Journal Of Economics and Management | VOLUME: 09/ N°: 01 (2026), PP 9-18
P-ISSN: 2572-0090 E-ISSN: 2710-799X

Opportunity cost as an optimization tool Tax collection an applied study at the General Authority for Taxes, Najaf Al-Ashraf Branch

Ameer Ageed kadhim Al-ardawe
Faculty of Administration and Economics, University of Kufa
ameera.alardawe@uokufa.edu.iq

Haider Jawad kadhim Al-Murshidi
Faculty of Administration and Economics, University of Kufa
haider_jwad_78@yahoo.com
Mohammed Sadiq Jabbar
Faculty of Administration and Economics, University of Kufa
Mohammeds.Kadhim@uokufa.edu.iq

Received: 11/04/2026 **Accepted: 07/05/2026** **Published: 10/06/2026**

Abstract :

The study showed the reality of tax collection and ways to improve it in the General Authority for Taxes, Najaf Governorate Branch. By studying and analyzing the Opportunity cost Explaining its importance in the growth of state revenues According to the challenges faced by the taxpayer and those responsible for collecting it. The problem of the study revolves around accounting systems and theories Applied in the General Authority for Taxes, Najaf Governorate Branch It is characterized by traditional methods And besides that Failure to understand the laws And tax systems A simplified and comprehensive understanding by the taxpayer and taxpayers. Which led to Declining growth rates and improving tax collection In the treasuries of the Iraqi state in general. The study results showed that accounting systems and theories Applied in the General Authority for Taxes in the Najaf Governorate It is characterized by complexity Lack of awareness and focus on advanced techniques in tax collection policies Whether it is in the public or private sector As a result, the growth rate and improvement of tax collection decrease and the planned value. The study concluded that this is necessary Apply Opportunity cost As a tool to improve tax collection rates Simplifying systems and laws Whether it is in the public or private sector.

Keywords : Opportunity cost , Tax improvements , Tax collection.

JEL Classification Codes:334

INTRODUCTION

Taxes are considered The main source of the state's general budget It is the cornerstone of the development of its economic, social and political goals And besides that It provides a public service in building the state's infrastructure And evaluate them in light of the accumulated financial crises So, tax collection It represents the cash amounts collected by taxpayers And imposed on society in general, whether in the public or private sector. In order to cover the state's public expenses Therefore, the

state must protect this tributary. Establishing regulations and laws and holding accountable those who are negligent in not paying the tax collection value to the state treasuries And comprehensively apply simplified accounting systems In order to calculate taxes and improve their rates In accordance with the regulations and laws in force by the tax authorities In addition to the application Opportunity cost As an optimization tool Tax collection And the improvement in economic reality imposed by the state in its public treasuries.

The problem of the study There is no doubt that accounting systems and theories Applied in the General Tax Authority in Najaf Governorate It is characterized by traditional accounting methods and besides that Lack of understanding of tax laws and regulations A simplified and comprehensive understanding by those responsible. Which led to a decline in the improvement rates of tax collection In the treasuries of the Iraqi state Therefore, the problem of the study is centered on With the following question Is the Opportunity cost It has a direct role In measuring and improving tax collection rates Simplifying tax accounting procedures between taxpayers and those who refuse to pay taxes to the state treasuries?

The importance of the study is highlighted by It provides a comprehensive theoretical framework About concepts Opportunity cost and its improvements as a tool for evaluating the value of tax collection. Highlighting the role of the rate of improvement of tax revenues And its impact on the return achieved from tax collection.

The study aims To learn about the most important foundations of application Opportunity cost And improve it in order to increase the growth of tax collection rates And an indication of the extent of growth in the rate of tax collection And its impact on the General Tax Authority in Najaf Governorate.

The study is based on a basic hypothesis that Opportunity cost It provides a sound and comprehensive foundation for enhancing and improving the value of tax collection Reducing the phenomenon of tax evasion In addition to simplifying tax accounting procedures Estimating the cost of tax collection through alternative value bases.

Theoretical Framework

The concept of Opportunity cost in a year 1914 by the Austrian scientist (Friedrich von Wieser) In theories of social economy Its concept has been defined by time and money (Hinrichs,2011:6) As the Opportunity cost It is represented by monetary value And the opportunities available to economic units At the lowest cost and best quality Compared to competitors

(Melanie Waterley, 2013: 7) Opportunity cost It measures the value that is lost or sacrificed When a specific product is selected if it is required by the economic unit management By alternative work In accordance with the planned strategic principles(Drury, 2004 : 39) On this basis Opportunity cost Potential or realized Which is abandoned according to the accreditation mechanism With one of the alternatives chosen by the economic unit In complete competition with the other alternative(Garrison, 2018: 82) Which results in a return on contribution According to the preferences chosen from a particular alternative and the rejection of another

alternative(Aziz and Al-Ghabban, 2022: 139) Profitable value has been lost or abandoned Through the use of limited resources (Abbas and Al-Jubouri, 2007: 130):

1. It achieves the highest lost contribution return.
2. It concerns the best alternative that was abandoned.
3. They are not realized costs.
4. They do not appear in existing accounting systems because they do not arise from cash payments
5. It is used in comparison between alternatives for the purpose of making administrative decisions.

There is no doubt that the importance of Opportunity cost It has a fundamental role in improving the value of tax collection In the world of business in general and the modern manufacturing environment in particular Deriving the available value in the labor market and choosing the best alternative Relying on future expectations and predictions In economic units in general On this basis, it derives its importance of Opportunity cost In improving tax collection Through what is included in the Table No. (1).

Table No. (1) The importance of Opportunity cost

Source	The importance of Opportunity cost
/https://hbrarabic.com	Evaluate different alternatives to help make a better decision. Identify profitable opportunities During the process of evaluating the alternative that was chosen According to the preferences of an alternative and the possibility of investing in it
https://theinvestorsbook.com	Determine the price based on determining the accumulated expenses When a good or service is purchased There are costs that may be incurred in obtaining alternative options. resource allocation and investment according to the appropriate value It is done by analyzing Opportunity cost For all the available alternatives.
Abbas and Al-Jubouri,) (2006: 132	Explicit cost Those costs that are paid By economic units On the production units Under which it was agreed to obtain inputs Implicit cost Those costs that are recognized in specific cases They may not normally be recognized under accrual basis accounting procedures

Revenues and their components Its components are the main penalty in building and growing rates of improving tax collection Which is limited to amounts or money which are acquired by the tax administration After determining the subject matter of the entry

of persons subject to tax law(Al-Obaidi, Al-Zubaie, 2019: 50) Tax collection is limited to the amounts that the state obtains from imposing various taxes in its tax system (Sabti, Al-Zubaidi, 2017: 62)It is a set of procedures that lead to transferring the tax debt from the taxpayer to the state's public treasury in accordance with the generally accepted tax rules and laws, as the relationship becomes direct between the tax authority and the taxpayer on the basis of (Shakoor, Ahmed, 2022: 385):

1. Providing the necessary funds to the state to carry out its main functions and tasks.
2. The state can achieve its economic goals by implementing its tax revenues
3. Tax revenues contribute to reducing disparities between social groups

Based on this logic, improving the accounting process according to tax collection procedures is based on the following foundations:

1. Direct taxes: The state is based on this method Improving the growth rates of tax collection Through those charged with collecting taxes directly Relying on its employees. So this method is followed in most countries in the world including Iraq and Arab countries And all advanced countries The direct tax is imposed Primarily based on the value realized by the taxpayer or the elements of capital he owns The taxpayer bears it himself and cannot transfer the burden of this tax. It is paid to a state without charge(Al-Kartani, et al., 2022: 399) A tax whose burden is not shifted Rather, it is borne by the people in the economic unit that is originally subject to the tax (Spencer, 1983: 11) The Iraqi tax system includes a group of direct taxes (income taxes, real estate taxes, and property taxes).
2. Indirect taxes: That tax collection operations In some states It is not carried out directly by the tax administration However, many states resort to collecting taxes indirectly on goods and services When producing or selling itIts circulation, consumption, import or export Economic units are not satisfied with imposing tax on income when it is generated Rather, it is followed by the imposition of the agreement and its circulation (Al-Kartani, et al., 2022: 341) Its burden can be transferred, partially or completely, to others other than the individual or economic unit originally subject to the tax (Spencer, 1983: 20) The Iraqi tax system includes a group of indirect taxes (customs tax, production taxes, and sales taxes).

There are many factors and determinants affecting growth rates and improving tax collection These may be technical factors related to the technical regulation of the tax Others relate to the nature and givens of the existing political and economic reality and the prevailing societal concepts and values On this basis, we explain the most important factors affecting the rates of growth and improvement of tax collection:

1. Cost capacity : It is considered one of the most important economic factors influencing the growth rates and improvement of tax collection It is based on the extent of the state's or tax authorities' ability To allocate its tax-deducted income to finance public expenditures It represents the ability of national income to bear taxes It can be expressed as the taxpayer's ability to pay taxes while taking into account the minimum necessary to maintain their lives (Damla & Simsek, 2013: 77).

2. The level of economic activity: It is one of the most important pillars of growth and improvement of tax collection rates by government authorities It is linked to economic recovery cases And the subsequent expansion and growth in economic activities and increase in income It allows for diversity in taxation and enables the imposition of taxes at high value rates In order to achieve tax collection The opposite is true in the case of economic recession, when the level of economic activity declines In addition, incomes and the inability to diversify taxes decrease, which is accompanied by a decrease in the growth of tax collection rates(Ali, Daoud, 2022: 403).
3. Legal allowances: The high increase in tax allowances Generally a result of the economic situation The resulting high rates of inflation in prices It is necessary to increase the amounts of these allowances to be consistent with the high increase in prices in general However, a change in the allowances towards a higher increase may lead to a decrease in taxable income Because it decreases the taxpayer's total income, which means a decrease in the growth rates of tax collection(Al-Obaidi and Al-Zubaie, 2019: 51).
4. Tax awareness: The concept of tax awareness is based on the ability and potential available in the tax payment and growth process to comply with recognized tax laws and regulations Which are determined by ethics, the legal environment and other factors determined by the particular time and place (Palil, 2010:2).
5. Tax prices: It is the tax price One of the most important factors in increasing tax collection growth rates The higher the level of the tax price, the higher the rate of growth in tax collection, while the factors affecting the tax price remain constant (Hussein, Taher, 2020: 196).
6. Efficiency of the tax system: The efficiency of the tax system is considered One of the most important factors significantly influencing the increase in growth rates of tax collection The level of building and developing the efficiency of the tax system is based on the nature of tax work Appropriate technical knowledge in applying tax regulations, laws, instructions, and recognized technical and accounting rules In addition to that, creating the appropriate specializations for work from experienced and specialized cadres, developing and qualifying them, with an incentive system to encourage the continuation of their efforts and maintain the quality of work This is accompanied by preparing and implementing plans to ensure achieving good results and benefiting from them (Al-Shuwaili, 2020: 95).

Taxes in Iraq It is one of the oldest financial institutions in the Arab world and is affiliated with the Ministry of FinanceIt was legislated in Iraq after the national government was established and Income Tax Law No. 25 was issued in 1927. The General Authority for Taxes was created on 2/27/1982 based on the Ministry of Finance Law No. 92 of 1981. In the formations of the Ministry of Finance, the General Directorate of Income, which was implementing the Income Tax Law, was merged with the Directorate of General Revenues. Which was applying the real estate tax law and was called the General Tax Authority, which was replaced by the Directorate of Income and Public Imports Tax. On this basis Public bodies have been formed in all

governorates of Iraq in general, including the General Authority for Taxes, Najaf Branch It is in the process of imposing taxes on income, real estate, and property, through which it strengthens its position by supporting the revenues of the Iraqi state and developing it through recognized tax laws and legislation. Which is issued by the state, and the annual circulars and bulletins issued by the environment so that all members of the state can review Get to know the work of tax department systems.

In preparation for studying and analysis Opportunity cost Its effect on the growth and improvement of tax collection rates requires studying and analyzing the following steps:

First: Determining the actual and planned tax collection revenues Taxes are generally considered one of the most important foundations of direct and indirect tax collection at the General Authority for Taxes in the Najaf Governorate. It contains the following taxes (Income, companies, real estate, direct deduction, and transfer of ownership of real estate) imposed on the taxpayer to pay it to the taxpayers, as shown in Table No. (2-3)

TABLE .2. Actual tax collection revenues

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	Total tax collection revenues
2022	4,370,422,891	3,053,852,826	12,001,291,350	1,678,471,380	147,461,050	21,251,499,497
2021	1,114,104,164	2,270,195,040	1,804,415,825	1,788,987,000	4,345,667,000	11,421,590,704
2020	3,323,000,000	1,739,000,000	1,327,000,000	1,693,000,000	5,695,000,000	13,777,000,000
2019	5,348,700,000	1,784,450,000	2,347,890,000	1,768,954,000	5,633,450,000	16,883,444,000
2018	4,665,000,000	1,526,000,000	1,500,000,000	1,657,000,000	5,632,000,000	15,421,000,000
2017	5,018,000,000	1,689,000,000	1,784,000,000	1,824,000,000	5,574,000,000	16,361,000,000

Source: General Authority for Taxes / Najaf Governorate Branch

TABLE .3. Planned tax collection revenues

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	Total tax collection revenues
2022	4,851,169,409	3,420,315,165	13,561,459,225	1,913,457,373	1,695,802,071	25,442,203,243
2021	2,491,846,249	3,917,211,702	1,902,637,500	1,800,339,220	5,775,740,020	15,789,553,016
2020	4,719,000,000	1,782,000,000	1,595,000,000	1,879,000,000	5,863,000,000	15,838,000,000
2019	6,834,550,000	2,346,550,000	3,467,830,000	1,854,540,300	5,834,200,000	20,337,670,300
2018	5,085,000,000	1,910,000,000	1,941,000,000	1,806,000,000	6,800,000,000	17,101,000,000
2017	8,863,000,000	1,773,000,000	2,256,000,000	1,866,000,000	5,750,000,000	20,036,000,000

Source: General Authority for Taxes / Najaf Governorate Branch

Second: Determining the value of tax evasion from the tax collection revenues After the tax collection revenues were determined between the actual and the planned in the General Authority for Taxes in Al-Jaf Al-Ashraf Governorate Al-Ashraf, as in this step the value of tax assessment is calculated, shown in Table No. (4)And on the basis of the following equation:

The value of tax evasion = planned tax collection revenues - actual tax collection revenues

TABLE .4. The value of evading tax collection revenues

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	value of tax revenue evasion
2022	480,746,518	366,462,339	1,560,167,875	234,985,993	1,548,341,021	4,190,703,746
2021	1,377,742,085	1,647,016,662	98,221,675	11,352,220	1,430,073,020	4,564,405,662
2020	1,396,000,000	43,000,000	268,000,000	186,000,000	168,000,000	2,061,000,000
2019	1,485,850,000	562,100,000	1,119,940,000	85,586,300	200,750,000	3,454,226,300
2018	420,000,000	384,000,000	441,000,000	149,000,000	1,168,000,000	2,562,000,000
2017	3,845,000,000	84,000,000	472,000,000	42,000,000	176,000,000	4,619,000,000

Source: Adoption of Table No. (2,3)

Note from Table No. (4) The value of tax evasion is in the tax collection revenues of the General Authority for Taxes in the Najaf Governorate in general. Resulting from those who abstain from paying the value of tax revenues (the taxpayer) to those responsible for collecting them will negatively affect the growth rates and improvement of tax collection. The reason for this is:

1. Weak systems and laws that deter those who refuse to pay tax revenues.
2. Weak regulatory and accounting systems applied in the General Authority for Taxes in Najaf Governorate
3. High tax rates and a heavy tax burden may lead to an increase in the value of tax evasion between actual and planned.
4. Weak cooperation between the legislative and executive authorities and civil society when enacting tax laws may burden the taxpayer and those responsible for paying the value of tax revenues.

Third: Determine the replacement value cost of the achieved tax collectionAfter the value of tax evasion was determined in the tax collection revenues, the General Authority seeks taxes in the Holy Najaf Governorate. To study and analyze the alternative value that can be achieved at the lowest cost and the best possible value in order to reach the total planned tax collection through the following:

1. Determine the desired ratio to be achieved between those responsible for paying taxes and those responsible for collecting tax collectionIt was agreed upon in the General Tax Authority at a rate of 9% of the total value of tax evasion
2. Determine the tax revenues achieved based on the desired percentage of the value of tax evasionIt is shown in Table No. (5) according to the following equation
   Realized tax collection = value of tax evasion x 9%

TABLE .5. Tax collection based on Opportunity cost

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	Taxation achieved
2022	43267186.62	32981610.51	140415108	21148739.37	139,350,692	377,163,337
2021	123996787	148231499	8839950	1021699	128,706,572	410,796,510
2020	125640000	3870000	24120000	16740000	15,120,000	185,490,000
2019	133726500	50589000	100794600	7702767	18,067,500	310,880,367
2018	37800000	34560000	39690000	13410000	105,120,000	230,580,000
2017	346050000	7560000	42480000	3780000	15,840,000	415,710,000

Source: Prepared by the researcher based on the percentage desired to be achieved and Table No. (4)

3. Determine the realized tax collection cost based on the alternative value as shown in Table No. (6) according to the following equation:
   The cost of tax collection is the basis of the alternative value= Tax evasion value- Tax collection achieved.

TABLE .6. The cost of tax collection is the basis of the alternative value

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	Total tax revenues
2022	437,479,331	333,480,728	1,419,752,766	213,837,254	1,408,990,329	3,813,540,409
2021	1,253,745,297	1,498,785,162	89,381,724	10,330,520	1,301,366,448	4,153,609,152
2020	1,270,360,000	39,130,000	243,880,000	169,260,000	152,880,000	1,875,510,000
2019	1,352,123,500	511,511,000	1,019,145,400	77,883,533	182,682,500	3,143,345,933
2018	382,200,000	349,440,000	401,310,000	135,590,000	1,062,880,000	2,331,420,000
2017	3,498,950,000	76,440,000	429,520,000	38,220,000	160,160,000	4,203,290,000

Source: Adoption of Table (4-5)

Fourth: Calculating the total planned tax collection according to the alternative value After determining the cost of the alternative value and the value achieved from tax evasion The total actual achieved and planned tax collections will be determined at the General Authority for Taxes in the Najaf Governorate. At the lowest cost and the best possible value according to the following equation:

Planned tax collection based on the alternative value = actual tax collection + tax collection achieved based on the alternative value

TABLE .7. Tax collection based on Opportunity cost

year	Income	Companies	Real estate	Direct deduction	Transfer of ownership of the property	Opportunity cost
2022	4,413,690,078	3,086,834,437	12,141,706,459	1,699,620,119	286,811,742	21,628,662,834
2021	1,238,100,952	2,418,426,540	1,813,255,776	1,790,008,700	4,474,373,572	11,734,165,539
2020	3,448,640,000	1,742,870,000	1,351,120,000	1,709,740,000	5,710,120,000	13,962,490,000
2019	5,482,426,500	1,835,039,000	2,448,684,600	1,776,656,767	5,651,517,500	17,194,324,367
2018	4,702,800,000	1,560,560,000	1,539,690,000	1,670,410,000	5,737,120,000	15,210,580,000
2017	5,364,050,000	1,696,560,000	1,826,480,000	1,827,780,000	5,589,840,000	16,304,710,000

Source: Prepared by the researcher, based on Table No. (3-5)

CONCLUSION

The conclusions of the study of opportunity costs and tax revenue growth rates indicate:

1. Weakness of the administration and those responsible for collecting taxes by the taxpayer and those charged with collecting them in the General Tax Authority
2. Most of the employees of the General Authority for Taxes do not have sufficient experience and skills to follow the laws and instructions issued recently by official authorities.
3. Failure to implement provisions and laws by taxpayers, and in addition to that, failure to activate control systems and hold accountable those who fail to collect taxes in order to manage the financial crisis.

Recommendations: Based on the results reached, the study recommends the following:

1. It is necessary to take into account the opportunity cost when calculating taxes, as it is one of the indicators of growth in tax collection rates.
2. 2. The need to simplify tax laws and regulations and understand them for the taxpayer and taxpayers when conducting tax accounting.
3. Activating the control and audit systems in all aspects of the General Authority for Taxes and holding negligent persons accountable

REFERENCES

1. . Sabti, Zeina Muhammad, Al-Zubaidi, Hamza Faeq Wahib, (2017), "Real estate tax and its impact on tax revenues, applied research in the General Authority for Taxes," Journal of Accounting and Financial Studies, Volume (22), Issue (38).
2. Abbas, Muhammad Wafi, and Al-Jubouri, Nassif Jassim, (2007) "Opportunity Cost and its Role in Responsibility Accounting - A Study of Al-Wisam Company for Dairy and Foodstuff Products," Iraqi Journal of Administrative Sciences, Issue (21).
3. Ali, Muhammad Fakhri Muhammad, Dawoud, Iman Hussein, (2022), "Activating tax inventory procedures and their role in increasing tax revenues / applied research in the General Authority for Taxes," Journal of Accounting and Financial Studies, Volume (17) Issue (60)
4. Al-Kartani, Khaldoun Salman Muhammad, Al-Ardawi, Amir Aqeed Kazem, Al-Tamimi, Murtada Ibrahim Makki, (2022), "Measuring the impact of tax evasion between reality and target in managing the financial crisis, a case study in the General Tax Authority," Tripoli Private University, International Conference The Sixth Libyan Medical, Applied, and Human Sciences, Volume (5) Issue (1).
5. Al-Obaidi, Nahed Najm Hamad, Al-Zubaie, Salem Awad Hadi, (2019), "Governance and its role in increasing tax revenues in Iraq," Journal of Accounting and Financial Studies, Volume (14), Issue (49)
6. Al-Shuwaili, Amal Karim Kazem, (2020), "The impact of integration between internal and external control systems on achieving tax justice, applied research in the General Tax Authority," a thesis submitted to the Board of Trustees of the Arab Institute of Certified Public Accountants, which is part of the requirements for obtaining an accounting certificate. Legal.
7. Aziz, Talal Abbas, Al-Ghabban, Faiza Ibrahim Mahmoud, (2022), "Adopting opportunity cost as a tool to increase tax revenues/ applied research in the General Authority for Taxes - Companies Department," Journal of Accounting and Financial Studies, Volume (17) (Issue) 95).

8. Dosh, Reyam Muhammad Abbas, Al-Fadl, Moayed Abdul Hussein, (2020), "Evaluating investment decisions according to the perspective of opportunity cost and SWOT analysis," Administrative Technical College / Kufa, Master's thesis in financial and accounting techniques.
9. Drury, Colin,(2004) ,"Management and Cost Accounting", 6th ed., (Thomson, Learning.
10. Hussein, Muhammad, and Taher, Iyad, (2020), "Evaluating the performance of the General Tax Authority for tax collections for the period 2012_2016," Journal of the University of Baghdad College of Economic Sciences, Issue (60)
11. Ismail, Haitham Abdel Khaleq, Shaker, Kafaa Abdel Karim, Shaker (2018) "The contribution of supporting agencies to increasing tax revenues, an applied research on a sample of supporting agencies in the health sector for the period (1998-2008)," Journal of Accounting and Financial Studies, Volume (23) Issue (42)
12. palil ,mohd rizal,(2010), tax knowledge and compliance determinants in self assessment system in Malaysia , athesis submitted to the university of Birmingham for the degree of doctor of philosophy.
13. Peter, Atrill, and Wayde, Melanie, translated by Zuhair Omar Dardar, (2013), "Management Accounting for Decision Makers," Al-Marikh Publishing House, Riyadh, Kingdom of Saudi Arabia.
14. Ray H. Garrison,(2018)" Managerial Accounting,
15. Shakur, Muhammad Mubarak, Ahmed, Nidal Raouf, (2022), "Coordination between real estate and income tax and its impact on the tax revenue / applied research in the General Authority for Taxes," Journal of Accounting and Financial Studies, Volume (17) Issue (60)
16. https://hbrarabic.com
17. https://theinvestorsbook.com