World Research of Business Administration Journal
Vol.2 No.2 July 2022

The Accounting Measurement and Disclosure of Public Expenditure Return and Its Impact on Rationalizing Allocation Decisions

Samy Hosny Mohamed Tamera
Ministry of Finance
Arab Republic of Egypt
samytayer@yahoo.com

Abstract

The research aims to identify the essential variables that cause the inefficiency of decisions to allocate public expenditures and that cause the inability to determine the optimal mix of aspects of public expenditure, in addition to providing a suggested approach to reduce these variables and rationalize allocation decisions.

Through this research, the researcher tries to answer the research question related to how to rationalize public expenditure allocation decisions?

The researcher conducted an analytical study of a number of previous research studies in both the accounting and economic literature which discussed public expenditure allocation and the measurement of social benefits, The researcher also conducted a practical study based on a survey of a number of experts in both economic and accounting literature and public finance science in a number of countries registered in the International Monetary Fund database, with the aim of testing the research hypotheses and the proposed methodologies that he thinks as their ability to reduce the causes of inefficiency decisions allocation.

The results of this research are the acceptance of the research hypotheses that have been formulated and concluded that the process of allocating public expenditures lacks an objective measurement of information related to the inputs and outputs of the allocation, and the possibility of achieving this information through the accounting measurement of the return on public expenditure that the researcher put forward as a new target for measurement.

Keywords: Accounting Measurement, Accounting Disclosure, Return on Public Expenditure, Rationalization of Allocation Decisions.

1. Introduction

Jacob Soll stated in his book Financial Accounting and the Rise and Fall of Nations in 2014 that accounting is designed to produce high-quality information that supports sound economic decision-making and effective allocation of resources, and that the main role of the accounting profession is to provide appropriate information to decision-makers in order to achieve economic development at the macro and micro levels (Venter, Gordon, & Street, 2018), But achieving economic development and increasing the level of citizens' welfare requires more expenditure, which is already being undertaken by many governments of the world, due to their role in economic activity and their social responsibility towards citizens, but the results are contrary to expectations, However the increase in expenditure rates, this increase was offset by a decrease in citizens' incomes and a decrease in the level of their Welfare, this is what happened in the Arab Republic of Egypt from 2014 to 2017, where this period witnessed a significant increase in the volume of public expenditure distributed among infrastructure projects and road construction, but the percentage of citizens below the poverty line increased by 3% (El Sabaa, 2017).

These phenomena placed more burden on researchers especially with regard to

Print ISSN 2771-1161
Online ISSN 2771-1153

evaluating decisions to allocate public expenditure and to determinate, are these decisions are efficient and effective in the creation the optimal mix of aspects of public expenditure - which is necessary to maximize the public benefit of citizens - or not?, A number of few research studies have discussed the issue of public expenditures allocation decisions to answer the question related to the efficiency of these decisions, Many results have been reached but they raise many questions (Pradhan, 1996).

It has been shown that the efficiency of these decisions is affected by inefficiency in consumption and inefficiency in production, Inefficiency in consumption means that society as a whole is provided with goods and services that it would not have chosen if individuals Practiced their rights to choose goods and services that meet their desires, As for inefficiency in production means that the goods and services that are provided to society are not produced in more efficient ways (Smith, 1981), And also These decisions are tainted by a great corruption, as the allocation is increased to some aspects of expenditure which it is easy with it to seize public money, such as defense, security and public safety (Moschovis, 2010)

One of the variables that also affect the efficiency of allocation decisions are the restrictions imposed on the public budget, which are faced by policy makers determining relative weights to citizens' needs for goods and services, but these relative weights are inaccuracy because they are based on the experiences of policy makers not based on an objective measure of needs, in addition the lack of impartiality of policy makers in the assessment (Mogues, 2015), and affected them by the poverty of resources and the lack of information, as well as the pressure factors on the side of the political economy and their impact on determining the components of public spending (Ben-David & Tavor, 2011).

Another factor affecting the efficiency of the allocation of public expenditures is the absence of measurement of the outputs of these expenditures, as the economic and social information system has become unable to record and evaluate the desired social outputs, which are always in a state of change, and there has been an increase in dissatisfaction with the use of economic statistics. alone to measure social performance (McBain & Alsamawi, 2014). Which requires a quantitative measurement in a monetary form that shows the value of the social return, which is one of the most important necessary measures and challenges facing the governments of countries, especially after the global financial crisis and the funding problems faced by countries, including, for example, the problems faced by the United States of America after 2009 with regard to Refinance the same social programs year after year with the absence of a measurement of the returns of these programs, which led to large debts estimated at that time 4 trillion dollars (Saul, 2013).

It became necessary to answer an important question, which is what is the priority to be achieved in order to correct economic and social conditions and improve the quality of life for citizens, whether at work or at home?, As well as answering the following question: Why is it not possible to obtain a good measure of economic and social performance?, According to the findings of research studies in this regard, the priority to be achieved is the social welfare of citizens or the so-called social welfare. But economic and social information systems will not be able to determine the required level of social welfare and what resources must be allocated to achieve this level, Therefore, it is necessary to rely on a complementary information system that enables policy makers to develop an integrated strategy of the aspects of public expenditure which are necessary to maximize the social benefit of citizens. (Moss, 1980)

This is in addition to the challenge faced by a number of countries in the world, which is the increase in the volume of public expenditure with the decline in the level of public revenue, This challenge is considered one of the most important challenges in the twenty-first century, which leads these countries to the necessity of applying some austerity measures (Wirtz, Lütje, & Schierz, 2010), But care must be taken when composing a package of these

measures in order to avoid the negative impact of reducing some aspects of public expenditure - such as education - on the overall economic growth rate (Castro, 2018), As the optimal rationalization of expenditure depends on the efficiency of allocation that entails the change in the structure of goods and services that are provided to (Postuła, 2017), The efficiency of public expenditure also depends on the optimal allocation of resources (Dutu, 2016), It should be noted that the social values of services chosen to be provided to citizens must correspond to the different levels of resource allocation decisions (Ahmed, 1988)

According to the foregoing, the rationalizing of public expenditures allocating decisions has become a very important necessity because of its fundamental impact in a path of the development process, Hence, the research problem discussed in this research is: How to rationalize the allocating decisions of public expenditures in the presence of the impact of a number of variables surrounding the allocation process, which would lead to the failure of the allocation decisions in maximizing the public benefit of citizens.

In order to form a vision for answering the research question represented in: How can we rationalize public expenditure allocation decisions?, In order to form a vision for answering the research question represented in: How can public expenditure allocation decisions be rationalized? The researcher will further discuss and analyze a number of research studies that dealt with the issue of allocating public expenditures and measuring the return on allocating these expenditures as it represents the feedback to the allocation process.

The researcher will also do practical study based on the survey of experts and insiders in the field of research in order to test the validity of the research hypotheses formulated by the researcher in light of the results he reached from discussing a number of previous research studies related to the causes of the research problem These hypotheses were as follows:-

- First Hypothesis: There is a significant relationship with statistical significance between the absence of feedback on the process of allocating public expenditures, and the inefficiency of allocation decisions.
- The second hypothesis: There is a significant relationship with statistical significance between achieving the accounting measurement of public expenditure return, and achieving the feedback of public expenditures allocating process.

2. literatures Review

Public expenditure in many countries represents between 50-60% of the total demand in the national economy, and no way less than 30% in most countries of the world. Therefore, any change in public expenditure has an impact in determining the path of economic growth, The degree of this effect depends on the change in the components of public expenditure (Dewan & Ettlinger, 2009), Research studies indicate that the impact of a change in the structure of public expenditure varies according to the size and quality of this component. The effect resulting from a change in export subsidies differs from the effect resulting from a change in the volume of other transfers to the education or health sector and also differs from the effect resulting from a change in subsidizing energy products.

The impact of the change in the structure of public expenditure is not limited to the growth path, but extends to the distributive dimension of this change, which is a very important issue, If there is a decision to compare between energy subsidies, education subsidies, health subsidies, or food subsidies, the decision to increase or reduce these types - or to substitute one type of subsidy for another, such as cash subsidies instead of in-kind subsidies - has distributional effects that cannot be ignored on income distribution and on peace social in society (Shehata, 2009), In light of this, the decision to determine the aspects and priorities of public expenditure is a great matter in influencing the growth path, and this

Print ISSN 2771-1161
Online ISSN 2771-1153

always raises the question of how the aspects and priorities of public expenditure are determined?

2.1 literatures Review that discussed the allocation of public expenditures

This part of the research in which the researcher discusses and analyzes a number of research efforts that dealt with the issue of the allocation of public expenditures, trying to identify the variables affecting the efficiency of the allocation process and the research gap through which these causes can be avoided.

2.1.1 Study (Tridimas, 1999)

Tridimas carried out this study in order to test the effect of the opportunity cost of public spending allocations on the allocation of these expenditures in light of the available amount of public resources, Tridimas has also studied the extent to which the government's orientation in the allocation of public expenditures is affected by the prices of public services provided to the public.

Tridimas used UK public spending data for the period from 1963 to 1996, And he prepared a model for allocating public expenditures based on the Rotterdam model of demand, by entering a variable representing the value of the error in the demand equation for this model, It is worth noting that this model is a model for determining the amount of demand from public services according to the prices of these services.

The study concluded that there is a significant impact of the prices of public services in the allocation of expenditures for these services, As well as the presence of an important impact of demographic variables on the allocation process, The study also concluded that there is no effect of total public expenditures as an influential variable in the allocation of expenditure; Although other research studies have found an effect of the total value of expenditure on the allocation process.

2.1.2 Study (Paternostro, Rajaram, & Tiongson, 2005)

Paternostro et al. carried out this study is a result of the growing concern about the scientific foundations and concepts related to the belief that the level of poverty can be reduced through public expenditure targets, Although this approach to allocating public expenditure is exposed to criticism because of its negative impact on the rate of economic growth; as a result of directing expenditure directly to confront the poverty of citizens and not to productive operations. Paternostro et al. said that: There is no appropriate framework for assessing the impact of public expenditure on both poverty and growth, A combination of macroeconomic principles and growth theory is needed in order to develop a theoretical framework for public spending policy.

The study dealt with the literature on the allocation of public expenditure, which tried to answer the question of how governments work with regard to allocating public expenditure among different sectors in order to increase opportunities for achieving development, The study also attempted to answer the question about what are the principles and technical tools that guide the allocation of public expenditures, Paternostro et al. have been mentioned A number of approaches to allocating overheads, which are: cost-effectiveness analysis, multi-criteria analysis, surveys, expenditure tracking and cost- social benefit analysis.

The study concluded that there is no optimal policy for determining aspects of public expenditure; Rather, determining the aspects of public spending is due to the theory of market failure, which is intended to provide goods and services that markets cannot provide to citizens. The study also found that there is no specific methodology for allocating public expenditure, Some of them depend on quantitative measures, and some of them depend on the experiences of the persons involved in allocating, which differ from one country to another.

Paternostro et al. have indicated to the existence of future research challenges in defining a reference guide to be used by policy makers in the allocation of public expenditures; This is due to the inability of economic theories currently to solve this problem and not keep pace with the challenges of development policies, and this in turn led to a widening of the gap between theory and practice.

2.1.3 Study (Moschovis, 2010)

This study was conducted with the aim of testing the impact of corruption on decisions related to public expenditure and Execution of the public budget, especially in the presence of financial fluctuations, The study also focused on reviewing the relevant literature related to the impact of corruption on public expenditure. Relying on an econometric method, Moschovis reviewed the literature on the allocation of public expenditure to defense, security, public safety systems, economic and cultural affairs, and public services; This is for the case of 15 countries of the European Union, with more attention given to the case of Greece, during the period from 1995 to 2006, The study concluded that there is an effect of corruption on expenditure accuracy and pushing towards financial crises. Moschovis stated that his study differs from other studies, as it dealt with aspects of public expenditure under study as a percentage of total public expenditure and not like most other studies that dealt with aspects of expenditure as a percentage of GDP.

2.1.4 Study (Ben-David & Tavor, 2011)

This study was conducted with the aim of measuring the social loss as a result of the government's inability to use the public demand function, which is due to the absence of information related to the volume of demand for public goods and services. In this study, Ben-David and Tavor have developed a model through which the government can maximize the public benefit to citizens under the assumption that the social benefit is determined according to the public demand for goods and services, which can be a substitute for the value of the public benefit, And the value of public demand was determined through a field survey of a group of citizens.

This study discussed the methodology of allocating public expenditures directly, as the study stated that the allocation process is carried out according to the relative weights specified for each functional sector by the planners; Where the allocation starts from the sector with the highest relative weight, then the lowest, and so on, but the study stated that there is no agreement on the accuracy of these relative weights which can Creating the optimal mix of public expenditures to maximize the public benefit of citizens, The study faced criticism regarding the hypothesis of the model Where it has not been fully accepted, under the pretext that it is impossible to obtain an adequate assessment of the social benefit of citizens through field surveys.

2.1.5 Study (Carboni & Medda, 2011)

This study tested the relationship between public expenditure and the growth rate of domestic product, through an econometric model, where public expenditure represents one of its variables. The study found the possibility of maximizing the growth rate of output by controlling the volume of public expenditure, It is even possible to increase the growth rate through reallocation between aspects of public expenditure and the transfer of expenditure from one functional sector to another, The study also found a positive relationship between public expenditure and the increase in the productivity of private expenditure, The study also found that neglecting the linear relationship between public expenditure and the growth rate would lead to biased and subjective results.

Print ISSN 2771-1161
Online ISSN 2771-1153

2.1.6 Study (Liu, 2014)

This study was conducted with the aim of examining the impact of public sector employee corruption on the volume and allocation of public expenditure in the United States of America, Liu and Mikesell made an analytical study of the data recorded during the period from 1997 to 2008. The study found an increase in the allocation of US public expenditure in aspects of expenditure that increase the opportunity to receive bribes, such as expenditure on infrastructure, road construction, salaries and wages.

2.1.7 Study (Cordes, 2017)

This study examined the relationship between government corruption and the components of public expenditure in the United States of America, Where Cordis conducted an empirical study for the period from 1986 to 2008 using data on corruption cases filed by the federal attorney general in order to measure the level of government corruption at the level of all US states and to overcome the discrepancy in the level of corruption among all states, Cordis also used the results of annual surveys conducted by the US Census Bureau to analyze components of US public expenditure.

The study concluded that there is a significant impact of government corruption in determining the components of public expenditure in the United States of America, And the study specifically mentioned that government corruption leads to a reduction in allocations directed to spending in the field of higher education, as well as a reduction in allocations directed to social reform and an increase in the welfare of citizens, On the other hand, government corruption leads to an increase in the allocations directed to expenditure in the field of health, hospitals and housing.

2.1.8 Study (Kasdin & Lin, 2015)

This study was conducted with the aim of examining the effect of the political environment on the response of federal institutions in the allocation of public expenditure; This is done by analyzing public expenditure in the United States of America from 2006 to 2010, Whereas in 2006 the helm of government moved from the hands of the Republicans to the Democrats and vice versa in 2010. The study found that American government institutions are affected by the existing system of government when allocating public expenditure and directing expenditure according to the desires of the regime.

2.1.9 Study (Calligaris, 2015)

This study was conducted with the aim of explaining the phenomenon of the increasing decline in the productivity of the factors of production within the industrial sector in Italy compared to the rest of the countries of the continent of Europe, As this phenomenon increased, attention began to increase to the efficiency of expenditure allocation, and there was an urgent question regarding the impact of misallocation allocation of expenditure on the productivity of factors of production? and what are the causes of misallocation?

The answer to this question was the focus of this study, The Italian case represented a good example for studying the misallocation of expenditure and became interesting, especially in light of the increasing decline in the productivity of production factors over time after Italy achieved the best growth among the countries of the continent of Europe in the period from 1970 to 1980, Calligaris conducted an empirical study by analyzing production inputs in Italian factories over a time series during the period from 1993 to 2011, Calligaris assumed a basic hypothesis for this study: the absence of misallocation with the expectation that the productivity of the factors of production would increase by 58% in 1993, by 67% in 2006, and by 80% in 2011. The study reached a very important conclusion, which is: the

increase in misallocation over time and that misallocation plays an influential role in the inefficiency of production in the Italian industrial sector, The study stated that the reason for the misallocation is due to a number of determinants represented in the nature of Italian companies and the geographical scope.

2.1.10 Study (Mogues, 2015)

This study aimed to test the impact of the determinants of political economy on the allocation of public expenditure, by discussing a number of research studies that dealt with this topic, The study dealt with the discussion of the agricultural sector allocations as one of the areas of public expenditure; Mogues studied the impact of these determinants on these allocations in both developed and developing countries. The study discussed a number of previous research studies that tested the effect of each of the incentives and constraints of politicians, bureaucrats, and donors on expenditure allocation, The study also tested the impact of the characteristics of goods and services provided to the public and the impact of the political environment in determining public investment priorities.

The study concluded that the determinants of political economy have a significant impact on the process of allocating public expenditures, But, Mogues has shed light on a number of areas that need further research in the future, including the strong empirical evidence on the impact of these determinants in the allocation process and identified three basic determinants that are: (the incentives of authorities in the allocation process - the characteristics of public goods and services provided to citizens - the vision of those responsible for determining Public expenditure priorities).

2.1.11 Study (Fonchamnyo & Sama, 2016)

Fonchamnyo and Sama conducted this study with the aim of testing the efficiency of public expenditure in the education and health sectors in three African countries: Cameroon, Chad and the Central African Republic, This study also aimed to test the effect of institutional and economic factors on the efficiency of public expenditure in these two sectors, The study stated that expenditure efficiency depends on two factors: technical efficiency and allocation efficiency. The study concluded that when analyzing the efficiency of expenditure allocation to determine its impact on expenditure efficiency, a more in-depth analysis is required with regard to input prices according to the cost-benefit analysis approach.

2.1.12 tudy (Neduziak, 2017)

This study tested the effect of public expenditure allocation on the GDP growth rate in Brazil during the period from 1995 to 2011 through an empirical study using the fixed effects model – Which is a statistical model characterized by the stability of parameters - In order to know the effect of public spending components on the rate of the GDP growth. The study found a positive relationship between some components of public expenditure and the rate of the GDP growth. These components were represented in expenditure directed to administrative institutions, planning, housing and social assistance, while there is a negative relationship between the rate of the GDP growth and expenditure directed to education, culture and the legislative authority.

2.1.13 Study (El Sabaa, 2017)

This study was conducted with the aim of testing the effect of allocating public expenditure on solving problems and facing the economic challenges facing the Arab Republic of Egypt, The study developed a basic hypothesis which is: the misallocation of economic resources in Egypt leads to inflation, through over-investment in infrastructure and

Print ISSN 2771-1161
Online ISSN 2771-1153

reduce- expenditure on the productive economy. El Sabaa analyzed public expenditure data for a time series from 2000 to 2014; El Sabaa inferred that the January 2011 revolution resulted in an increase in poverty and inequality in the distribution of income.

The study concluded that, Although, the increase in the volume of public expenditure especially in the recent period, the percentage of the population below the poverty line has increased, This was indicated by El Sabaa on the inefficiency of the allocation of public expenditure in the Arab Republic of Egypt and that: it was not optimal to face the economic challenges and help improve income distribution and alleviate poverty.

1.2.14 Study (Anríquez, 2018)

This study was conducted with the aim of measuring and evaluating the impact of public expenditure distributed between (subsidies - public goods) in achieving social welfare for the citizens of rural areas, The study also aimed to discuss whether public expenditure in the agricultural sector is the real cause of social welfare for citizens in rural areas. Anríquez et al. used the econometric approach to test the relationship between the components of public expenditure in the agricultural sector and the performance of this sector; As well as testing the extent of homogeneity between the applied public spending policies and the level of sector performance, for a time series of data on public expenditures for the agricultural sector in Latin America from 1982 to 2012.

The study found a significant impact of the components of public expenditure in the agricultural sector on the performance level of the sector, And that redirecting the allocation among the aspects of expenditure within the agricultural sector for 10% will lead to an increase in the added value for the individual in this sector equivalent to 5%, with an emphasis on the stability of the total value of expenditure for this sector; While achieving this level of value added increase in case of the absence of redirecting requires an increase in the level of expenditure directed to the sector as a whole by 50%.

1.2.15 Study (Gemmell, Kneller, & Sanz, 2016)

This study was conducted with the aim of knowing the effect of the change in the components of total public expenditure, as well as the change in the shares of expenditure categories on the gross domestic product (GDP) for a sample of the group of member countries of the Organization for Economic Cooperation and Development (OECD), About the period since the seventies of the last century taking into consideration the methods of financing expenditures and the possible internal relationships between aspects of expenditures.

The study found empirical evidence that is more systematic than the evidence found in the studies that preceded this study that is: the reallocation of both education and infrastructure expenditure has a significant impact on the level of GDP in the long run, and the reallocation of social expenditure may be accompanied by negative effects.

2.1.16 The Discussion of Results

It is clear to the researcher from the findings of the studies presented that dealt with the issue of the allocation of public expenditures that the efficiency or inefficiency of the allocation process is not absolute, but is due to the influence of some of the variables surrounding the allocation process and the methodology used in the allocation.

On the level of variables, there is a substantial impact on: corruption in all its forms, the prevailing system of governance, the geographical scope, the political economy, the vision of those responsible for the allocation process, the opportunity cost of expenditure allocation, the prices of services provided to the public and the absence of information related to the volume of demand for public goods and services, On the level of the methodology used in the

allocation, the results show that there is no optimal methodology and there is no specific methodology for the allocation process.

The results of those studies also showed that the problem of inefficiency in allocating public expenditures is not limited to developing and emerging countries only, as it exists in the Arab Republic of Egypt and a number of countries in Africa and Latin America, but that this problem also exists in developed countries such as the United States of America and the United Kingdom, as well as A number of member countries of the Organization for Economic Co-operation and Development (OECD) and a number of European Union countries.

This result indicates the similarity of the variables affecting the allocation process in all countries - with the different degree of the influencing variable - as well as the similarity of the causes of the inefficiency of the adopted methodology, and the inability of one science alone - as a specialized science - to provide an appropriate methodology for allocation that is able to remove these causes and be Capable of maximizing the general benefit of citizens and achieving social welfare.

The researcher believes that it requires more research with regard to the fundamental causes affecting the allocation of public expenditures, This is because of the most studies that indicated the existence of a problem with regard to the efficiency of the allocation has approved this result based on analyzes related to the inputs of the allocation process and the variables surrounding it, As well as relying on the link between some of the phenomena that appeared in conjunction with the absence of tangible and influential results for the allocation process in maximizing the public benefit of citizens, without the real touch by these studies to research and analyze the results of the privatization process.

Also, these studies did not indicate the existence of a measurement of the benefits achieved and the outputs of the allocation process, either in a descriptive form or in a quantitative form that can be used as a financial value for the return on expenditure and can be offset by the value of what was spent to be considered as a feedback to the allocation process, which helps in determining the appropriate relative weights for expenditure priorities.

The researcher believes that there is a necessity to discuss the research efforts that dealt with measuring the benefits achieved from public allocation as a return to these expenditure, in terms of the possibility of measuring them, the extent of the objectivity of this measurement and the possibility of developing it and relying on it in providing feedback information for the allocation process. Therefore, the researcher will address this matter in the next part.

2.2 literatures Review that discussed measuring social benefits

The literature of scientific research in both the economic and accounting fields suffers from the lack of research studies that dealt with measuring the benefits achieved from public expenditure, The previous research efforts made several attempts to achieve this measurement, using a number of different scales according to the vision of the researcher and the practical field of the study, The following is the discussion a number of those studies in order to establish the latest findings of the scientific research regarding this measurement.

2.2.1 Study (Starrett, 1977)

This study was undertaken with the aim of building a broadly usable measure of Social Welfar achieved through the provision of technology products, This is based on the theory of homogeneous functions, where the return is measured for a group of products and considered as one unit according to the degree of homogeneity; The concept of social welfare is one of the important topics in economic studies.

Print ISSN 2771-1161
Online ISSN 2771-1153

Starrett has developed a basic hypothesis in order to measure the level of social welfare, and this hypothesis is that: "Society consists of specific groups of individuals who agree in their tastes and abilities. The social welfare of the community depends on its consumption of goods and on the available resources, and the resources used."

2.2.2 Study (Pina, 2005)

This study was conducted with the aim of discussing the Pereira 2000 methodology related to the rate of return on public investment (ROPI), The study also aimed to avoid the criticisms which was directed to this methodology, which considered the return on public investment as the rate of return included in the calculation of average productivity, which is measured through the relationship between four variables: public investment, private investment, employment in the private sector and national output from the private sector.

The study stated that this methodology relied on the Vectorial Auto Regressive (VAR) model, which is an autoregressive model that measures the mutual linear relationships between a number of variables in multivariate time series through an equation that combines the logarithm of the dependent variable and the previous logarithms of the independent variables.

Pina agreed with the Pereira 2000 methodology on the importance of taking into account the indirect effects of the outputs of public investment and their relationships with private investment inputs. Pina differed with the Pereira 2000 methodology in the way investment costs are measured, as well as with regard to the position of costs as an influential variable in public sector outputs.

2.2.3 Study (Li & Lofgren, 2006)

This study tested the measure of Net national product as a measure of social welfare achieved as a result of public spending, The study concluded that the measure of net national product in general does not reflect social welfare, because of the net national product is measured according to consumer and fixed prices; And this is not correct when measuring the level of progress in social welfare. The study suggested deducting fixed prices and replacing them with variable prices according to the consumer price index, and the study provided an alternative measure for expressing the level of social welfare represented in the rate of return on the net relative weight of public investment.

2.2.4 Study (Junankar, 2003)

This study was conducted with the aim of discussing the results of public investment in education in Australia, and Junankar measured the so-called social rate of return (SROI), and this return reflects the amount of benefits that have been achieved for the Australian citizen as a result of public investment expenditure in education, The social rate of return was determined as a measure of public expenditure results, similar to the rate of return on investment in commercial projects (ROI).

The methodology for measuring the social return achieved as a result of public expenditure in education was like the methodology for estimating the return on private investment in education, through the potential income achieved as a result of the high level of education compared to the cost paid as a result of this rise in the educational level; and the difference between them represents the return, bearing in mind that education services Introduction is priced.

The study methodology in estimating the social return to education has been subjected to a number of criticisms, the most important of which are: overestimating the rate of return, and bias in estimating profits.

Print ISSN 2771-1161
Online ISSN 2771-1153

2.2.5 Study (Moretti, 2010)

This study was conducted with the aim of contributing to the research argument surrounding the idea of the Local Multiplier (LM3), which originates from the economic literature which says that: job creation in certain sectors results from an increase in expenditure in other sectors; Thus, governments can attract more investment into the national economy by expenditure more tax proceeds to create demand in certain sectors.

Moretti has come to confirm the idea of the domestic multiplier, but taking into account the rate of elasticity between supply and demand between sectors of the economy, as it was found that creating more jobs in the commercial sector, had a significant impact in creating more jobs in the construction sector, wholesale trade and services Personal.

2.2.6 Study (Alston, 2011)

This study was carried out with the aim of making a new estimate for the returns of US public expenditure in the field of agricultural research, which can serve as a benchmark for evaluating the returns achieved as a result of expenditure on agricultural research, Alston et al. They presented a model of estimation different from the models presented by previous research studies that dealt with this topic, as the model was based on the agricultural productivity and the investments of the central and local government in the field of agricultural research, Agricultural productivity was measured by measuring the change in productivity as a result of both agricultural research and public expenditure on agricultural expansion.

2.2.7 Study (Millar & Hall, 2013)

Millar and Hall conducted this study in response to the call for scientific research to find and develop an appropriate mechanism for evaluating social institutions and organizations, The study aimed to analyze performance measures used in institutions and social organizations, with more attention given in the analysis to the social rate of return (SROI) in order to contribute to the discussion about the usefulness of using it as a measure of performance in institutions and social organizations after increasing interest in it and supporting its use by many countries of the world such as China and France.

This scale is based on accounting principles and the principle of cost-benefit analysis, and it works to determine a monetary value for each of the environmental and social returns of social programs in order to show the real added value to society as a result of these programs. This scale expresses the social benefits achieved relative to what has been spent in order to achieve these benefits .

The study found that despite the successes achieved by the use of this scale by many social institutions in evaluating their performance, such as institutions working in the field of health, social care and education, it is not used by other institutions; The reason for this is due to the difficulty of determining a financial value for some of the achieved results of social programs such as confidence and self-esteem, which is due in its estimation to personal judgment.

The reason for not using this scale by some organizations is also due to the assumptions that are made to reach this scale, which conflict with the way these organizations are managed, for example: that these organizations have a database and financial agents, and often the data in these organizations are not Reliable, which leads to poor quality of reports prepared according to this metric, Also, this scale requires that there be knowledge about what could happen, and data on this is rarely available, which leads to arithmetic errors in estimation, data inconsistency, and inability to compare this scale between different institutions.

Print ISSN 2771-1161
Online ISSN 2771-1153

2.2.8 Study (Kakwani, 2015)

This study was conducted with the aim of evaluating public expenditure programs related to the social aspect, in light of the continuous increase in the percentage of investment in social programs by many developing countries with the aim of increasing the level of Welfare of their people, especially the poor and the weak.

Kakwani and Son applied the social rate of return (SROI) methodology to evaluate these programs, and the study defined this rate as "the social welfare achieved as a result of public expenditure programs related to social aspects, which represents a percentage of the cost of these programs."; Measuring this rate requires determining the amount of the increase in the level of social welfare in monetary form, which represents the direct change in social welfare due to income, and the indirect change as a result of the benefits distributed after the implementation of the social program.

In order to measure the social rate of return (SROI) according to the concept presented by this study, which is "representing a percentage of the cost of the implemented social program", it is necessary to measure the cost of this program.

2.2.9 Study (Thomas, 2015)

This study was conducted with the aim of discussing previous research studies that dealt with the field of evaluating public expenditure in the field of health, as well as evaluating the standard methods that were used to estimate the value of money, in order to improve the efficiency of the allocation of public resources to face the pressures imposed by this situation of increasing scarcity resources. Thomas et al. evaluated 40 research studies that dealt with public expenditure in health between January 1996 and December 2014.

Thomas et al. concluded that these studies used a number of different standard approaches in order to measure the effects achieved as a result of public spending on health programs. These approaches were represented in cost-benefit analysis, cost-effectiveness and the social rate of return on investment (SROI); The most widely used of these approaches is the social rate of return on investment, But A decline in the use of this approach has been observed since 2011. Thomas et al. presented some recommendations that they consider the necessity of research in the future in order to apply the methodology of the social rate of return on investment (SROI) objectively in the field of measuring the benefits of public expenditure in health, The most important of these recommendations were:

- The need to identify the actual beneficiaries of the benefits achieved from expenditure, not all stakeholders.
- The need to provide explanations and justifications related to the discount rates used in finding the present value of each of the financial value of social benefits and the cost of expenditure.
- And the need to provide objective models with regard to estimating the financial value of the outputs of social programs.

2.2.10 Study (Nicholls, 2016)

This study was conducted with the aim of discussing the developments that the social rate of return (SROI) has gone through, in order to identify the aspects of this scale that need further scientific research in the future in order to reach a comparable standard with other standards to provide information that suits each of the purposes of financial accounting and public expenditure allocation decisions, and achieving sustainability in the private sector, and commensurate with cost-benefit analysis in the public sector, and arranging the relative importance of the results achieved from public spending according to their relative weight in

achieving the return.

Nicholls searched for the reasons for the emergence of this scale, and he concluded that it was represented in: The need for an indicator that shows whether the activities performed by the institutions have affected the lives of people or not. Nicholls also mentioned other reasons for the interest in this indicator, which is represented in: As a result of the presence of several unanswered questions, these questions were as follows:

- How can the success of the efforts of social institutions and organizations be measured?
- How can the level of progress in the activities and efforts undertaken by social institutions and organizations be measured?
- How can we convince others of what we think is true?
- Are resource allocation decisions efficient?

The study showed that the social rate of return cannot be fully relied upon in the process of resource allocation by social organizations, and there is a need to develop this measure over time to become a criterion which social organizations depend on the decision-making process.

2.2.11 Study (Brown, 2016)

This study was conducted with the aim of estimating the average return on investment in the activities of public health administrations in the state of California, Brown used the ROI methodology using the present value of a number of health economics variables, These variables were obtained from a number of specialized articles, these variables were represented in: the present value of avoiding deaths, the present value of improving health status and the present value of public expenditure on health.

The present value for avoiding deaths is obtained through the estimated statistical value of life used by environmental protection organizations, and this value is obtained through the causal relationship between the volume of public expenditure on health and the avoidance of death. As for the present value of the improvement in health, it is obtained through the standard value expressing good health, which is measured through the causal relationship between the proportion of the population whose health has improved and the volume of public expenditure on health, As for the present value of public expenditure on health, it is obtained by the value of public expenditure on health and the prevailing discount rate.

2.2.12 Study (Pastor, 2016)

This study was conducted with the aim of presenting a different methodology from the previous studies that dealt with measuring the return on public expenditure on public universities. These methodologies were divided into two types of methodologies, The first is: the methodology based on measuring the direct returns from public expenditure on universities through the impact of education on employment and the second is: the methodology based on measuring the indirect effects on the local economy as a result of public expenditure on universities through the relationship between inputs and outputs.

Pastor and Peraita used a Monte Carlo model that included a set of random elements to estimate the tax returns of public expenditure on university in the Basque Country in Spain. The study concluded that public investment in university education is a financially profitable investment.

2.2.13 Study (Cordes, 2017)

As a result of the growing interest in SROI since the early 2000s, This study aimed to discuss the uses and shortcomings related to both the Cost and Benefits Analysis (CBA)

Print ISSN 2771-1161
Online ISSN 2771-1153

methodology and the Social Rate of Return (SROI) methodology as tools that governments, the private sector, investors, as well as donors can use in prioritizing programs and social assistance and evaluating performance.

The study found the ability of the social rate of return to evaluate performance. The study also addressed the objections to this measure, which were summarized in the following: Difficulty in accessing a monetary value that represents a quantitative measure of the outputs of programs implemented by non-profit institutions.

2.2.14 Study (Yates & Mita, 2017)

This study discussed the problems of applying the social rate of return (SROI) as a measure to evaluate performance and measure the social benefits resulting from expenditure in social programs to increase the level of citizens' welfare. The study stated that cost-based analyzes, including the social rate of return on investment analyzes, are relatively recent and cannot be fully relied upon in the decision-making process, And, The relevant organizations and bodies, such as the Social Value International Organization (SVI), which is the organization concerned with the social value that is achieved for societies through social programs, must work to develop a methodology for its measurement.

2.2.15 Study (Gargani, 2017)

This study aimed to discuss the standard framework of the social rate of return on investment (SROI) methodology, which is basically based on the standard framework of the methodology for measuring the rate of return on investment in commercial projects ROI.

The study stated that the same problems facing the investor in choosing between different projects, which required the need for a criterion that enables rational choice, are the same problems facing investors in choosing between social programs, which required the existence of a criterion on the basis of which the appropriate choice can be made.

2.2.16 Study (Watson & Whitley, 2017)

After the social rate of return on investment (SROI) methodology has become the most developed and used method for measuring the intangible social effects of investment in the United Kingdom, the United States of America and some European countries, this study was conducted with the aim of discussing and exploring this methodology by applying it to the investment case in building health clinics, And also to determine whether there is a criticism related to this methodology, and to indicate whether there is a need for future research efforts that can be conducted in order to develop this measure.

Watson and Whitley calculated the rate of social return achieved as a result of building a group of health clinics according to the procedures manual for how to measure this return, which is represented in the number of six stages starting with the stage of determining the areas under measurement through conducting field surveys, And finally, calculating the value of the rate and finding the present value of it during the program's lifetime, and then reporting on this value.

Watson and Whitley found the ability of the social rate of return on investment to express the social benefits related to building clinics and health buildings, But, they pointed out that there is one aspect of criticism that can be directed to this methodology, which is related to the uncertainty of the causal relationship between the social benefits that were reached through field surveys of citizens in the areas under measurement, and the construction of these buildings.

Watson and Whitley mentioned a number of recommendations that must be taken into account in the future in order to continue applying this methodology to measure social

benefits. The most important of these recommendations are related to the quality of preparing surveys, identifying the surveyed individuals and their motives, how to evaluate benefits, and what is the benchmark of the social program costs.

2.2.17 Study (Van Dijk, 2017)

This study was conducted in order to reach a more accurate estimate of the local employment multiplier in the United States of America, which Van Dijk defined in this study as the number of additional jobs that were created in the non-commercial sector as a result of adding one job in the commercial sector in the same city.

Van Dijk found that adding one job to the commercial sector increases jobs in the non-commercial sector by an average of 1.6 to 1.7 jobs, and this result is a strong explanation for the growth rate in the non-commercial sector.

2.2.18 Study (Hall & Millo, 2018)

This study was conducted with the aim of finding out why governments and policy makers choose accounting methods in clarifying and rationalizing their chosen policies for applying.

This study concluded that the accounting approaches have the ability to clarify and explain the content of the applied public policies, which makes them eligible for strong use by policy makers in communicating the content of their policies to the relevant parties, primarily citizens. The study also found that the social rate of return (SROI) is The accounting approaches - currently in use - are most capable of expressing the social benefits achieved as a result of expenditure on social programs, But, Hall and Millo called for future research studies regarding the validity of their findings regarding the ability of accounting to explain and clarify the content of public policies.

2.2.19 Study (Purwohedi & Gurd, 2019)

This study was conducted with the aim of clarifying the possibility of using the social rate of return on investment in improving the management of public projects undertaken by local governments, Purwohedi and Gurd conducted a case study of a sanitation project in an Indonesian city. The study found a significant improvement in project management through the use of the social rate of return on investment, as a result of determining project priorities and implementation preferences, better measuring performance, and achieving the principle of accountability.

2.2.20 Study (Krucien, Fleury, & Gafni, 2019)

This study was conducted with the aim of developing a special methodology that enables the selection of the best expected outputs for public expenditure, especially in the field of health, as the decision-maker cannot allocate public expenditure among health programs due to the lack of knowledge of the possible outcomes in advance, as well as the uncertainty related to these outcomes.

Krucien et al. They applied the (cost-effectiveness plane) (CEP) methodology to select the best outputs for public expenditure for health programs. This methodology is based on the principle of maximizing the benefit resulting from the change in both cost and effectiveness as a result of switching from one drug to another and comparing both cost and effectiveness. For the previous drug with the cost and effectiveness of the current drug.

2.2.21 The Discussion of Results

It is clear to the researcher from the results of the studies that were discussed that these studies' handling of the issue of measuring the benefits achieved for citizens as a result of the

Print ISSN 2771-1161
Online ISSN 2771-1153

allocation of public expenditures was done at the level of specific economic sectors and not at the level of all macroeconomic sectors, which led to the absence of feedback on the process of allocating public expenditures at the aggregate level for the state's general budget.

It is also clear that these studies use - through their chronological sequence - a number of methods of measuring social benefits, which started with the theory of homogeneous functions, which is one of the important topics in the economic literature, leading to the methodology of the social rate of return on investment (SROI), which is currently the most important and most commonly used measure in the field of measuring social benefits.

the social rate of return on investment (SROI), derives his philosophy from the principle of cost-benefit analysis and derives its mathematical formula from the mathematical framework of the rate of return on investment in commercial projects (ROI) - which is one of the important topics in the accounting literature - which emphasizes the idea of integration between social sciences to achieve the Welfare of peoples.

Despite the number of methods used in trying to achieve an objective measurement of the social benefits achieved for citizens through the concept of social welfare, as well as the research efforts related to developing methodologies for this measurement, But, these methods did not provide an objective measurement of these benefits. This is because it did not achieve a real and direct measure of the change in the level of social welfare achieved as a result of public spending; The reason for this is due to many shortcomings in the methodologies used in the measurement, as well as a number of issues related to the concept of social welfare itself.

On the level of measurement methodologies, many aspects of criticism have been directed at these methodologies, especially the criticisms related to the social rate of return on investment (SROI) methodology with regard to how to determine social benefits, which are based on field surveys of a number of individuals who are assumed to be the beneficiaries of the implementation of social programs, as well as criticism related to how to determine the value of financial benefits.

As for matters related to the concept of social welfare as a reason for not achieving a real and direct measurement of the change in the level of social welfare achieved as a result of public spending, this may be due primarily to the difficulty of measuring the concept of social welfare in itself, which went through many stages of development during the period from 1970 until 1980 by a number of researchers, including: Sen, Starret, Blackorby, Donaldson (Geoffrey, 1990), As a result of the difficulty of measuring the concept of social welfare compared to output, governments refuge to maximizing output instead of maximizing welfare. (Misch, Gemmell, & Kneller, 2013).

The difficulty of measuring the concept of social welfare is due to several reasons, namely:

- This concept is based on individual preferences of citizens, not society as a whole (Weymark, 2013)
- It is also a multi-dimensional and contextual concept that: is constantly modified to reflect the prevailing social realities, and it consists of a physical dimension which includes some economic indicators such as income, employment, level of education and social security services, and another personal dimension such as happiness, satisfaction, availability or general insecurity (Moss, 1980)

This is in addition to the fact that: this concept cannot be generalized as it does not take into account the different aspects of citizens' lives, which require continuous review and evaluation to find out what these aspects mean for each country and each region; and reflects

the prevailing social realities and contributes to meeting the needs of citizens (Martinez, Rodriguez, Lombe, & Rossi, 2017). Since the ability of individuals to meet their needs depends on the income they obtain to enable them to meet them, the concept of social welfare has been defined by a number of researchers as "the available income after reducing it by the coefficient of inequality in the income distribution.", And, It was used as an indicator of inequality in the distribution of income by the researcher Dalton in 1920 as the first researcher to use this concept to express inequality in the distribution, It was also used for the same purpose by researcher Atkinson in 1970.

Among the studies that defined the concept of social welfare in this context and used it as a measure to express the efficiency of resource allocation is a study (Villar, 2001), The study (Creedy & Hérault, 2012) defined it as "the average per capita disposable national income," and the study (Quentin & Shlomo, 2002) defined it as "the level of per capita income" in light of the individuals' concept of well-being and based on their view and evaluation of what they get from Income or what they consume in comparing to others, not in absolute terms of what they receive in income or what they consume.

The process of measuring the level of social welfare - given that it is defined as the disposable income after deducting it by the coefficient of inequality in the income distribution - faces a number of challenges, the most important of which are:

- Determining the transfers that will be made to individuals for the purpose of improving the level of welfare, as well as the appropriate measurement tools ((Magdalou, 2018).
- Measuring the level of social welfare for society as a whole requires studying a number of variables, namely (employment and unemployment, income distribution, taxes and social expenditures, social security pensions, health care, education, housing, poverty and social assistance (Mesa-Lago, 2017).
- Studying the variables that have a fundamental impact on the level of well-being, the most important of which are taxes, because of their impact on the level of economic and social life through the level of income (Selen & Karas, 2018), as well as the effect of corruption by government officials for their possession of most incentives, which leads to a decrease in the amount transferred from incentives to individuals, which entails Inability to meet their needs (Toukan, 2017).

The researcher believes that: there is another matter related to the concept of social welfare as a reason for not achieving a real and direct measurement of the change in the level of social welfare achieved as a result of public expenditure, which is related to the content of this concept itself, where the concept of social welfare - in light of the welfare economy - expresses the preferences and priorities of society. However, due to the difference of individuals in their preferences and priorities, the concept of social welfare "represents the weighted sum of the benefits obtained by individuals" (Suzumura, 2002); (Fleurbaey, 2014), and therefore the concept of social welfare does not fully reflect the preferences of all members of society, and the choices of individuals Goods and services are not entirely subject to free choice, and in order for social welfare to be fully representative of the preferences and desires of individuals, the preferences of society as a whole for a commodity must be the same as the preferences of any individual in society. (Haradhan; 2011)

Hence, the researcher believes that although the concept of social welfare is a strategic goal for public spending (van de Walle, 1996), it is not considered an appropriate approach point for achieving objective measurement of the benefits achieved as a result of this spending, due to the difficulty of measuring it and related to the difference of its real content

Print ISSN 2771-1161
Online ISSN 2771-1153

from its philosophy.

Therefore, rationalizing the decisions of allocating public expenditures lies in achieving and making available information related to the volume of demand for public goods and services, as well as achieving and making available information about the feedback process of the allocation process, which is represented in the value of social benefits achieved for citizens as a return as a result of this expenditure.

So, we must work to find the appropriate approach to achieve and make this information available to enable policy makers and persons who are responsible for allocation to direct expenditure towards aspects that maximize the public benefit of citizens at the level of all economic sectors.

3. The Approach of Rationalizing Allocation Decisions

The researcher proposes the accounting measurement of public expenditure return as an appropriate approach to rationalize the allocation decisions, because the return on public expenditure represents the feedback information that the allocation process is missing. Based on that, and also based on the pillars of the accounting measurement process, on top of which is the feature that is being measured, in the next part, the researcher will discuss the concept of public expenditure return as the measured feature, which is hoped to achieve the information necessary to rationalize allocation decisions.

3.1 The concept of public expenditure return

The researcher found that the term "public expenditure return" was rarely used in research studies, and in the few studies in which the term "return" was mentioned, it was associated with one of the aspects of public spending; But it was mentioned missing the linguistic meaning of the word "return," which was defined in both Arabic and English as "revenue, income, or the profit from trade or investment." This term was also mentioned missing the scientific content of the term return, which is based on comparing the income achieved with the cost expended to achieve this income according to the principle of cost-benefit analysis as well as the principle of accounting matching.

The concept of public expenditure return was not explicitly mentioned as a term that expresses the return achieved by citizens from public expenditure at the level of all economic sectors in the country, and the economic and accounting literature did not include a specific definition of this concept.

The study (Benin, 2015) was one of the studies in which the term "return" was mentioned in conjunction with one of the aspects of public expenditure, which aimed to measure the impact of public expenditure on the agricultural sector in Africa. Where, in this study, the researcher used a measure of the added value (increase in productivity) per hectare of agricultural land as a result of public expenditure in the field of agriculture. The term (return) was also mentioned in the study (Cappelen, 2013), which was conducted with the aim of measuring the impact of expenditure by the Norwegian Research Council in the field of research and development by analyzing the performance of a group of institutions during the period from 2001 to 2009.

The researcher believes that: the reason for the loss of the term (public expenditure return) to its scientific content and linguistic meaning in the studies which discussed it, is due to the interest of those conducting these studies in measuring the impact of public expenditure in a particular sector through the productivity scale, without trying to actually measure the value of income achieved for citizens within this sector and using Productivity scale to express the return on this expenditure.

The researcher believes that: the possibility of using the term (public expenditure

return) as an accounting concept that reflects the financial value of the social benefits achieved for citizens, At the same time, it reflects what the state has spent to meet the citizens' demand for public goods and services that have brought them these benefits Especially in light of the following determinants:

- the strategic objective of public expenditure is to increase the level of Welfare of citizens (van de Walle, 1996).
- That: the role of the state in economic activity, according to the theory of market failure, is providing the markets with goods and services that are in the interest of society but that markets have failed to provide to citizens as a result of the individual preferences of market participants and their desire to achieve profits (Furton and Martin; 2019).
- And that: the state's social responsibility is to support its citizens and achieve social justice among them through the redistribution of income. (Khemani, 2017)

Then the researcher can define the concept (return on public spending) from an accounting perspective - taking into account the determinants related to the goal of public spending and the role of the state in economic activity and its social responsibility - this definition is represented in " The improvement in the level of Welfare of citizens due to the increase in their income level or the savings achieved for them in expenditure as a result of obtaining public goods and services, and direct and indirect cash transfers provided by the government".

Considering that: the citizens mentioned in the definition are the citizens who are deserve to services, goods and cash transfers provided by the government in accordance with the eligibility criterion determined by the competent authority in the country, It is worth mentioning that: there are some cases in which these citizens obtain the goods and services provided by the government or even cash transfers, but there is no improvement in their level of welfare, as happens in the case of the death of patients in governmental hospitals or the failure of students in public schools and universities, The researcher believes that in these cases, accounting must be recognized for what we can call public expenditure losses, which can be defined as "the cost of public goods and services and direct and indirect cash transfers obtained by citizens and did not lead to an improvement in their level of welfare. To complement the researcher's discussion of the accounting measurement methodology for the public expenditure return as a measurement methodology whose purpose is to achieve the information necessary to rationalize the allocation decisions, which the economic information system is unable to achieve, the researcher will discuss in the next part how to achieve this measurement and then how to disclose it.

3.2 The Achieving Approach of The Accounting Measurement of Public Expenditure Return

The researcher believes that: the achieved part of the citizens' aggregate demand for public goods and services, which we can call (Real Public Demand), represents the appropriate approach to measure the term (return on public spending), This approach has been used previously in relation to the unrealized portion of demand for public goods and services to express and measure the concept of social loss (SL) by researchers (Ben-David and Tavor) in 2011.

The researcher believes that this approach enables the persons responsible for the allocation to ensure that the full impact of governmental expenditure is transferred to the citizens, It also expresses the content of the definition that was established for the public

Print ISSN 2771-1161
Online ISSN 2771-1153

expenditure return, Whereas, the realized part of the total demand for public goods and services expresses the increase in citizens' income or the savings achieved for them in spending due to obtaining goods and services provided by the state represented by its government; without these citizens paying the money they were willing to give up in order to get it from the market, Hence, this leads to an increase in the level of social welfare for the citizens who obtain these goods and services.

And, supports the researcher's vision of using this approach to measure the public expenditure return; The use of this approach to estimate the optimal volume of production for public goods and services - as a result of the restrictions imposed on the general budget and the lack of the economy of public goods and services the measuring of production return (Van den Nouweland, 2018). The researcher's vision is also supported by the effect of joint consumption, which means that public goods and services are used simultaneously by all consumers and there are no demand curves for public goods and services. (Agiobenebo, 2004)

Hence, using the (demand for public goods and services) approach to measure the public expenditure return achieves a double measurement, the first is: data related to the outputs of the allocation process by measuring the return on allocation decisions, The second is: data related to the inputs to the allocation process by measuring the demand for public goods and services; This information is very important, as the availability of this information leads the government to reconsider the combinations of production in order to achieve the appropriate supply of goods and services that achieve balance at the overall level of the national economy and maximize the public benefit of citizens.

The researcher believes that: achieving the accounting measurement of the public expenditure return in light of the proposed approach; requires discussing the variables that are compatible with this approach and achieving the measurement of the monetary value of that part of the total demand for public goods and services, which expresses the benefits achieved for citizens as a result of the allocation of public expenditures, these variables will be discussed in the next part.

3.3 The Achieving Model of The Accounting Measurement of Public Expenditure Return

Achieving the accounting measurement of transactions requires that these transactions be capable of monetary measurement, and this is the essence of the measurement process; which results in determining the monetary value of these transactions, recording them in the accounting books, and disclosing them in the financial statements and reports, Hence, the accounting measurement of the public expenditure return requires a specification of the variables of the measuring model that achieve the monetary value of this return through the proposed measurement approach. The researcher believes that these variables are represented in:

- The total actual cost of producing one unit of the good or service provided by the state in a particular sector.
- The number of units of goods and services that the citizen obtains as a result of the demand for them in this sector.

Hence, the mathematical function of the model to achieve the accounting measurement of the public expenditure return for the citizen in one of the economic sectors is represented in:

$$Rg_{P\,S} = CS_{\text{Per Unit}} * TU_{\text{Per Person}} \longrightarrow 1$$

P = 1, S = 1

Print ISSN 2771-1161
Online ISSN 2771-1153

Whereas:

$Rg_{P\,S}$	Citizen Public Expenditure Return in One of The Sectors.
$CS_{per\ Unit}$	The Total Actual Cost of Producing One Unit of The Good or Service.
$TU_{Per\ Person}$	The Number of Units of Goods And Services That The Citizen Obtains.
P	The Number of Person.
S	The Number Sector.

By aggregating the return achieved for the same citizen within all sectors of the national economy, the total return on public spending achieved for this citizen at the level of the national economy is obtained, and this is illustrated by the following function:

$$Rg_P = \sum_{P=1,\,S=1:n} Rg_{p\,s} \longrightarrow 2$$

By aggregating the return achieved for all citizens within this sector, the total return on public spending in this sector is produced, and this is illustrated by the following function:

$$Rg_S = \sum Rg_{p\,s} \longrightarrow 3$$

The researcher believes that in addition to determining the variables of the measurement model, it is necessary for governmental agencies to determine the nature of the good or service they provide, according to the nature of their activity in the economic sector in which they operate, and to use cost accounting systems to measure the actual cost of unit production of this good or service, Bearing in mind that, the unit production cost is represented in:

- the total current expenses incurred for producing this unit.
- The unit's share of the depreciation of existing capital assets in the production process.
- The unit's share of the administrative expenses necessary to ensure that the facility continues to provide its own good or service, Provided that the administrative expenses include the annual depreciation of infrastructure, facilities and assets of all kinds.

3.4 Accounting Recognition and Disclosure of Public Expenditure Return

The researcher believes that: in spite of the importance of achieving the accounting measurement of the public expenditure return as a feedback information for the process of allocating public expenditures, But, it is an ineffective measure in achieving the required rationalization for the allocation decisions; This is due to the failure to adequately recognize and disclose this financial information.

For this reason, the researcher sees the importance and necessity of disclosing both the revenue and losses of public expenditure in an independent statement that must be added to the financial statements that the administrative authorities and the general government are obligated to prepare, This is for the purpose of disclosing the social performance of the government sector; Whereas IPSAS 1 - Presentation of Financial Statements - omitted a statement that discloses the users of financial statements and those related to administrative authorities and the general government about the social performance of the government sector.

The standard did not provide for a statement regarding disclosure of social performance, although the primary goal of governmental performance is a social goal not a financial goal, and therefore the evaluation of governmental performance must be through the evaluation of social performance next to the evaluation of financial performance. (IPSAS1)

The researcher's vision with regard to the accounting recognition and disclosure

methodology for the public expenditure return is represented in: recognizing this return as social revenue and disclosing it within the social performance statement and recognizing the same value as an asset and disclosing it within the items of the statement of financial position as one of the items of intangible assets under the name of human capital. This is illustrated by the following double entry.

Debit / Assets (Intangible Assets - Human Capital)

Credit / Social Revenue (Public Expenditure Return)

As for the accounting disclosure and recognition methodology for public expenditure losses, it is represented in recognizing the value of these losses as a reduction in the value of the social revenue achieved during the year and disclosing them within the statement of social performance, And recognizing the same value as a reduction in the value of human capital in the statement of financial position, as human capital has previously been increased by the value of what citizens receive from goods and services through the public expenditure return (social revenue); As a result of their lack of improvement in their level of welfare, whatever the reason may be, human capital must be reduced by the amount it has been increased so that the disclosure of social performance is objective. This is illustrated by the following double entry.

Debit / Public Expenditure Losses

Credit / Assets (Intangible Assets - Human Capital)

Hence, the researcher believes that: the social performance statement is very important as it is a channel for disclosing the social performance of the administrative authorities and the general government; And this helps in the parliamentary and popular oversight process and the competent authorities on governmental performance with regard to achieving the objectives of the state's general budget and maximizing the public benefit of citizens. the presence of the social performance statement within the other financial statements is also very important, as it is a control tool that translates the achieved social benefits to the community in the form of monetary values that are compared with the monetary values in the financial performance statement; and an indication of whether there is a good use of the available financial resources, or whether there is a waste of these resources. This is in addition to considering this statement a digital disclosure tool for the annual contribution of the governmental sector to the country's human capital.

3.5 Public Expenditure Allocation Model

The impact of the allocation of public expenditures on economic development is significant and is of great interest to specialists in this field, given that it is an approach to face the constraints imposed on the state’s general budget, and also as the result of the impact of the reallocation process on growth rates. This is in addition to the fact that when governments reach a certain amount of expenditure, they cannot do anything beyond this amount that affects growth rates except for the mechanism they have for reallocation. (Neduziak and Correia; 2017)

The researcher in the next part, discusses the impact of providing information related to the public expenditure return - given the feedback that the allocation process was missing - on rationalizing the allocation decisions, through a proposed model for the allocation of public expenditures that depends on the achieved accounting measurement of the public expenditure return.

Building this model depends on measuring the return achieved as a result of the previous allocation of expenditures, and this measurement is in accordance with the previously discussed methodology in the previous parts of this research, which is based mainly on the accounting measurement of the public expenditure return, which represents the social benefits achieved for citizens through the approach of the real public demand for public goods and services.

The researcher believes that building a model for allocating public expenditures would maximize public benefits for citizens in light of the available amount of resources, and work on redistributing income and achieving social justice among members of society in all economic sectors, and working to achieve equality between the percentage of social benefits achieved for citizens within each sector; This requires that: this model be based on the philosophy of distributing public expenditures between sectors according to the volume of demand faced by each sector, which expresses the total value of social benefits that the state is required to provide to citizens through this sector, These benefits can be measured through the so-called (public expenditure targeted return) (TRgs) based on what has been measured for the public expenditure return for the individual, which can be measured through the following function:

$$\mathbf{TRgs = CS_{per\ Unit} * TU_{Per\ Person} * TP_D} \longrightarrow \mathbf{4}$$

Whereas:

TRgs	Targeted Return on Public Expenditure for The Sector.
$CS_{per\ Unit}$	The Total Actual Cost of Producing One Unit of The Good or Service.
$TU_{Per\ Person}$	The Number of Units of Goods And Services That The Citizen Obtains.
TP_D	The Number of Individuals Requesting Goods and Services in This Sector.
S	The Number Sector.

By reviewing the previous function, we find that it represents the product of the variables of the public expenditure return for the individual in the sector $\mathbf{Rg_{P\ S}}$ and the variable of the total number of individuals requesting the goods and services provided by the state in this sector $\mathbf{TP_D}$, and these variables, especially the total number of individuals requesting, require an accounting measurement of the results of the allocation process the previous one, with an adjustment according to the expected growth rates.

The difference between the public expenditure return achieved within the sector $\mathbf{(Rg_S)}$ and the targeted public expenditure return $\mathbf{(TRg_S)}$ that is for this sector represents the deficit of social benefits for this sector or what we can call social losses for this sector, because this difference is that unrealized part of the demand for goods and services provided by this sector as a result of the deficit resource or misallocation, these social losses are denoted by the symbol **(SL)** and are indicated by the following function:

$$\mathbf{S\ L_S = TRg_S - Rg_S} \longrightarrow \mathbf{5}$$

The researcher believes that: it is necessary to disclose the value of each of the target public expenditure return **(TRg)** and social losses **(SL)** within the complementary notes to the financial statements, as they are important information related to the social performance of the administrative Institutions and the general government. The following function represents the final version of the public expenditure allocation model, which depends on the relative weight of the target public expenditure return.

Print ISSN 2771-1161
Online ISSN 2771-1153

Allocation Model = B P * W TRg $_S$ ⟶ 6

S = 1

Whereas:

B P	Total Resources Available for Allocation.
W TRg $_S$	The Relative Weight of The Target Public Expenditure Return For The Sector.

Hence, the accounting measurement of the results of economic operations, including the process of allocating public expenditures, represents a necessary and important input to ensure the effectiveness of achieving social justice and achieving economic development at the level of the national economy by achieving effectiveness with regard to the potential allocation of public expenditures in the coming periods.

4. The Results of Practical Study

The researcher presented the subject of the research for the survey inside and outside the Arab Republic of Egypt, where the original community of the study consisted of the group of member states of the International Monetary Fund, which numbered 183 countries, including the state of the Arab Republic of Egypt, and the researcher relied in obtaining the data for the study on survey lists sent to The sample items numbered (750) from the vocabulary of the study community, regardless of their field of work and scientific specializations. The participants in the study belonged to governmental and non-governmental agencies and international institutions.

The number of lists that were answered reached (502) lists, and this represents a rate of 67%, of which the researcher excluded 25 lists due to their scientific and practical specialization in the field of the research topic under study, and thus the number of lists on which the statistical analysis was conducted is 477 lists, or 64%, by 366 List inside the Arab Republic of Egypt 109 List outside the Arab Republic of Egypt.

The researcher faced a number of difficulties to obtain this number of responses, the most important of which is the small number of the target group with scientific and practical background in the subject of the research, and this is evident from the neutral responses to many of the survey statements. The results were:

4.1 The Results of The Research Hypothesis Test

- **The First Hypothesis:**

Pearson's correlation coefficient for the first research hypothesis

	Number	Average	Pearson Correlation	Sig. (2-tailed)
Absence of feedback	**477**	**3.992**	**.691****	**.000**
Inefficiency in allocating decisions	**477**	**4.0733**		
****. Correlation is significant at the 0.01 level (2-tailed).**				

We note from the previous table that:

The relationship between the absence of feedback on the process of allocating public expenditures and the inefficiency of the allocation decisions is direct and highly statistically significant, as the value of the Pearson correlation coefficient reached 69% at the level of statistical significance 0.00, which is less than the level of significance 0.05, meaning that we are 95% confident that the absence of The feedback on the process of allocating public expenditures leads to the inefficiency of the allocation decisions and vice versa, Therefore, we can accept the research hypothesis that there is a statistically significant relationship between

the absence of feedback on the process of allocating public expenditures, and the inefficiency of the allocation decisions.

- **The Second Hypothesis:**

Pearson's correlation coefficient for the second research hypothesis

	Number	Average	Pearson Correlation	Sig. (2-tailed)
Achieving the accounting measurement of the public expenditure return	477	4.021	.612**	.000
Achieving feedback	477	3.7866		
**. Correlation is significant at the 0.01 level (2-tailed).				

We note from the previous table that:

The relationship between achieving the accounting measurement of the public expenditure return, and achieving the feedback on the process of allocating public expenditures is positive and highly statistically significant, as the value of the Pearson correlation coefficient reached 61% with a statistical significance level of 0.00, which is smaller than the level of significance 0.05, meaning that we are confident with a percentage of 95 % of that achieving the accounting measurement of the public expenditure return leads to the achievement of the feedback on the process of allocating public expenditures and vice versa, Therefore, we can accept the second research hypothesis which says that there is a statistically significant relationship between the achievement of the accounting measurement of the public expenditures return, and the achievement of the feedback on the process of allocation of expenditures the public.

4.2 The results of testing the effectiveness of the proposed definition of the concept of public expenditure return

T-test to evaluate the proposed definition of the concept of return on public spending

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Definition	477	3.8205	0.59578	30.080	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.82, which is Greater than the impartial mean of the five-point Likert scale, equal to 3, if we can judge that the real average of the opinions of the sample members is greater than 3, that is, they tend to agree with the proposed definition.

Print ISSN 2771-1161
Online ISSN 2771-1153

4.3 The results of testing the effectiveness of the approach to measuring the concept of public expenditure return

T-test to assess the effectiveness of the approach to measuring the concept of public expenditure return

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Approach of Measuring	477	3.8172	0.58104	30.717	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.82, which is It is greater than the impartial mean of the five-point Likert scale, which is equal to 3. If we can judge that the average opinions of the real sample members are greater than 3, that is, they tend to agree to the proposed approach to measure the concept of return on public spending.

4.4 The results of testing the effectiveness of the methodology for measuring the concept of return on public spending

T-test to assess the effectiveness of the methodology for measuring the concept of public expenditure return

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Methodology for Measuring	477	3.6990	0.59812	25.522	476	.000

We note from the previous table that:

The level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the neutral mean of the five-point Likert scale equal to 3, and by noting that the average opinions of the sample members equal 3.7, which is It is greater than the impartial mean of the five-point Likert scale, which is equal to 3, so we can judge that the average opinions of the real sample members are greater than 3, that is, they tend to agree with the proposed methodology for measuring the concept of return on public spending.

4.5 Results of testing the effectiveness of the proposed methodology for allocating public expenditure

T-test to assess the effectiveness of of the proposed methodology for allocating public expenditure

One-Sample Test						
Test Value = 3						
	Number	Average	Standard Deviation	T	Df	Sig. (2-tailed)
Methodology for Measuring	477	3.7925	0.60940	28.401	476	.000

We note from the previous table that:

Print ISSN 2771-1161
Online ISSN 2771-1153

That the level of statistical significance corresponding to the T-test equals 0.00, which is less than the level of significance 0.05, and therefore we can accept the hypothesis that the average opinions of the sample members differ from the impartial mean of the five-point Likert scale, equal to 3, and noting that the average opinions of the sample members equal 3.79, which is Greater than the impartial mean of the five-point Likert scale, which is equal to 3, if we can judge that the real average of the opinions of the sample members is greater than 3, that is, they tend to agree with the proposed methodology for allocating public expenditures.

The findings of the researcher with regard to testing the hypotheses, the concept and the proposed methodologies can be summarized as follows**:**

- There is a direct relationship of 69% with statistical significance between the absence of feedback on the process of allocating public expenditures and the inefficiency of allocation decisions at a level of significance of 0.05.
- There is a direct relationship of 61% with statistical significance between achieving the accounting measurement of the public expenditure return, and achieving the feedback on the process of allocating public expenditures at a level of significance of 0.05.
- The opinions of the sample members tend to agree on the proposed definition of the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed approach to measure the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed methodology for measuring the concept of public expenditure return.
- The opinions of the sample members tend to agree on the proposed methodology for allocating public expenditures.

5. Summary

Through this research, the researcher discussed how to rationalize decisions to allocate public expenditures as one of the problems that greatly affect the welfare of peoples, and whose intellectual basis is due to the economic literature, The researcher discussed many previous research studies in both economic literature and accounting literature that discussed how to allocate public expenditures and measure the social benefits that accrue to citizens as a result of these expenditures.

The researcher used the deductive approach in order to identify the fundamental causes of the problem of misallocation of public expenditures, which turned out to be mainly due to many variables, but the most important of them is the absence of feedback on the allocation process and the absence of information related to the volume of demand for goods and services provided by the governmental sector to citizens in light of The state's commitment to its social responsibilities and its role in economic activity.

To complement the research plan established by the researcher and for the purpose of accepting or rejecting his findings during the analytical study of some of the previous research efforts, the researcher conducted a practical study that included a field study based on the survey to poll the opinion of those with knowledge and experience inside and outside the Arab Republic of Egypt regarding his position of Hypotheses about the causes of the problem of misallocation of public expenditures and how to confront them, assuming that they identify the problem and provide a solution.

Print ISSN 2771-1161
Online ISSN 2771-1153

The results of this study came by accepting the formulated research hypotheses, emphasizing the causes identified by the researcher for the problem of poor allocation process, and agreeing to accept the proposed approach to reduce the impact of the causes of this problem, and confidence in his ability to confront it.

This emphasized the essential role that accounting literature can play in achieving economic development and using it as an appropriate approach for reform and development processes.

The researcher used the concept of human capital in order to disclose the public expenditure return within the items of the financial statements, and the researcher believes that the concept of human capital for the country as a whole is very important because of its significant impact on public expenditure trends, which makes it an area for further discussion and research in the future.

References :

A. A. al-Salam Ahmed .(1988) .Using the cost-benefit analysis method in developing the budget for infrastructure projects in local authorities .;unpublished Ph.D. thesis; Cairo University ، ;pp.: 1 - 256.

A. M. Pina .(2005) .How Should We Measure The Return On Public Investment In a VAR ? Working Papers Department of Economics from ISEG - Lisbon School of Economics and Management . ,Department of Economics, Universidade de Lisboa ، ,No 2005/04.

A. Toukan .(2017) .Corruption In Public Procurement And Social Welfare . ,The Journal of Developing Areas ،,Vol. 51, no. 2, pp.: 315-327.

A. Van den Nouweland .(2018) .Demand for public good as a correspondence of cost shares , .Society for the Advancement of Economic Theory ، ,Vol. June, PP.: 1-11.

A., O., B., Madaj, B., Charles, A., and Nynke, V., D., B. Thomas .(2015) .Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review . ,BMC Public Health ، ,Vol. 15, no. 1, PP.:1-14.

A., Raknerud, A. and Rybalka, M. Cappelen .(2013) .Returns to public R&D grants and subsidies . ,Statistics Norway Research department, Discussion Papers ، ,No. 740, PP.: 1-32.

Abdullah Shehata .(2009) .Political Economy for Determining Public Expenditure Priorities: A General View . ,Research Paper, Faculty of Economics and Political Science, Cairo University ،,pp.: 1-16.

Antonio Villar .(2001) .Multidimensional Inequality And Social Welfare, Valenciano de Investigaciones Económicas . ,S.A. working papers ، ,PP.: 1-27.

B. Magdalou .(2018) .A model of social welfare improving transfer . ,CEE-M Working Paper 2018 ,13 ،-PP.: 27.

B. T. Yates و ،M. Mita .(2017) .Social Return On Investment (SROI): Problems, solutions and is SROI a good investment .,?Evaluation and Program Planning, Elsevier ، ,vol. 64, no. C, PP.:136-144.

Print ISSN 2771-1161
Online ISSN 2771-1153

B. Wirtz ،S. Lütje و ،P. G. Schierz .(2010) .An Empirical Analysis of the Acceptance of E – Procurement in the German Public Sector . ,International Journal of Public Administration ،,Vol. 33, pp.:26.42–

C. Mesa-Lago .(2017) .Social Welfare and Structural Reforms in Cuba, 2006 . ,2017–Cuba in Transition, ASCE ، , PP.: 1-16.

C. Z. Li و ،K. G. Lofgren .(2006) .Comprehensive NNP, social welfare, and the rate of return ., Economics Letters ، ,Vol. 90, PP.:254.259–

C., and Mikesell, J., L. Liu .(2014) .The Impact of Public Officials 'Corruption on the Size and Allocation of U.S. State Spending . ,Public Administration Review ، ,Vol. 74, no. 3, PP.:346.359–

D McBain و ،A. Alsamawi .(2014) .Quantitative accounting for social economic indicators . , Natural Resources Forum ،,no. 38, PP.: 193.202–

D. A. Starrett .(1977) .Measuring Returns to Scale in the Aggregate, and the Scale Effect of Public Goods . ,Econometrica ، ,Vol. 45, no. 6, PP.:1439-1455.

D. C. Fonchamnyo و ،m., c. Sama .(2016) .Determinants of public spending efficiency in education and health: evidence from selected CEMAC countries .,J Econ Finan ، , VOL. 40, PP.:199.210–

D. Smith .(1981) .Briefing Paper: The Public Expenditure Debate . ,Economic Outlook ،,PP.: 28-40.

D. van de Walle .(1996) .Assessing the Welfare Impacts of Public Spending . ,The World Bank Policy Research Department Public Economics Division, Working Papers ،, no.1670, PP.: 1-30.

E. Moretti .(2010) .Local Multipliers, American Economic Review . :Papers & Proceedings ، , Vol. 100, no. 2, PP.: 373.377–

E., R. Venter ،E., A. Gordon و ،D., L. Street .(2018) .The Role of Accounting And The Accountancy Profession in Economic Development: A research Agenda . ,J Int Finance Manage Account ، ,Vol. 29 pp.:195.218–

F. Misch ،N. Gemmell و ،R. Kneller .(2013) .Growth and Welfare Maximization in Models of Public Finance and Endogenous Growth . ,Journal of Public Economic Theory ،,Vol. 15, no. 6, PP.:939.967–

G. Moschovis .(2010) .Public Spending Allocation .,Fiscal Performance and Corruption, Economic Papers ، ,Vol. 29, no. 1, pp.: 64.79–

G. Tridimas .(1999) .A Demand -Theoretic Analysis of Public Consumption Priorities in The United Kingdom . ,Public Finance Review ، ,Vol. 27, no. 6, PP.: 599-623.

G., Foster, W., and Ortega, J. Anríquez .(2018) .Development costs of misallocated public resources . :Rural and agricultural subsidies in Latin America, 1985 ,2012–doi ، : /10.1111dpr.12389.

Print ISSN 2771-1161
Online ISSN 2771-1153

J. A. Weymark .(2013) .Social Welfare Functions .,Vanderbilt University Department of Economics Working Papers.

J. Creedy و ،N. Hérault .(2012) .Decomposing Inequality and Social Welfare Changes: The Use of Alternative Welfare Metrics . ,Victoria Business School Working Papers ،,no. 06, PP.: 1-38.

J. Gargani .(2017) .The leap from ROI to SROI: Farther than expected . ,?Evaluation and Program Planning, Elsevier ،,Vol. 64(C), PP.:116-126.

J. Geoffrey .(1990) .Inequality in Pakistan: A Social Welfare Approach .,Pakstan Journal of Appliied Economics ، ,Vol. 9, no. 2, PP.: 165-193.

J. J., Van Dijk .(2017) .Local employment multipliers in U.S. cities . ,Journal of Economic Geography ، ,Vol. 17, no.2, PP.: 465-487.

J. Nicholls .(2016) .Social return on investment—Development and convergence .,Evaluation and Program Planning ، ,Vol.64, PP.: 127-135.

J. Saul .(2013) .The Difference Between Spending Money and Buying Outcomes . ,The Public Manager ، ,PP.: 24-25.

J., M., and Peraita, C. Pastor .(2016) .The Tax Returns of Public Spending on Universities: An Estimate with Monte Carlo Simulations . ,Regional Studies ، ,Vol. 50, no. 11, PP.:1863-1875.

J., M., Andersen, M., A., James, J., S., and Pardey, P., G. Alston .(2011) .The Economic Returns to U.S. Public Agricultural Research . ,American Journal of agricultural Economics ، ,Vol. 93, no. 5, PP.: 1257.1277–

J.J. Cordes .(2017) .Using cost-benefit analysis and social return on investment to evaluate the impact of social enterprise: Promises, implementation, and limitations . , Evaluation and Program Planning ، ,Vol. 64, no. C, PP.: 98-104.

K. J. Watson و ،T Whitley .(2017) .Applying Social Return on Investment (SROI) to the built environment . ,Building Research & Information ،, Vol. 45, no. 8, PP.: 875.891–

K. Suzumura .(2002) .Introduction to social choice and welfare . ,Institute of Economic Research Hitotsubashi University, Tokyo, Japan ،,PP.: 1-46.

L., C., R., Correia, F., M. Neduziak .(2017) .The allocation of government spending and economic growth: a panel data study of Brazilian states .,Brazilian Journal of Public Administration ، ,Vol. 51, no. 4, PP.:616-632.

M. Fleurbaey .(2014) .On Sustainability and Social Welfare . ,Journal of Environmental Economics and Management ، ,PP.: 1-40.

M. Hall و ،Y. Millo .(2018) .Choosing an Accounting Method to Explain Public Policy: Social Return on Investment and UK Nonprofit Sector Policy . ,European Accounting Review ، ,vol. 27, no. 2, PP.:339-361.

M. Moss .(1980) .Social Challenges to Economic Accounting And Economic Challenges to Social Accounting .,Review of Income and Wealth ، ,Vol. 26, no.1, pp.:1-17.

M. Postuła .(2017) .Spending Reviews – a Tool to Support the Efficient Management of Public Funds . ,Journal of Management and Business Administration. Central Europe , ،Vol. 25, no. 2, PP.: 63.90–

N. Ben-David و ،T. Tavor .(2011) .Measurement of the social loss of wrong public budget allocation .,International Journal of Social Economics ،,Vol. 38 Iss 3 pp.: 209 - 217.

N. Gemmell ،R. Kneller و ،I. Sanz .(2016) .Does the Composition of Government Expenditure Matter for Long-Run GDP Levels . ,?Oxford Bulletin of Economic and Statistics ، , Vol. 78, no. 4, PP.: 525.547–

N. Krucien ،N. P. Fleury و ،A. Gafni .(2019) .Measuring Public Preferences for Health Outcomes and Expenditures in a Context of Healthcare Resource Re-Allocation . , Pharmaco Economics ،,Vol. 37, no 3, PP.: 407-417.

N., and Son, H., H. Kakwani .(2015) .Social rate of return: A new tool for evaluating social programs . ,Ecineq Working Paper Series ، ,no. 383, PP.: 1-45.

O. A. M. Martinez ،A. M. V. Rodriguez ،M. Lombe و ،P. G. Rossi .(2017) .Incorporating Public Insecurity Indicators: A New Approach to Measuring Social Welfare in Mexico . ,Springer Science + Business Media Dordrecht ،,PP.: 1-23.

O., A. Carboni و ،G. Medda .(2011) .Size and Composition of Public Spending in A neoclassiccal Growth Model . ,Metroeconomica ، ,Vol. 62 no.1, PP.: 150-170.

P., N. Junankar .(2003) .Estimating the Social Rate of Return to Education for Indigenous Australians . ,Education Economics ، ,Vol. 11, no. 2, PP. 169-192.

R. Dutu .(2016) .Raising Public Spending Efficiency in Switzerland . ,OECD Economics Department Working Papers ، ,no. 1280, PP.: 1-35.

R. Millar و ،K. Hall .(2013) .Social Return on Investment (SROI) and Performance Measurement .,Public Management Review ، ,Vol. 15, no. 6, PP.: 923-941.

S. Benin .(2015) .Returns to Agricultural Public Spending in Africa South of the Sahara, International Food Policy Research Institute . ,IFPRI Discussion Paper 01491 ،,PP.: 1-30.

S. Calligaris .(2015) .Misallocation and Total Factor Productivity in Italy . :Evidence from Firm-Level Data ، ,Labour Vol. 29, no ,4 .PP.: 367.393–

S. Dewan و ،M. Ettlinger .(2009) .Comparing Public Spending and Priorities Across OECD Countries, Center for American Progress . ,available at: www.americanprogress.orgs.org.

S. Kasdin و ،L. Lin .(2015) .Strategic behavior by federal agencies in the allocation of public resources . ,Public Choice ، ,Vol. 164, PP.:309.329–

Print ISSN 2771-1161
Online ISSN 2771-1153

S. Khemani .(2017) .Demand and Supply Curves in Political Markets Understanding the Problem of Public Goods and Why Governments Fail Them . ,world Bank Policy Research Working Paper ،,no. 8213, PP.: 1-54.

S. Paternostro ،A. Rajaram و ،E. R., Tiongson .(2005) .How Does The Composition of Public Spending Matter . ,?World Bank Policy Research Working Paper 3555, March ، ,PP.: 1-37.

S. Pradhan .(1996) .Evaluating Public Spending A Framework for Public Expenditure Reviews . ,World Bank Discussion Papers ، ,no. 323, PP.: 1-134.

S., El Sabaa .(2017) .The Allocation of Economic Resources And Income Distribution in Egypt . ,International Journal of Business and Economics Perspectives ،,Vol.12, no.1, pp.:30-40.

T. Mogues .(2015) .Political Economy Determinants of Public Spending Allocations: A Review of Theories, and Implications for Agricultural Public Investment . ,European Journal of Development Research ، ,Vol. 27, pp. 452.473–

T. T. Brown .(2016) .Returns on Investment in California County Departments of Public Health .,AJPH Research ، ,Vol. 106, no. 8, PP.: 1477-1482.

T., J. Agiobenebo .(2004) .On the Optimal Quantity of Public Goods and Some Related Issues . ,PHD Theses, Public Economics 0408002, University Library of Munich, Germany.

U. Purwohedi و ،B. Gurd .(2019) .Using Social Return on Investment (SROI) to measure project impact in local government .,Public Money & Management ، ,Vol. 39, no. 1, PP.: 56 - 63.

U. Selen و ،E. Karas .(2018) .The Relationship Between Social Welfare and Taxation in The Context of Welfare Economics: Evaluation of Turkish Revenue Tax . , Business and Economics Research Journal ، ,Vol.9 no. 4, PP.: 979-993.

V. Castro .(2018) .Functional components of public expenditure, fiscal consolidations, and economic activity .,Economic & Politics Polit ،,no. 30, pp.:124.150–

W. Quentin و ،Y. Shlomo .(2002) .Inequality and Social Welfare, Munich Personal RePEc Archive . ,Working Paper ، no., 12298, PP.: 6-57.

  Print ISSN 2771-1161
Online ISSN 2771-1153