The Effect of Economic Growth on the Tax Revenue: Case of Egypt

Dr. Amr Abdelmeguid Edris Eissa

Lecture of Economics, Faculty of Management Sciences Modern Sciences and Arts University (MSA)

Dr. Alaa Kamel Hassan Khalifa

Lecture of accounting at the Higher Institute for Computer & Information Technology El-Sherouk Academy

Dr.alaa.kamel@sha.edu.eg

Faculty of Commerce Scientific Journal

Faculty of Commerce, Assiut University

Vol. 79, December 2023

APA Citation:

Eissa, A. A. E., Khalifa, A. K. H. (2023). The Effect of Economic Growth on the Tax Revenue; Case of Egypt. ***Faculty of Commerce Scientific Journal***, Faculty of Commerce, Assiut University, 79, 395-436.

Website: https://sjcf.journals.ekb.eg/

The Effect of Economic Growth on the Tax Revenue: Case of Egypt

Dr. Amr Abdelmeguid Edris Eissa, Dr. Alaa Kamel Hassan Khalifa

Abstract:

Taxing is one of the sources of state revenue, and on the other hand, economic growth can influence taxing, as economic activities done during the process of Growth will increase or decrease the tax revenue. The effect relies on the time period as well volume of economic activities. The objective of this paper is to measure the effect of economic growth on tax revenue in the Egyptian economy in the period from 1975 to 2022 to this end, in an Autoregressive Distributed Lag (ARDL) approach has been employed, using six variables: Tax revenue (% of GDP), GDP (current LCU), GDP per capita (current LCU), Inflation, consumer prices (annual %), Gross capital formation (current LCU), and Unemployment, total (% of total labor force) (national estimate). The Importance of this paper exists because our point of departure from the current studies lies in the fact that we measure the effect of economic growth on tax revenue in Egypt not the opposite as other literature did. The results showed unemployment and gross capital formation to be insignificant. GDP currency and GDP per capita were significant in the short run and inflation of consumer prices was significant in the long run.

Key Words: Egypt, economic growth, tax revenue, Autoregressive Distributed Lag (ARDL)

Faculty of Commerce Scientific Journal, 79, December 2023

أثر النمو الاقتصادي على العائد الضريبي (الحالة المصرية)

د. عمرو عبد المجيد ادريس عيسى، د. علاء كامل حسن خليفة

المستخلص العربي

تعتبر الضرائب أحد مصادر إيرادات الدولة، ومن ناحية أخرى، يمكن أن يؤثر النمو الاقتصادي على فرض الضرائب، حيث أن الأنشطة الاقتصادية التي تتم خلال عملية النمو ستؤدي إلى زيادة أو انخفاض الإيرادات الضريبية. ويعتمد التأثير على الفترة الزمنية وكذلك حجم الأنشطة الاقتصادية. و الهدف من هذا البحث هو قياس تأثير النمو الاقتصادي على الإيرادات الضريبية في الاقتصاد المصري في الفترة من ١٩٧٥ إلى ٢٠٢٢ ولتحقيق هذه الغاية، سيستخدم منهج الانحدار الذاتي الموزع (ARDL) وذلك باستخدام ستة متغيرات: وهي ،الإيرادات الضريبية. (% من الناتج المحلي الإجمالي)، الناتج المحلي الإجمالي (بالأسعار الجارية للعملة المحلية)، إجمالي الناتج المحلي للفرد (بالأسعار الجارية للعملة المحلية)، التضخم، أسعار المستهلكين (% سنويا)، إجمالي تكوين رأس المال (بالأسعار الجارية للعملة المحلية)، إجمالي البطالة (% من إجمالي القوى العاملة) (على المستوى الوطني) تقدير، وتكمن أهمية هذه الدراسة في اختلاف نقطة انطلاقنا عن الدراسات الحالية حيث أننا نقيس تأثير النمو الاقتصادي على الإيرادات الضريبية في مصر وليس العكس كما فعلت الدراسات الأخرى. وأظهرت النتائج أن البطالة وإجمالي تكوين رأس المال غير ذات تأثير. وكان الناتج المحلي الإجمالي بالعملة المحلية ونصيب الفرد من الناتج المحلي الإجمالي ذو تأثير كبير في المدى القصير وكان تضخم أسعار المستهلكين ذو تأثير كبير على المدى الطويل فقط.

الكلمات المفتاحية: مصر، النمو الاقتصادي، الإيرادات الضريبية، الانحدار الذاتي الموزع (ARDL)

Introduction

The primary goal of taxation is to fund government spending. In any economy, the tax system is also critical to attaining other goals such as equality, and social and economic benefits. Economic growth needs a well-organized, efficient, and effective Economic system. Taxation determines the level and rate of economic growth in countries worldwide. Zotikov (2023). Countries with well-organized and stable taxation systems grow faster over time than countries with less distinct systems. Tax revenue can be considered to have grown in a cycle with Economic growth. If economic growth is characterized by a rise in GDP, the government will similarly be able to predict tax income with certainty. In Egypt in 2022 the tax revenue as % of GDP is 12.27% compared to 2019 the tax revenue was 11.98 which reflects the GDP increased between the two periods. Taxation has always been the largest contributor to government budget revenue, so collecting the maximum tax revenue is critical to meeting policy objectives. Countries with well-organized and stable taxation systems expand more swiftly over time than countries with less distinct systems 'natures. The debate over whether taxes are an effective tool for stimulating economic growth in the literature is still ongoing, as several research have produced contradictory findings on the effects of taxes on economic growth, Thapa (2023). On the other side, economic growth is considered one of the variables that is supposed to lead to an increase in tax revenues in different countries, especially those countries that suffer from economic problems. In this study, we will try to assess the impact of Economic growth on the Egyptian Economy on the Tax revenue by proposing three hypotheses and using a ARDEL model (to evaluate the relationship between Economic growth and Tax revenue in the short and long run. Originality/value: The importance of study stems from research topic, since taxes have multiple effects on various areas in society which can be divided into scientific and practical importance in our research we will study the impact of Economic growth on Tax revenue. The results showed unemployment and gross capital formation to be insignificant. GDP currency and GDP per capita were significant in the short run and inflation of consumer prices was significant in the long run.

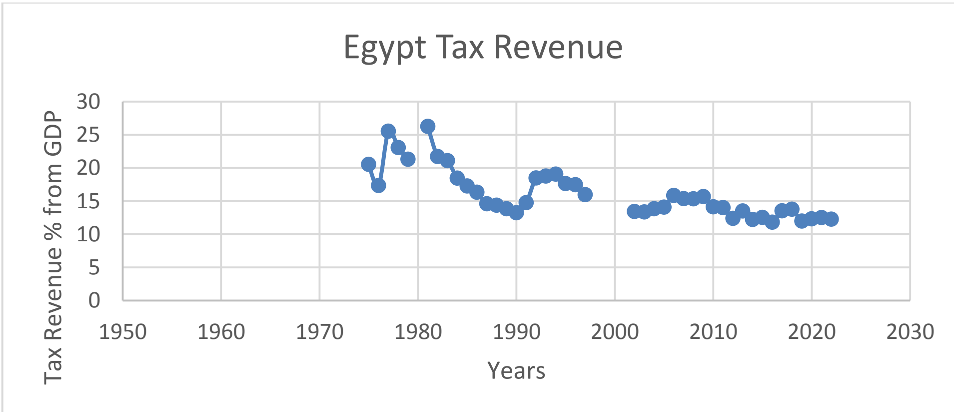
Economic Growth:

Economic growth is defined as "a consistent process by which the productive capacity of the economy is increased over time to produce rising levels of national output and income." Mohieldin, M., Hussein, K., & Rostom, A. M. T. (2019). Also, economic growth may be defined as the process of growing a country's productive capacity in the form of national revenue. Growth in the economy is considered to be a necessary but not sufficient condition for the eradication of absolute poverty and the reduction of inequality. "Economic growth may be defined as a long-term process wherein the substantial and sustained rise in real national income, total population, and real per capita income takes place" Kamal, A. L. M. (2022), Economic growth is usually associated with a significant rise in the economy's productive capacity. Economic growth is linked to the equitable distribution of income and wealth. Economic growth is closely linked to poverty and unemployment reduction since economic development is so important, also economic growth may readily encourage economic development since poverty has decreased most when inequality has decreased and economic growth has been high. Inequality at the outset is related to a higher negative elasticity of poverty reduction about growth. Higher beginning inequality has less of an influence on poverty as economic growth increases. Mansour, H. (2022). In this case, the tax revenue will increase as everybody in the community will have income and will pay taxes, also business people will have the incentive to pay more taxes as their business will booming. Economic growth is a continuous improvement in the state of the country's economy in a positive direction. According to Adam Smith, economic growth is a change in the level of a country's economy caused by population expansion, resulting in increased production, Kamal, A. L. M., & AboElsoud, M. E. (2023). For most economists, Human resources, natural resources, scientific and technological advancement, and the inflation rate are all variables that contribute to economic growth. GDP computed using current prices may be used to observe alterations in economic structure, whereas GDP calculated using constant prices can be used to estimate economic growth from year to year. The increase in real GDP from year to year indicates economic expansion. Ojima, D., Ojima, N., & Okonkwo, O. N. (2023) If GDP rises, economic growth will be better. Economic growth will improve as GDP rises. If the average annual economic growth rate rises, the community's per capita income will rise, implying that welfare will rise as well. A rise in GDP from year to year characterizes economic growth. Ahmed, E. A., & Edris, A. E. (2018b)._GDP is one of the elements that might influence economic growth. GDP is the total worth of all products and services produced over a certain time periperiod Gross Domestic Product, is a measure of revenue and economic spending that excludes money received from or paid to non-residents, Ahmed, E. A., & Edris, A. E. (2018b) and Kamal, A. L. M. (2022). GDP is the most often discussed economic metric since it is seen as the best single indicator of people's well-being and the changes in the Economy. _We keep in mind that other factors can affected by the rate of economic growth like inflation, unemployment, FDI Capital formation, poverty, and taxes, as the collection of taxes will be based on GDP, with the proceeds eventually going toward the growth of the country. Takumah, W., & Iyke, B. N. (2017).

Egypt's real GDP has increased at a rate of 4.3% per year on average since the 1990s, higher than the African average (3.8%) and in line with the Middle East and North Africa (MENA). Egypt's real GDP growth rate is expected to climb by 1.8 percentage points between 2023 and 2028. According to this estimate, growth will have grown to 5.97 percent for the fourth straight year in 2028. Egypt's GDP increased by 3.90 percent in the first quarter of 2023 compared to the same period the previous year. Kamal, A. L. M., & AboElsoud, M. E. (2023).

Taxes revenues

Taxes are mandatory payments linked with specific activity. On the other hand Tax revenue is described as the money collected from income and profit taxes, social security payments, taxes on goods and services, payroll taxes, taxes on property ownership and transfer, and other levies. Total tax revenue as a percentage of GDP shows how much of a country's production is collected by the government through taxes. It may be viewed as one indicator of how much influence the government has over the economy's resources. The tax burden is calculated by dividing total tax revenues collected by GDP. This statistic pertains to the government as a whole (all levels of government) and is measured in millions of dollars and as a percentage of GDP. OECD (2023). Tax revenues are used to acquire the inputs needed to manufacture government-supplied products and services or to redistribute purchasing power among individuals. Ismayilov, R. M. M. I. M. (2023). The item or economic activity on which the tax is collected is referred to as the tax base, also taxes have many functions in the economy one of which is to redistribute resources from the private to the public sectors in two steps: First, taxes decrease the individual's capacity to possess resources. Second, tax revenues are used to fund resources required to deliver government products and services, as well as income support payments for government transfers such as social security benefits. Edori D. S, & Atabusi, Michael. (2022). The tax rate structure describes the relationship between the tax collected during a given accounting period and the tax base. In evaluating taxes on such economic bases as income, the tax rates are calculated as the ratio of taxes paid to the various values of the base. The most common tax bases can be grouped into three categories: income, consumption, and wealth. These are economic bases, and their values are determined by individual actions. Individuals, for example, make everyday decisions that influence their income. They can also direct the distribution of their income between saving and spending. Because most people must save in order to build money, their spending habits have an impact on their wealth. Zotikov, N. Z. (2023) There are two types of taxes direct and indirect, for example, a tax is a charge that the government imposes or levies on a product, income, or activity. It is termed direct tax when it is levied directly on personal or business income. Direct taxes are essential in Egypt's economy. Income taxes account for a sizable portion of total tax collections. Where the indirect tax is levied the manufacturer, service provider, and seller bear immediate duty to pay, but the cost is passed to the eventual users of such goods and services. The burden is transmitted not via taxes, but through the cost of products and services. For instance, general sales tax, value-added tax, and customs duty. Wolak-Tuzimek, A., & Tuzimek, W. (2021).



The tax revenue as % of GDP in Egypt was 20.52 % in 1975 and in 1977 reached 25.52% and in 1981 reached 26.24 % this happened due to the Economic reform strategy the government followed after the end of the 1973 war. From 1984 the tax revenue started to decline to range from 18.40 to 11.89 in 2019 reflecting the long period which has many economic and social fluctuations and Crises also the missing data from 1988 till 2001 which represents the failure of the tax system to record any achievements. Such incidents prove the importance of our paper on the effect of economic growth on Tax Revenue.

Relationship between Tax revenues and Economic growth.

The empirical findings from many studies revealed a definite and highly articulated impact of direct taxes on economic growth. This is attributed to efficiency increases in revenue accumulation through wealth taxation. On the other hand, the comparison of the effects of tax revenue accumulated by the two forms of taxing validates the assumptions for indirect taxes' poorer efficiency as a way of budgeting revenue accumulation. This is owing to the significant inequality of indirect taxes and levies, production and sales are declining as a result. As a result, the tax system is based on direct taxes, more effective in terms of promoting economic growth, Takumah & Iyke, (2017), Maryantika & Wijaya, (2022) & Fajrina & Setiawan,(2023). However, tax system analysis is constantly a fresh issue, and it is difficult to make conclusive conclusions from empirical data. Another perspective is that tax revenue has a favorable effect on overall economic growth. Furthermore, other characteristics such as trade openness and labor mobility strengthen the positive association between tax revenue and economic growth, but excessive government interference in markets weakens this relationship. Abo-Ahmed, K.(2021) & Thapa, (2023). In general, it is proven that tax revenue can affect economic growth in many ways, however, our paper is not investigate that issue, we look from another scope and we will try to analyze the relation between Economic growth and tax revenue, as the literature ignores such enquiry.

Literature review

(1) Relationship between Economic growth and tax revenue

(Fajrina & Setiawan, 2023) The study aims to examine digitalization's effects on tax income in ASEAN countries, as measured by internet penetration and GDP per capita growth. Using samples from six ASEAN countries: Indonesia, Malaysia, Singapore, Cambodia, the Philippines, and Thailand; with a dataset spanning 15 years from 2005 to 2019. By using data panel multiple regression analysis in Fixed Effect Model, In the Fixed Effect Model, data panel multiple regression analysis is used. The findings show that (1) digitalization has a significant and positive impact on tax revenue, (2) GDP per capita growth has a significant and negative impact on tax revenue, and (3) both digitalization and GDP per capita growth have a significant impact on tax revenue.

(Niyazmetov et al., 2023) This study aims to determine the extent to which current Uzbekistan's tax policies are efficient, researchers propose that the article elaborates on the efficiency of the tax system by using a tax effort index to measure the collection capability of potential tax revenue and the optimal tax burden to maximize economic growth. Using a mathematical model, to calculate the tax effort index for Uzbekistan, which appeared to be around 45%. Furthermore, the researchers used the Ordinary Least Squares (OLS) method to determine the optimal tax burden. The findings show the optimal level of tax burden in Uzbekistan for the years 2000-2019 is estimated to be around 19% based on the results of the econometric analysis. Increasing the tax burden to this level could close the GDP gap by 1%.

(Takumah & Iyke, 2017) This paper investigates the relationship between tax revenue and economic growth in Ghana. The causality analysis is based on a multivariate setup that allows key control variables to mediate the relationship between tax revenue and economic growth. To avoid pre-testing bias, the paper employs the Toda-Yamamoto test rather than the traditional Granger causality test. Using a quarterly dataset spanning the years 1986Q1-2014Q4. The findings show In Ghana, there is strong evidence of a one-way causal flow from tax revenue to economic growth. This finding supports the previously discovered relationship between taxation and economic growth.

(Lestari & Yolanda, 2022) The goal of this study was to calculate the magnitude of the impact of economic growth, poverty, and wages on tax revenues. This study used 30 provinces in Indonesia as its sample. The descriptive quantitative analysis method was employed in this study. Using secondary data from 1991 to 2021 and analyzing it using time series data regression. According to the findings of the study, economic growth has a positive and significant effect on tax revenue, poverty has a negative and significant effect on tax revenue, and education has a positive and significant effect on tax revenue. in addition to tax revenue.

(Irekponor & Jones, 2023) The study examines the effect of taxes on economic growth in developing countries classified into three regions, namely Africa, Asia, and South America, from 1990 to 2019, with the specific goal of determining the effect of tax revenue on the gross domestic product of the regions collectively and providing comparative analysis of the three regions. The ex post facto research design was employed, and the variables were examined using panel regression analysis. The study established clear evidence that each region and collective tax revenue have a positive and significant effect on their GDP. also, the study concludes that tax revenue has a significant impact on developing-country economic growth and recommends that developing-country governments increase efforts to sustain their GDP by reinvigorating their tax system, fiscal institutional structures, and framework to generate more tax revenue and invest in critical infrastructure.

(Eze, 2023) The impact of non-oil tax revenue on economic growth in Anglophone and Francophone countries was investigated in this study. The research specifically sought to determine the impact of capital-gain tax revenue, the impact of customs/excise tax revenue, and the impact of property tax revenue, on economic growth. Capital gain tax revenue (CGT), customs/excise tax revenue (CET), property tax revenue (PRT), and real GDP growth were used in the study and were collected from 1991 to 2021. The study used a sample of five (5) Anglophone and Francophone countries from a total of twenty (20) Anglophone and Francophone countries. Generalized panel least squares were used to analyze the data. The empirical results show that capital gain tax revenue (CGT) has a positive and significant impact on economic growth in Anglophone and Francophone countries; property tax revenue (PIT) has a positive and significant impact; and customs/excise tax revenue (CET) has a positive but insignificant impact.

(Emudainohwo & Ndu, 2022) The purpose of this paper is to investigate how the implementation of an electronic tax system affects economic growth in Nigeria. The study employed the neoclassical growth theory and the Technology Acceptance Model (TAM). The Autoregressive Distributed Lag bounds test regression model was adequately created based on diagnostic tests. The Central Bank of Nigeria's quarterly secondary data and tax statistics data were divided into two periods for analysis: 2011q1 to 2015q3 pre-electronic tax period (pre-e-tax) and 2015q4 to 2020q4 post-electronic tax period (post-e-tax). The results show that In the long run, value-added tax, petroleum profit tax, and capital gain tax marginally reduce economic growth, whereas company income tax, education trust fund, and stamp duty marginally increase it. In the short run, company income tax had no influence on post-e-tax revenue, while value-added tax had a moderate negative impact, petroleum profit tax had a strong positive impact, and education trust fund, capital gain tax, and stamp duty had a strong negative impact on economic growth.

(Etienne, 2023) The purpose of this research is to investigate the impact of tax revenue on economic growth in Rwanda from 2006 to 2021. This study uses time series data from 2006Q1 to 2021Q4. For Gross Domestic Product (GDP) is used as a proxy for economic growth, while Direct Tax (DT), Tax on Goods and Services (TGS), and Tax on International Trade (TIT) are all independent variables. Using the unit root and co-integration tests revealed that all variables are co-integrated of order one, implying that variables have a long-run equilibrium relationship. The Johnsen test was also used. The findings show that TGS and TIT have a long-run impact on GDP, but there is no short-run causal relationship between DT, TGS, and TIT and GDP. The adjusted R-squared is 0.994407, indicating that the regression model accounts for 60% of the variability observed in the target variable. The remaining 0.6% cannot be explained by the model. Keeping all other variables constant, the result shows that a 1% change in DT and TGS increases economic growth (GDP) by 0.19% and 0.58%, respectively.

(Hani & Warad, 2023) The purpose of this research is to shed light on the reality of tax revenue in Jordan and to identify the factors that influence it. This is accomplished by examining the effect of a variety of economic and non-economic factors on tax revenue. Economic factors included real GDP, the consumer price index CPI, foreign direct investment FDI, and economic openness, while non-economic factors included corruption and tax law changes. The models were built using the Autoregressive Distributed Lag (ARDL) method and the results of standard diagnostic tests. According to the study, the main determinants of tax revenue in Jordan are real GDP and CPI. It was also discovered that corruption has a significant negative impact on tax revenue, whereas tax law amendments have no clear impact or have an insignificant impact on tax revenue.

(Nguyen & Darsono, 2022) This study examines the relationship between tax revenue, investment, and economic growth while accounting for the non-linear effects of tax revenue. The World Bank database was used to extract macro data for nine ASEAN countries (including Brunei, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) from 2000 to 2020. Panel data estimations were used in this study. This study discovered statistical evidence that tax revenue hurts economic growth. However, when the non-linear effects of tax revenue were considered, empirical findings revealed that higher tax revenue could reduce the disadvantages of tax impacts to boost economic growth. Taxation has a negative effect that is as obvious as economic growth theories, but it is dependent on taxation revenue. Lower tax revenue may encourage saving and investment, but it also increases the government deficit, which reduces economic growth through government debt, spending, and investment. Furthermore, during the research period, this study provided consistent evidence of investment's positive effect on economic growth in ASEAN countries.

(Ndoya & Bakouan, 2023) This study examines the impact of tax income on economic complexity in 29 African nations from 1995 to 2018. Using the generalized method of moments (GMM) for the system. The study discovered that tax revenue promotes economic complexity in Africa by providing governments with vital financial resources for the production of complex and sophisticated goods. After running many robustness tests, including adjusting for macroeconomic volatility and using various measures of economic complexity and tax revenue, the results remain robust. Furthermore, the mediation analysis results demonstrate that financial development and government spending mediate the effect of tax income on economic complexity.

(Maryantika & Wijaya, 2022) The purpose of this study is to investigate the effects of corruption, government spending, and human development on tax collections, as well as the role of economic growth in mediating these effects. The analysis was carried out on ten provinces from 2010 to 2019 using a purposive sample technique, and 100 observations were gathered. The hypothesis was examined using multiple linear regression. The findings revealed that (1) government spending, human development, and economic growth all have a positive effect on tax revenue, while corruption does not affect tax revenue; (2) government spending and human development both have a positive effect on economic growth, while corruption hdoes not affecteconomic growth; (3) economic growth mediates the effect of government spending and human development on tax revenues; and (4) economic growth has no effect on corruption.

(Nyamadi, 2023) Using time series data from 1970 to 2020, this study investigated the influence of tax policy measures on economic development and the tax revenue level that maximizes economic growth. GDP per capita, human capital stock, physical capital, working population growth rate, and six (6) tax indicators are included in the data sets: import duty, excise tax, company tax, personal income tax, income and property tax, and value-added tax. The unit root test findings show that all variables are stationary at levels and first difference. At a 1% level of significance, the limits test indicates the presence of a long-run link between the variables. Using the Autoregressive Distributed-Lag approach, the data revealed that increases in import taxes and business taxes help economic growth more than other forms of taxes, both in the short and long term. Increases in the percentage of value-added taxes and personal income taxes, on the other hand, were found to hurt Ghana's economic growth. The best amount of taxes influencing economic growth was determined to be 14.48 percent of the tax revenue - GDP ratio.

(Thapa, 2023) The study's purpose is to evaluate the link between Nepal's economic growth and the government's tax revenue sources, as well as to measure the short and long-run consequences of changes in these revenue sources on economic growth. Autoregressive Distributed Lag (ARDL) is applied to time series secondary data from 1974 to 2021 to anticipate the change in economic growth owing to changes in tax income sources. According to the findings, Non-Tax Revenue (NTR) has a positive significant link with Nepal's economic growth over the long run, but Tax

Revenue (TR) has a positive but negligible relationship. Using the Augmented Dickey-Fuller Test, variables were shown to be stationary at I (0) and I (1). According to the bound test results, non-tax revenue is the cointegrated component influencing Nepal's economic growth. Tax revenue is the only component that has no bearing on Nepal's economic growth. Non-tax revenue has a long-term impact on Nepal's economic progress.

(Abo-Ahmed, K. 2021) The goal of this research is to look at how corporate and income taxes affect economic development in Egypt. The analytical quantitative technique is used in this work, and the strategy is based on using yearly time series data from 1980 to 2018 to estimate two models using the Autoregressive distributed lag (ARDL) model. The first estimation compares direct taxes (corporate and income taxes) to GDP growth as the dependent variable, whereas the second uses the human development index (HDI) instead of GDP growth. The second goal is to look into any differences between the results produced by utilizing HDI and GDP in calculating the influence of corporation and income taxes on Egypt's economic development. The findings reveal a positive and substantial association between direct tax (income and corporate taxes) and Egyptian economic growth, as well as a negative relationship between direct tax (income and corporate taxes) and Egyptian economic development.

(2) Taxes

(Ismayilov, 2023) This article examines taxes, taxation thoughts, and the significance of taxes in economic growth and development theories. The article represents the perspectives of A. Smith's classical taxation theory, C. M. Keynes' theory, and M. Friedman's monetarism, as well as A. Laffer's supply economy theory, all of which are neoclassical theories. The essential aim of all discussed theories and economists' varied points of view have been described. Various economic growth and development theories were reviewed, and the existence of taxes and the nature of their influence on the growth rate in each theory were mentioned. These are the Harrod-Domar development model produced by R. Harrod and E. Domar, the R. Solow neoclassical growth model, the F. Knight model, and J. Heckman, R. King, S. Rebelo, and R. E. Lucas, who supplied information on human capital development models. The main findings of this study The only thing these ideas have in common is that they all aim to create economic development. However, the influence of taxes has produced diverse results since the ideas in each of them differ and the strategies utilized to improve the growth rate change.

(Edori D. S & Atabusi, Michael, 2022) The study examines The Connection between Direct Taxes and the Total Tax Revenue of the Federal Government of Nigeria. Using time series data (secondary data) was attained from the Federal Inland Revenue Service and analyzed using basic regression analysis from 2005 to 2020. According to the analysis, there is a substantial association between education tax and total tax revenue, as well as petroleum profit tax and total tax revenue, with probability values of 0.000 and 0.002, respectively. Furthermore, with R2 values of 0.729 and 0.524, respectively, both the education tax and the petroleum profit tax show a positive association with overall tax revenue.

(Zotikov, 2023) The article investigates the influence of the fiscal function of taxes on the creation of budgets in the Russian Federation budget system from 2006 to 2021 using official data. There is now no one, well-established point of view in accounting or economics on the number of tasks fulfilled by the tax. At the same time, all academics agree that the principal purpose is the fiscal function, which forms the revenue basis of budgets at all levels through the imposition of taxes. All other tasks, such as stimulating, regulating, and so on, are inextricably linked to the fiscal function. This tax function is used by the government to determine tax policy at a certain stage of economic growth. The author discovered that the state is now following a fiscal federalism strategy, which results in an imbalance in the revenue and spending components of regional and local budgets.

(Wolak-Tuzimek & Tuzimek, 2021) The purpose of this study is to explore the fiscal importance of indirect taxes on the state budget. According to the study, indirect taxes create large budget collections not just during times of economic boom but also during times of economic crisis. In 2016-2020, indirect taxes accounted for the majority of the state budget's tax income (an average of 70%). The study findings are A prominent position of the value-added tax in the overall income of the state budget might also be highlighted. On average, it accounted for 44% of overall revenue during the period. Furthermore, the results of a correlation matrix reveal a substantial relationship between state budget revenue and indirect taxes. A statistical study confirms the research premise that indirect taxes have a significant influence on the income of the state budget.

(Yuldasheva & Artikov, 2021) Based on economic analysis, the objective of this article is to illustrate the role and relevance of taxes in a market economy. There are also economic issues regarding tax kinds, and the significance of tax functions in today's market economy has been scientifically proven. Statistics reflect the function and types of taxes in the management of the economy, as well as the effects of economic actions made to impose taxes on the country's economic growth. The authors highlight tax functions as a significant aspect in securing the country's budget through an in-depth investigation of their position in the economy. The large-scale work done in our nation to create better openness in tax policy defines the sector's importance in today's market economy.

(Mamo, 2023) The impact of taxes on state growth is still debatable. I will concentrate on the functions of direct and indirect taxes. I estimate the links between tax systems and state per capita income growth using traditional growth frameworks. The direct-to-indirect tax ratio is found to be positively connected with income growth. Indirect taxes, particularly property taxes, have a continuously negative relationship with growth. Corporate and individual income, as well as sales taxes, have no discernible relationship with growth. In general, indirect taxes are connected with lower growth but also rising inequality, indicating a socially inefficient mix of state taxes. The findings are typically robust when tax endogeneity is taken into account.

(Ngwaba, 2023) This study evaluates the impact of company taxes on direct foreign investment in developing countries using corporate tax data compiled for the study from 1990 to 2015. The corporate tax database contains statutory corporation tax rates from 65 developing nations spread around the globe, including Africa, Asia, Latin America, the Caribbean, and the Middle East. According to the study's findings, direct foreign investment in emerging economies is not affected by corporation taxation. This shows that other variables, such as the availability of natural resources, infrastructure, commerce, and other government policies, may be driving the flow of foreign investment into emerging host countries.

(Ali, 2023) Using the Autoregressive Distributed Lag Model (ARDL), this article examines the connection between private consumption expenditure and independent variables such as GDP, population number, interest rate, and inflation rate in Egypt from 1955 to 2022. The research will also use a model (ARDL) to investigate the effect of displacement between private and government consumption spending. The findings of study, in the long term, the study discovered a positive and substantial link between private consumer expenditure and both production and population. In the long run, however, there is a considerable negative link between private consumer spending and both interest rates and government consumer expenditure. Private consumer spending has a positive and considerable association with both production and population in the short run. Consumer spending Private, on the other hand, has an inverse connection with short-term interest rates.

(Soumadi & Alrjoub, 2023) The purpose of this research is to show how taxes affect pricing and output in Jordan. For the period (2011-2020), researchers employed a conventional analytic approach and a vector error correction model, with the profit margin ratio indicator serving as a representative indicator for production and pricing. The findings revealed a long-term causal link between pricing and output on one hand, and direct and indirect taxes on the other, with the relationship between short-term deviations and long-term reliability being adjusted at a rate of 3% per year. The results revealed that indirect taxes had a negative substantial influence on price competitiveness in the long run, which was supported by the variance components analysis and response function test. In the medium run, direct and indirect taxes have a minimal influence on price competitiveness?

(3) Economic Growth

(Mohieldin et al., 2019) The purpose of this article is to explore the growth of the Egyptian banking industry as well as the important trends in Egyptian financial development. The goal of this study is to explore experimentally the link between financial sector expansion and economic growth in Egypt between 1980 and 2016. This study examines the link between financial development and real growth per capita using econometric time series modeling of bivariate regressions for real growth per capita and indicators of financial development. Findings based on the empirical investigation, are three distinct conclusions. First, there is a substantial relationship between real per capita growth and financial development as measured by money supply to GDP. Second, neither availability nor effectiveness of financial services are related to real per capita income. Third, the Financial Markets Access Index, which collects data on market capitalization outside of the top ten largest corporations as well as the number of corporate debt issuers, shows a strong correlation with actual per capita GDP.

(Kamal, 2022) Using the Autoregressive Distributed Lag (ARDL) model approach, this study explores the applicability of Okun's Law to the Egyptian economy from 1991 to 2021. To perform the unit root test, the study employs Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP). The ARDL bounds test for co-integration is justified in the paper for the two Okun's Law variants. The conclusions, however, are irreconcilable with economic theory and contradict the majority of research studies produced for other nations, according to the article. The findings, together with the findings of the ARDL Bounds Tests, demonstrate that there is no link between real GDP and the unemployment rate in Egypt, neither in the long run nor in the short term. As a result, Okun's Law, with its difference model and gap model, is invalid in the situation of Egypt.

(Mansour, 2022) The goal of this research is to evaluate the influence of capital expansion in ICT on economic growth in one developing nation, Egypt, which has made significant investments in the ICT industry. Using an error correction technique, the study examines time series data from 1999 to 2019. The data show that there is no long-term beneficial relationship between ICT capital expansion and Egyptian economic growth. While the advancement of ICT has the potential to offer Egypt with long-term economic growth, the relevance and magnitude of these effects are now insignificant. According to the study, to reap the benefits of capital investments in ICT, policymakers should enact high-quality investment policies and improve the overall quality of the surrounding environment, such as the regulatory and institutional environments, in addition to controlling inflation and government consumption.

(Kamal & AboElsoud, 2023) From 1991 to 2019, this article explores the origins of Egypt's economic development during four generations of reforms. We utilized the enhanced Solow model, which incorporates both human and physical capital accumulation, to analyze the contribution of input components to economic growth. The variables included in the analysis are GDP, capital, productivity, human capital, and employment. The research uses quantile regression econometric modeling to investigate the drivers of growth in Egypt's economy at various phases of reform, as well as the convergence of income segmentations. The findings of this study are, that poor growth performance can be linked to a lack of investment in both physical and human resources. Furthermore, the data reveal that trends in human capital, productivity, and capital are all strongly driven by savings volatility and population growth rates. As a result, the Egyptian economy's economic growth cycle is dictated by rates of savings and population increase. When these rates begin to trend in a direction that allows human capital, productivity, and capital to expand, robust capital accumulation emerges and enhances economic growth, and vice versa.

(Ojima et al., 2023) The study looked at the relationship between taxation and capital formation, as well as the implications for economic growth in Nigeria. The study's goal is to generate money to shore up the much-needed capital stock and infrastructure for economic growth. It used descriptive statistics, Unit Root, and ARDL to estimate the short and long-run correlations between the variables used for the investigation. The study's findings suggest a strong and inverse association between inflation, taxes, and economic development in Nigeria. Similarly, there is a positive and substantial link between broad money and real GDP, implying that taxation and inflation have a detrimental influence on economic growth in Nigeria.

Table (1) Summary for the Main Literature

Author	Variables Considered with Tax Revenue	Countries Considered	Model Employed
(Fajrina & Setiawan, 2023)	GDP per capita growth GDP growth	ASIAN Countries	panel multiple regression analysis
(Lestari & Yolanda, 2022)	GDP Current GDP per Capita Current unemployment	Indonesia	The descriptive quantitative analysis method (QDA)
(Irekponor & Jones, 2023) panel regression analysis	GDP per capita growth Gross Capital Formation	Developing countries 3 regions	panel regression analysis
(Emudainohwo & Ndu, 2022)	GDP per capita growth	Nigeria	The Autoregressive Distributed Lag ARDEL
(Hani & Warad, 2023)	GDP Current Consumer price index	Jordon	Autoregressive Distributed Lag (ARDL)
(Thapa, 2023)	GDP per capita growth Growth Capital Formation	Nepal	Autoregressive Distributed Lag (ARDL)
(Ali, 2023)	GDP Current GDP per Capita Current Consumer price index CPI	Egypt	Autoregressive Distributed Lag (ARDL)
(Mohieldin et al., 2019)	GDP growth GDP per Capita growth	EGYPT	Bivariate regressions
(Kamal & AboElsoud, 2023) quantile regression	GDP Current Gross Capital Formation Unemployment	EGYP	quantile regression

PROBLEM OF THE STUDY

The researchers found that the neglect of studying the impact of economic growth on tax revenue for developing countries specifically Egypt, could be an issue or key issue for this research because most of the Literature and models used - to the knowledge of the researchers - to analysis the economic impact of growth on tax revenue dedicated and concentrated to study only the impact of Tax revenue on economic growth or focus their attention on the other Macroeconomics variables (employment and poverty)only in the assessment of the needed impact which reduces the accuracy of estimation of such impact and reduces the ability to achieve goals of such assessment, and in the presence of correlation between economic and tax as an emerging phenomenon

In this context, the researcher went to the first question: Is it possible to assess the impact of Economic growth on tax revenue in both the short and long run for developing countries? Second: Does it help that assessment to measure the impact on the Egyptian economy? Building on all these facts, the researcher elaborated on the main problem purely as follows.

Is it possible to measure the impact of Economic growth on Tax revenue for the developing economy to help in producing an effective model for that purpose for Egypt?

STUDY IMPORTANCE

- The mutual influence between the economy and the tax revenue as a part of government expenses imposes itself when predicting any economic issue.
- Share the importance of the current study about the importance of economic growth and its effects on tax revenue

- The impact of economic growth on the community in terms of increasing the size of social spending increasing welfare in the communities, and increasing revenue.
- Scarcity of analytical studies on the relationship between Economic growth and Tax revenue in developing countries like Egypt.
- On the other hand, analytical l studies are scarce as the majority of Literature focused only on the impact of tax on growth.
- A need to work on the Macroeconomics level to measure and understand the mutual impact of growth on tax revenue to help policymakers.

STUDY OBJECTIVES

- Understand the most important types of taxes and their revenue.
- Study the most important features of economic growth.
- Study the relationship between Economic growth and Tax revenue in both the short and long run.
- Find the most appropriate model or methods and levels of integration between Economic growth and Tax revenue Egyptian Economy.

HYPOTHESES

(H1) - There is a correlation between Economic growth and Tax revenue in the Egyptian Economy.

(H2) - There is a short and long-run correlation between some of the economic growth variables used in this study and tax revenue in Egypt.

(H3) -There is no correlation between Tax revenue and unemployment as well as Gross Capital formation in both the short and long run.

LIMITATIONS OF THE STUDY

The application is on the Arab Republic of Egypt using data from the years 1975 to 2022. We choose the long time period 47 years to ensure our analysis is correct in the long run as well as in the short run.

Methodology:

- The research follows the descriptive analytical approach to clarify the idea and scope of the problem, also has an applied aspect represented in developing a proposed model that finds the relationship between Economic Growth and Tax revenue in Egypt, through the following:
  a) Review previous literature related to the research topic to identify the most important variables and models used in the analysis and identify the most important results and recommendations in that literature.
  b) Building research objectives, problem, and hypotheses.
  c) Defining the research variables, collecting a time series for later analysis, and identifying the various short- and long-term relationships between the variables
  d) Use one of the models to analyze the relationships between variables (ARDL model).
  e) Reaching results, verifying the validity of research hypotheses, and building recommendations in light of statistical analysis and previous studies.
- The methodology used in this study is summarized in the following steps:

1- Variables of the study:

The Methodology of this paper will start by determining the Model we will use by identifying our variables and describing the relationship between them by using the following equation:-

Y1t = **f** (**X1**t, **X2**t, **X3**t, **X4**t, **X5**t, **T**t)

Where Y1: Tax revenue (% of GDP), X1: GDP (current LCU), X2: GDP per capita (current LCU), X3: Inflation, consumer prices (annual %), X4: Gross capital formation (current LCU), X5: Unemployment, total (% of the total labor force) (national estimate), T: is a general trend.

Through a literature review, we found that the majority of papers we reviewed studied the relationship between tax revenue and economic growth, not the other way which is why they used tax revenue as an independent variable and their results directed toward the effect of tax revenue on other independent variables, except study of Fajrina, A. S. I., & Setiawan, B. (2023), and Niyazmetov, I. M., Rakhmonov, A. S., & Otabekov, O. (2023), 3. Lestari, F. A. P., & Yolanda, Y. (2022) , 4.Takumah, W., & Iyke, B. N. (2017) as they use economic growth and other variables as independent variables. to the four papers GDP growth or current and GDP per capita always has a positive and significant effect on other variables in the short run only except for Niyazmetov, I. M., Rakhmonov, A. S., & Otabekov, O. (2023) the GDP Growth and GDP per capita have a positive and significant effect in both long and short run of other variables specifically on tax revenue. For other variables used in this paper inflation CPI, Gross Capital formation, and unemployment we found that in the literature we reviewed no clear relationship between Gross Capital formation and unemployment and tax revenue or tax burden except for Lestari & Yolanda, (2022), Eze, C. G. (2023) and Ndoya, H., & Bakouan, P. (2023) they agree about the unemployment has a positive and significant effect on tax revenue. Regarding inflation, the majority of the literature agrees about the negative and insignificant effect on tax revenue except, Hani & Warad,(2023) and Ali, (2023) who agree about the effect of inflation in both the long and short term on both economic growth and tax revenue. The researchers choose their variables depending on three factors:- the first literature review, the second problem of the paper, and th third availability of data.

Table (2) Definition and Sources of Variables

Variable	Definition**	Source
(Y1) Tax revenue (% of GDP)	Indicates that a percentage of the output of a nation is collected by the government through taxes. It may be viewed as one indicator of how much influence the government has over the economy's resources.	World Bank data till 2015 From 2015 – 2022 Egyptian Ministry of Finance
(X1) GDP (current LCU)	GDP at purchaser's prices is the total of the gross value contributed by all resident producers in the economy, plus any product taxes and minus any subsidies not included in the product value.	World bank data
(X2) GDP per capita (current LCU)	Gross domestic product divided by midyear population. At the purchaser's prices is the total of the gross value contributed by all resident producers in the economy, plus any product taxes and minus any subsidies not included in the product value?	World bank data
(X3) Inflation, consumer prices (annual %)	The annual percentage change in the cost to the typical consumer of obtaining a basket of goods	World bank data

	and services that may be fixed or altered at specific periods, such as yearly, is reflected.	
(X4) Gross capital formation (current LCU)	Consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories.	World bank data
(X5) Unemployment, total (% of total labor force) (national estimate)	Refers to the share of the labor force that is without work but available for and seeking employment.	World bank data

**https://databank.worldbank.org/metadataglossary/all/series

Results and Conclusion

2- Descriptive Statistics

Table (3): Descriptive statistics for the phenomenon

Variable	Mean	Std. Dev.	Min	Max
Tax revenue	19	6	12	29
GDP	893000000000	1760000000000	1460000000	7840000000000
GDP per capita	9172	16328	54	70659
Inflation, consumer prices	10	7	-3	30
Gross capital formation	153000000000	298000000000	226000000	1330000000000
Unemployment,	8	3	2	13

Source: Calculations based on Data from World Bank 1975-2022 using Stata 14

The average tax revenue was 19 over the years while the variation of tax revenue was low (CV=31.6%). The lowest recorded tax revenue was 12 at year 2019 while the highest was 29 at year 1960. The average GDP was 893 million and the variation was relatively high between the years. The GDP per capita had an average of 9172. The inflation was recorded to have an average of 10. The variation of inflation over the years was relatively high (CV=70%). There was a deflation in 1975 reaching a level of -3 while the inflation appeared to reach a level of 30 in the year 2022. This shows the increasing trend the inflation. The gross capital formation had an average of 153 million allover the years while the average unemployment level showed a level of 8. It ranged from 13 to 10.

Table (4): Pearson Correlation Coefficients of the variables in the phenomenon

	Tax revenue **Y**	GDP **X1**	GDP per capita **X2**	Inflation, consumer prices **X3**	Gross capital formation **X4**	Unemployment **X5**
Tax revenue	1					
GDP	-0.510	1				
GDP per capita	-0.545	0.9981	1			
Inflation, consumer prices	-0.876	0.8078	0.8339	1		
Gross capital formation	-0.508	0.9973	0.9953	0.8062	1	
Unemployment	-0.374	0.2293	0.2657	0.3954	0.2141	1

Source: Calculations based on Data from World Bank 1975-2022 using Stata 14

Tax revenue was significantly correlated moderately with GDP, GDP per capita Gross capital formation, and unemployment. However, it was strongly correlated with inflation. Correlations are a good indicator of the relationship between variables but do not consider the simultaneous effect of different variables on the tax revenue.

Table (5): Augmented Dickey-Fuller test for stationarity

Variable	Lags	Test Statistic	P-value
Tax Revenue	4	-3.482	0.0085
GDP current LCU	5	-3.591	0.0059
GDP per capita current LCU	4	-3.092	0.0272
Inflation consumer prices	1	-4.642	0.0001
Gross capital formation	1	-2.595	0.0941
Unemployment total labor force	1	-2.682	0.0771

Source: Calculations based on Data from World Bank 1975-2022 using Stata 14

Observing the stationarity for the variables, the augmented dickey fuller stationarity was conducted. The augmented dickey fuller test was significant at different lags for each variable. After 5 lags, all of the variables were found significant Afterward, the co-integration test shall be considered for the variables.

Table (6): Co-integration test using ARDL after 5 lags

Variables	F test statistic	Decision
Tax Revenue	11.375	Co-integrated
GDP current LCU	17.654	Co-integrated
GDP per capita current LCU	12.300	Co-integrated
Inflation consumer prices	13.339	Co-integrated
Gross capital formation	11.674	Co-integrated
Unemployment total labor force	12.976	Co-integrated

Source: Calculations based on Data from World bank 1975-2022 using Stata 14

The results show that variables are co-integrated. This indicates that there is a long-run effect in the dataset. This can be further investigated by observing the numbers, It shows that as well an as increase in san all over the period, the long run effect appears to have an increasing trend.

Table (7): ARDL Model for the variables

Variable		Estimate	Std. Error		Pr (>|t|)
(Intercept)		19.6200***	5.0220		0.0004
L(Tax revenue of GDP, 1)		0.5278***	0.1417		0.0006
L(Tax revenue of GDP, 2)		-0.0781	0.1593		0.6268
L(Tax revenue of GDP, 3)		0.2005	0.1604		0.2188
L(Tax revenue of GDP, 4)		-0.3143**	0.1433		0.0342
GDP current LCU		0.0000	0.0000		0.6887
L(GDP current LCU, 1)		0.0000	0.0000		0.1085
L(GDP current LCU, 2)		1.29E-10**	0.0000		0.0363
L(GDP current LCU, 3)		0.0000	0.0000		0.8569
L(GDP current LCU, 4)		0.0000	0.0000		0.4412
L(GDP current LCU, 5)		0.0000	0.0000		0.3842
GDP per capita current LCU		-0.0022	0.0055		0.6881
L(GDP per capita current LCU, 1)		0.0145	0.0089		0.1106
L(GDP per capita current LCU, 2)		-0.0124**	0.0057		0.0368
Inflation consumer prices		-1.1910*	0.6251		0.0639
L(Inflation consumer prices, 1)		0.1276	0.6991		0.8561
Gross capital formation		0.0000	0.0000		0.6548
Unemployment total labor force		0.0887	0.1436		0.5405
R square	0.9593	F-statistic		151.5	
R square adjusted	0.9527	P-value		1.27e-05	

Sig values: ***<0.01, **<0.05, *<0.1, “”>0.1

Source: Calculations based on Data from World Bank 1975-2022 using R

Results

The model was found to be significant since the p-value is less than the significance level. The 95.27% of the variation in Tax revenues was explained by the ARDL model. The GDP, GDP per capita, and Inflation had a significant effect on tax revenues at 90% confidence. GDP current LCU lag2 was found to be statistically significant at a 95% confidence level. Their coefficients suggest that a one-unit increase in these variables would increase tax revenue by 1.29E-10 units respectively, holding all other variables constant. This shows that there is an effect GDP's GDP current LCU on tax revenues in the short run. At a 10% significance level, GDP per capita had a significant impact on tax revenues. In the short run, it had a significant negative effect on tax revenues. Inflation had a significant negative impact on tax revenues in the long run. These results were obtained using the auto_ardl command in R ensuring that the order with the lowest AIC of 23.33 is selected.

Summary

	Short run	Long run
GDP current LCU	significant	Insignificant
GDP per capita current LCU	significant	Insignificant
Inflation consumer prices	insignificant	Significant
Gross capital formation	insignificant	insignificant
Unemployment total labolaborce	insignificant	insignificant

1- Based on the statistical analysis results we found a significant correlation between Economic growth and Tax revenue in the Egyptian Economy as the coefficients suggest that a one-unit increase in these variables would increase tax revenue by 1.29E-10 units respectively so if there is a change in the variables this is will lead to a change in Tax revenue in general. This proves the first hypothesis of this study:-

(H1) - There is a correlation between Economic growth and Tax revenue in the Egyptian Economy.

2- Based on the statistical analysis results we found a significant correlation in the short and long run as GDP current LCU and GDP per capita current LCU have only a significant short-run correlation with Tax Revenue, whereas inflation has run significant correlation with Tax revenue. This proves the second hypothesis of the study

(**H2) - There is a short and long-run correlation between some of the economic growth variables used in this study and tax revenue in Egypt**.

3- Based on the statistical analysis results we found no negative or positive significant effect of both gross Capital formation and unemployment on Tax Revenue which supports the hypothesis of this study:-

(H3) -There is no correlation between Tax revenue and unemployment as well as Gross Capital formation in both the short and long run.

4- All hypothesis of this study has been proved by the statistical analysis results this give us the incentive to interpret the results and find why the impact of Economic growth represented by the variables from X1 to X5 have the same impact on tax revenue

DISCUSSION & CONCLUSIONS

The study shows the link between Economic growth and tax revenue in Egypt through the use of data covering the period from o1975 to 2022) The variables used in this study were selected beside on three factors:- the first literature review, the second the problem as adjectives of the paper, and the third availability of data. rarely we found literature linking Economic growth and Tax revenue the majority connecting Tax revenue to economic growth or other Variables, the statistical analysis shows that both GDP –

Current and GDP per Capita correlation to Tax Revenue are significant in the short run, such result is matching what found in the study of Fajrina, A. S. I., & Setiawan, B. (2023), and Niyazmetov, I. M., Rakhmonov, A. S., & Otabekov, O. (2023) but why no long significant correlation?

The answer is the GDP and GDP per capita are calculated on an annual basis and their volume is different from year to year also the GDP increase is always limited to the limited capacity of the economy and can change depending on the level of employment, availability of natural resources, availability of Capital which vary between long and short run, it obvious that the effect of such capacity will more powerful in the short run. Also one of the results of the statistical analysis results focuses on inflation and its impact on tax revenue, the statistical analysis results show that there is a negative significant effect of inflation, which matches the study of Hani & Warad, (2023) and Ali, (2023) but why there such long term correlation? The answer is inflation and not -hyperinflation- which takes some time to impact the economy that is why till inflation reaches its peak of effect on income or economic activities it will not be a significant problem to taxpayers. Also one of the results of the statistical analysis shows that no negative or positive significant effect of both gross Capital formation and unemployment on Tax Revenue which matches the results of the study of, Yuldasheva & Artikov, (2021) Mamo, (2023), and Ngwaba, (2023). But why there is no significant correlation? The answer is unemployment in addition gross capital formation are two variables usually used to measure economic growth their impact in the process of creating economic growth will follow the economic principle of (delay effect) which means, a very long time till we see the effect and the generated effect will be small and sometimes will be neglected that why both variables cannot impact the tax revenue in magnitude way.

We conclude that this study as one of the first studies gives a guideline to other researchers to develop their studies regarding the impact of economic growth on Tax revenue or other government revenues in developing countries Egypt is an Example.

Recommendation

1- Implementing policies that ensure sustainable economic growth: The most important elements necessary to achieve sustainable growth in total factors productivity, and hence economic growth.
2- The existence of a favorable macroeconomic policy environment: The elements of this environment are the presence, Low levels of both external debt and government consumption exist High international reserves to achieve economic growth.
3- Linking tax rates to the level of economic growth, and paying attention to increasing the segment to which the tax is applied and not the tax rate.
4- Attention is paid to reducing and controlling inflation rates because of their negative consequences on economic growth as well as the government's tax revenues.

References:

Abo-Ahmed, K. (2021).Impact of Income and Corporate Taxes on Economic Development in Egypt [Master's Thesis, the American University in Cairo]. AUC Knowledge Fountain. https://fount.aucegypt.edu/etds/1639

Ali, F. (2023). Determinants of Private Consumption Expenditure in Egypt: ARDL Study. Cognizance Journal, 3(7), 109–129. https://doi.org/10.47760/cognizance.2023.v03i07.011

Ahmed, E. A., & Edris, A. E. (2018b). The effect of the liberalization of the pound exchange rate on domestic tourism in Egypt. Egyptian Journal of Tourism and Hospitality, 25(2), 66–81. https://doi.org/10.21608/ejth.1999.233727

Busler, M. (2013). Income tax policy: is a single rate tax optimum for long-term economic growth? World Journal of Entrepreneurship, Management and Sustainable Development, 9(4), 246–254. https://doi.org/10.1108/wjemsd-01-2013-0008

Chang, J. J., Chen, B. L., & Hsu, M. (2006). Agricultural productivity and Economic Growth: Role of tax revenues and infrastructures. Southern Economic Journal, 72(4), 891. https://doi.org/10.2307/20111859

Edori D. S, & Atabusi, Michael. (2022). The Nexus between Direct Taxes and Total Tax Revenue of the Federal Government of Nigeria. European Journal of Accounting, Finance and Investment, Vol.8, No.12; December-2022(Vol. 8, No.12; December-2022), 49–60. https://www.cirdjournal.com/index.php/ejafi/index

Etienne, N. (2023). Impact of Tax Revenue on Economic Growth in Rwanda from 2006-2021. International Journal of Management Research and Economics, 3(1). https://doi.org/10.51483/ijmre.3.1.2023.57-73

Eze, C. G. (2023). Impact of non-oil tax revenue on economic growth in Anglophone and Francophone countries. World Journal of Advanced

Research and Reviews, 18(2), 671–681. https://doi.org/10.30574/wjarr.2023.18.2.0882

Fajrina, A. S. I., & Setiawan, B. (2023). The effects of digitalization and GDP per capita growth on tax revenue in ASEAN countries. Optimum: Jurnal Ekonomi & Pembangunan, 13(1), 14–24. https://doi.org/10.12928/optimum.v13i1.5780

Hani, M. B., & Warad, T. (2023). Determinants of tax revenues in Jordan. An-Najah University Journal for Research - B (Humanities), 37(3), 383–410. https://doi.org/10.35552/0247-037-003-002

Irekponor, A., & Jones, E. (2023). Comparative analysis on effect of tax revenue on economic growth of developing countries. European Journal of Accounting, Auditing and Finance Research, 11(8), 61–76. https://doi.org/10.37745/ejaafr.2013/vol11n86176

Ismayilov, R. M. M. I. M. (2023). The Role Of Taxes In Theories Of Economic Growth And Development. Proceedings of Azerbaijan High Technical Educational Institution, 30(07), 378–385. https://doi.org/10.36962/pahtei30072023-378

Kamal, A. L. M. (2022). The Nexus between Unemployment and Economic Growth in Egypt: Revisiting Okun's Law. Asian Journal of Economics, Business and Accounting, 163–173. https://doi.org/10.9734/ajeba/2022/v22i24904

Kamal, A. L. M., & AboElsoud, M. E. (2023). Modeling economic growth factors in Egypt: A quantile regression approach. Heliyon, 9(2), e13143. https://doi.org/10.1016/j.heliyon.2023.e13143

Kizito, E. U. (2014). The Nexus between Tax Structure and Economic Growth in Nigeria: A Prognosis. Journal of Economic and Social Studies, 4(1), 107–131. https://doi.org/10.14706/jecoss11417

Lestari, F. a. P., & Yolanda, Y. (2022, November 20). The Effect of Economic Growth, Poverty and Wages On Tax Revenue. Eduvest. https://doi.org/10.36418/eduvest.v2i11.644

Mansour, H. (2022). The Impact Of Ict Capital Growth On Economic Growth: The Case Of Egypt. Zbornik Radova Ekonomskog Fakulteta U Rijeci : Časopis Za Ekonomsku Teoriju I Praksu, 40(2), 375–394. https://doi.org/10.18045/zbefri.2022.2.375

McNabb, K., & LeMay-Boucher, P. (2014). Tax Structures, Economic Growth And Development. Social Science Research Network. https://doi.org/10.2139/ssrn.2496470

Mudainohwo, O. B., & Ndu, O. M. (2022). Tax Revenue Impact on Economic Growth in Nigeria: ARDL Bounds Test and Cointegration approach. Journal of Tax Reform, 8(2), 140–156. https://doi.org/10.15826/jtr.2022.8.2.113

Mamo, M. (2023). Direct versus indirect taxes and state income growth: 1991–2015. Eastern Economic Journal. https://doi.org/10.1057/s41302-023-00254-1

Maryantika, D. D., & Wijaya, S. (2022). Determinants of tax revenue in Indonesia with economic growth as a mediation variable. JPPI (Jurnal Penelitian Pendidikan Indonesia), 8(2), 450. https://doi.org/10.29210/020221522

Mishra, P. K. (2011). The Cointegration and Causality between Tax Revenue and Economic Growth in India. Social Science Research Network. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1989402

Mohieldin, M., Hussein, K., & Rostom, A. M. T. (2019). On financial development and economic growth in Egypt. Journal of Humanities and Applied Social Sciences, 1(2), 70–86. https://doi.org/10.1108/jhass-08-2019-0027

Niyazmetov, I. M., Rakhmonov, A. S., & Otabekov, O. (2023). Economic growth and optimal tax burden: A case of Uzbekistan's economy. Journal of Tax Reform, 9(1), 47–63. https://doi.org/10.15826/jtr.2023.9.1.128

Nguyen, H. T., & Darsono, S. N. a. C. (2022). The impacts of tax revenue and investment on the economic growth in Southeast Asian countries. Journal of Accounting and Investment, 23(1), 128–146. https://doi.org/10.18196/jai.v23i1.13270

Ndoya, H., & Bakouan, P. (2023). Does tax revenue improve economic complexity in Africa? Journal of Economic Integration, 38(2), 278–301. https://doi.org/10.11130/jei.2023.38.2.278

Ngwaba, C. A. (2023). Corporate taxes and FDI in developing economies. International Economics and Economic Policy, 20(4), 613–633. https://doi.org/10.1007/s10368-023-00575-8

Nyamadi, G. (2023). Tax policy and economic growth: Evidence from Ghana. Research Journal of Business & Economic Management, 6(3), 37–50. https://doi.org/10.31248/rjbem2023.092

Ojima, D., Ojima, N., & Okonkwo, O. N. (2023). Econometric analysis of taxation, capital formation and economic growth in Nigeria. International Journal of Humanities & Social Studies. https://doi.org/10.24940/theijhss/2023/v11/i6/hs2306-026

Soumadi, M. M., & Alrjoub, A. M. S. (2023). The impact of taxes on prices and production in Jordan. International Journal of Professional Business Review, 8(5), e01680. https://doi.org/10.26668/businessreview/2023.v8i5.1680

Thapa, K. B. (2023). Nepal's Tax Revenue: Analyzing the effect on GDP. Indian Scientific Journal of Research in Engineering and Management, 07(05). https://doi.org/10.55041/ijsrem22867

Takumah, W., & Iyke, B. N. (2017). The links between economic growth and tax revenue in Ghana: an empirical investigation. International Journal of Sustainable Economy, 9(1), 34. https://doi.org/10.1504/ijse.2017.080856

Wolak-Tuzimek, A., & Tuzimek, W. (2021). The effect of indirect taxes on the state budget revenue. Central European Review of Economics & Finance, 35(4), 29–41. https://doi.org/10.24136/ceref.2021.015

Yuldasheva, I. R., & Artikov, N. A. (2021). Types and functions of taxes in a market economy. International Journal of Multicultural and Multireligious Understanding, 8(7), 579. https://doi.org/10.18415/ijmmu.v8i7.2925

Zotikov, N. Z. (2023). Fiscal function of taxes, its impact on budget revenues at various levels. Вестник Университета, 1(1), 189–198. https://doi.org/10.26425/1816-4277-2023-1-189-198