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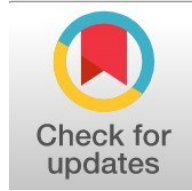
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# Determinants of Insurance Financial Mobilization and Public Budget Support in Iraq

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## Abstract

**General Background:** Insurance companies mobilize financial resources through premiums, investments, and reinsurance agreements, contributing to economic stability via tax revenues and employment generation. **Specific Background:** The Iraqi General Insurance Company and National Insurance Company channel profits to support public finances, yet their fiscal contribution mechanisms remain underexamined. **Knowledge Gap:** Empirical evidence quantifying determinants of financial resource mobilization in Iraqi insurance companies and their impact on state budget support is limited. **Aims:** This research identifies factors influencing mobilized financial resources and examines their contribution to the state budget during 2009-2022. **Results:** Using Partial Least Squares Structural Equation Modeling (PLS-SEM), the study reveals total profits do not significantly affect public treasury shares, with both companies contributing under one percent of total public revenues. **Novelty:** This investigation provides the first systematic empirical assessment of resource mobilization determinants in Iraqi government insurance companies using variance-based structural equation modeling. **Implications:** Current regulatory frameworks fail to optimize insurance sector contributions to fiscal sustainability, necessitating policy reforms including tax incentives and enhanced institutional capacity

**Keywords :** Insurance Financial Resources, State Budget Support, Iraqi Insurance Sector, PLS-SEM Analysis, Economic Growth Contribution.

### Highlight :

- Insurance company profits show no statistically significant impact on public treasury contributions.
- Iraqi insurance sector contributes less than 1% of total government revenues.
- Inflation rate strongly correlates with public treasury share at 89.5% coefficient..

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## Introduction

Insurance businesses are integral to the economy by offering safeguards against financial hazards. To fulfill their commitments to policyholders, insurance companies amalgamate funds from many sources, including premiums, investments, and reinsurance agreements. However, the magnitude of these cash resources may fluctuate based on many factors. This research will examine the determinants of financial resources magnitude in insurance businesses and their influence on state budget assistance, as outlined below:[1]

1. Insurance firms derives financial resources from premiums, investments, and reinsurance agreements
2. The magnitude of financial resources may be affected by legal and economic variables, in addition to market conditions and competition within the insurance sector.
3. The financial resources aggregated in insurance businesses can directly and indirectly influence the state budget, encompassing tax contributions, job creation, and fostering economic growth.
4. Government policies and efforts can incentivize insurance businesses to enhance their contributions to the state budget via tax benefits and public-private collaborations [2].
5. comprehending the determinants of financial resource magnitude n insurance businesses is essential for ensuring the stability and sustainability of the insurance sector and its co economic contribution.

Financial resources are essential for insurance businesses to meet their obligations to policyholders and ensure financial stability. Insufficient financial resources render insurance businesses become incapable of fulfilling's claims or adhering to regulatory standers, resulting in insolvency and diminished market confidence.

Insurance firms aggregate financial resources from multiple sources, including premiums, investments, and reinsurance agreements. These resources are subsequently allocated yield adequate returns to offset anticipated losses and expenditures [3].

The significance of financial resources in insurance firms resides in their capacity to minimize and transfer risks. By pooling, insurance companies can mitigate insolvency Risks and diversify their exposure by aggregating resources from numerous policyholders. Moreover, financial resources empower insurance companies to foster economic growth and development by offering safety and security to individuals and enterprises. The financial assets aggregated by insurance companies substantially contribute to the public budget. The effect can be seen in multiple critical domains, as demonstrated in Table (1)

**Table 1.** Insurance Companies' Financial Resources Contribute to Taxes, Job Opportunities, and Economic Growth

<b>Areas of Impact</b>	<b>impact</b>
<b>Taxes Paid</b>	<b>The insurance sector substantially contributes to tax revenues, through corporate income taxes, property taxes, sales taxes on premiums, and various fees paid by insurance businesses. A survey by the national association, of Insurance Commissioners revealed that, the insurance business remitted over \$18 billion in taxes in 2020</b>
<b>Job Creation</b>	<b>The insurance sector offers employment prospects in several professions, such as actuaries, underwriters, claims adjusters, and agents. These positions enhance to the overall health of the economy's vitality by increasing consumer expenditure and producing tax income. in 2020, the insurance sector In the United States employed about 2.7 million individuals in 2020.</b>
<b>Contributions to Economic Growth</b>	<b>Insurance companies allocate a substantial amount of their financial assets to the economy, offering essential funding for enterprises and infrastructure initiatives. These investments catalyze economic expansion, generate employment, and enhance general prosperity.</b>

Source: Prepared by the researcher

Consolidation financial resources are essential for financing government initiatives and services, while also fostering economic expansion and employment generation. Consequently, it is crucial for policymakers to comprehend the determinants of insurance companies' financial resources magnitude and their contribution to the state budget [4].

## Methodology

### Research Problem:

The study aims to address the following primary question:

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How can insurance companies in Iraq, support the state budget, and what factors influence the amount of financial resources they mobilize?

## The importance of the study:

In light of the economic challenges facing Iraq, such as its significant reliance on oil earnings and the volatility of the financial system, the importance of the research becomes clear.

## Research Objectives:

1. Examine the variables influencing the amount of money mobilized that Iraqi insurance companies have raised.
2. Assess how these resources contribute to the state budget.
3. Make suggestions for improving the insurance sector contribution to the Iraqi economy.

## Research Hypotheses:

The study posits that: (Financial resources mobilized by insurance companies enhance the earnings of the Iraqi state budget).

## Research Methodology:

1. Quantitative methodology: employing statistical data sourced from insurance firms and the central bank of Iraq.
2. Analytical tools: Multiple regression analysis, integration tests, and time series stationary.

## Constraints of Research:

1. Temporal parameters: From 2005 to 2022.
2. geographic restrictions: (National Insurance Company and Iraqi Insurance Company) in Iraq.

# Results and Discussion

## A. Theoretical Framework and Prior Studies:

### 1.1 Theoretical Framework: associated Economic Theories:

#### 1. Resource Mobilization Theory:

This theory examines the mechanisms via which financial resources are gathered across different sectors and their application in bolstering the economy and attaining economic objectives.

Consequently, premiums remitted by individuals and corporations might be transformed into financial assets allocated to development initiatives. Insurance businesses can facilitate the mobilization of domestic savings and channel them into productive (income-generating) ventures, thereby bolstering the economy. [5]

#### 2. Economic Growth Theory:

This theory emphasizes the significance of financial sectors, including insurance, in fostering economic growth by channeling savings into investments. Insurance promotes investment, entrepreneurship, and the financing of small and medium --sized enterprises (SMEs). Consequently, the insurance sector stimulates economic growth. [6]

#### 3. Risk Theory:

This theory elucidates the function of insurance in risk managing and its capacity to foster investment. Insurance offers financial security against risk, mitigates uncertainty and promotes investment.

Consequently, it is feasible to examine the role of insurance companies in mitigating economics' risks, including inflationary pressures and political instability. [7]

## B. Literature review:

1. Study by Hussein Ashour Al-Attabi and Zainab Younis Al-Bayati's (2013) examines the role of insurance companies in the planning and development of the Iraqi economy. The study showed several findings, the most significant of which is the association and influence between premium growth, heightened investment, and revenue production. The research additionally identified a precarious financial status for insurance firms, notably the Iraqi Insurance Company. [8]
2. Asaad et al. 2018 conducted a study assessing the impact of mandatory auto insurance on financing Iraq's general budget and its potential to fulfill social objectives. The study seeks to ascertain the mediating function of required in the attainment of societal objectives. Data was sourced from (the National Insurance Company and the Iraqi Insurance Company). It was determined that compulsory insurance can serve as a source of augmented government revenue while providing social advantages. These necessities legal modification and enhancement of the financial capabilities of insurance firms. This will augment the capital of the two insurance organizations, empowering them to confront competition and attain profitability. [9]
3. (Ayman and Iman, 2022) the influence of insurance operations on economic advancement. This study seeks to assess the influence of the insurance industry's evaluation on economic development in both the short and long term within the Algerian economy from 1992-2020. The analytical results for the examined time indicate a correlation and impact between premium growth, increased investment, and revenue generation. It also shown a direct and substantial correlation between insurance activity and economic growth. [10]



4. Foreign direct investment insurance in the Indian insurance sector, Yogesh Shikhare, Solapur University, Solapur, 2015

The study seeks to illustrate the function of the insurance sector in facilitating savings and investment across diverse economic sectors. The analysis determined that overseas insurance companies are only interested in investing under specific conditions. the study showed that local insurance companies are crucial [11].

**C. Sources of financial capital in insurance companies:**

Insurance firms acquire financial resources from diverse sources, including premiums, investments, and reinsurance agreements.

Premiums provide the principal revenue stream for insurance firms. Clients remit payments for their insurance policies, supplying organizations with capital to address claims and provide profits. The rates imposed by insurance companies depend on a range of factors, including the policyholder's age, lifestyle, and medical history.

Investments constitute a significant source of financial capital for insurance companies. These investments may encompass equities, fixed- income securities, and real estate. The earnings from these investments augment the financial resources accessible to the insurance firm. Reinsurance agreements serve as an additional source of financial capital for insurance firms. Reinsurance is a mechanism employed by insurance firms to allocate a Portion of their risks to another entity, the insurance company compensates the reinsurer with a premium when claims are substantial, and the reinsurer assumes a portion of the expense, so alleviating the financial burden on the insurance company. and the Table (2) compares the sources of financial resources inside insurance businesses.

**Table 2.** Comparison of Financial Resources inside insurance businesses

Source	Explanation	Advantages	Disadvantages
Insurance premiums	The money customers pay for insurance policies	A stable and predictable source of income	The risk of claims being higher than expected
Investments	Stocks, bonds, and real estate	The potential for high returns	The risk of investments losing their value.
Reinsurance contracts	Transferring risks to another company	company reduces the impact of large claims on financial resources	Premiums paid to the reinsurance company can be expensive

**Source:** Researcher's work based on the information above.

By utilizing a combination of these sources, insurance companies may sustain a varied and steady reservoir of financial resources to underpin their operations and augment the state budget.

**D. Determinants influencing the magnitude of Financial Resources in Insurance firms**

**4.1 Regulatory considerations**

Regulatory rules can substantially influence the magnitude of financial resources within insurance businesses. Capital requirements are a significant regulatory factor influencing the magnitude of financial resources.

The capital an insurance business must retain is typically dictated by the nature of its insurance offerings and the associated risks. Insurance businesses must retain a specific amount of capital to guarantee their capacity to fulfill claims and satisfy financial obligations. This mandate is d to safeguard policyholders and guarantee that insurers possess the requisite financial resources to maintain remain solvency [12].

Solvency laws represent another regulatory issue that might influence the financial resources of insurance businesses. Solvency regulations requirements mandate that insurance businesses uphold a specific solvency margin, which assesses their capacity to fulfill financial obligations. Solvency regulations mandate that insurance businesses submit periodic financial reports to regulatory agencies to verify adherence to solvency standards [13].

Besides capital requirements and solvency restrictions, further regulatory variables influencing the financial resources of insurance businesses encompass:

- Licensing requirements
- Investment Regulations
- Consumer Protection Regulations

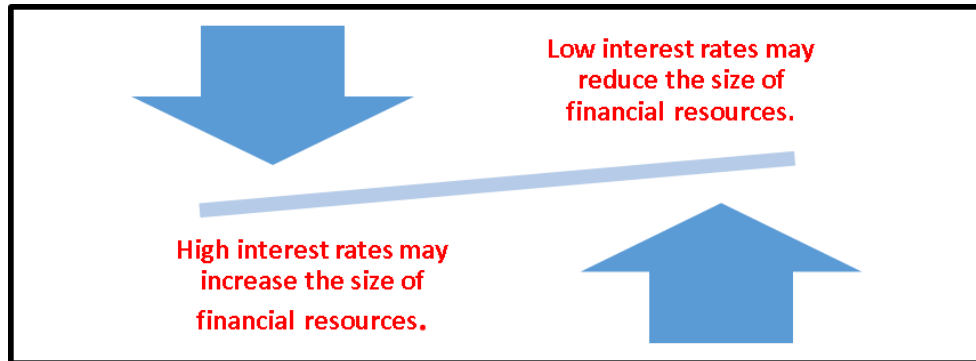
These regulatory elements aim to safeguard consumers and maintain the stability of the insurance sector, although they may also affect the financial resources accessible to insurance firms. Overall, regulatory factors significantly influence the financial resources of

insurance businesses. Insurance businesses must comply with these regulations to guarantee their long-term viability and safeguard the interests of policyholders and stakeholders.

## 4.2 Economic variables

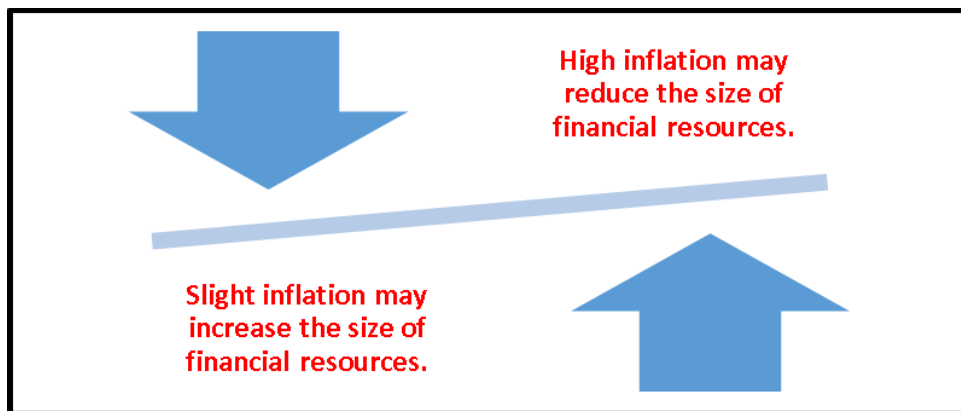
Numerous economic factors can influence the financial resources of insurance firms as follows. These factors can influence the capacity of insurance firms to yield profits, settle claims, and provide investment returns, all of which can affect the magnitude of their financial resources.

- a. Interest Rates: Interest rates are essential in the insurance sector as they dictate the capital costs for insurance firms. Low interest rates may hinder insurance firm's ability to generate enough investments returns, hence impacting their business operational viability and claims payments, which might diminish their financial resources. Conversely, elevated interest rates may enable, insurance businesses to achieve higher investment returns, so augmenting their financial resources, as seen in Figure (1).



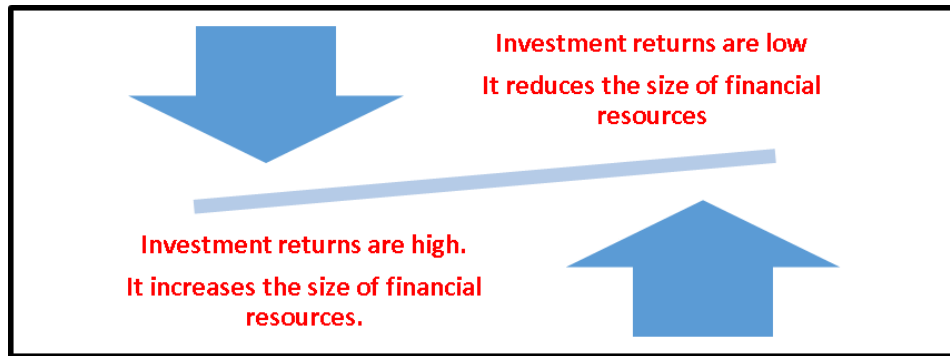
**Figure [1]** illustrates the impact of interest rates on insurance financial resources.

- b. Inflation: Inflation can adversely affect the financial resources of insurance firms. When elevated inflation necessities, higher claim payments, thereby diminishing their financial reserves. Additionally, Inflation can also increase the cost of goods and services (such as medical care and vehicle repairs), which can inflate insurance claims expenses and diminish profitability, further constraining their financial resources. Figure (2) illustrates this.



**Figure [2]** illustrates the impact of inflation on insurance financial resources.

- c. Investment returns: One of the primary key sources of financial resources for insurance businesses is the profits returns generated from their investment. High investment returns can enhance revenue of insurance firms, thereby augmenting their financial resources. When investment returns are diminished, insurance companies may be compelled to utilize their reserves to settle claims, which can reduce their financial resources.



**Figure [3]** illustrates the impact of investment returns on insurance financial resources.

Consequently, it is essential to recognize that economic considerations might influence consumer demand for insurance goods during economic downturns; consumers may curtail their expenditure on insurance, thereby diminishing the profitability of insurance businesses.

## E. The actuality of Insurance firms in Iraq

### 5.1 National Insurance Company (NIC)

Established in Iraq in 1950, it is among the oldest insurance firms in the country. Formerly known as the Iraqi National Insurance Company, it operates under the supervision of the Iraqi Ministry of Finance and is a prominent entity in the governmental insurance sector.

The company offers extensive insurance services, encompassing: optional insurance (life insurance), mandatory insurance, reinsurance, insurance consultancy, and investment operations.

### 5.2 Iraqi Insurance Company (IIC) [14]

Founded in 1959, it is preeminent government insurance business in Iraq and operates under the supervision of the Ministry of Finance. The company offers a comprehensive range of general insurance, life insurance, and reinsurance, ensuring the adequate protection for its liabilities. The corporation participates in various forms of investment aimed at national development and supporting the national economy. Both businesses function within the Iraqi government insurance sector and play a vital role in providing insurance services to individuals and organizations. The National Insurance Company focuses more on general and vehicle insurance, while the Iraqi Insurance Company offers a wider range of services, including life, agricultural, and industrial insurance.

### 5.3 The contributions of the Iraqi General Insurance Company and the National Insurance Company to the state budget:

In compliance with the Companies Law, insurance companies operating in Iraq are mandated to allocate a percentage of their revenues to the public budget [15]. The government's allocation is established according to the percentage approved by the Council of Ministers. At the conclusion of each fiscal year, the corporation complies its final accounts and allocates the profits attained according to the following percentages:

- Employees' allocation
- Research and development allocation
- Social services allocation
- Public treasury allocation (often between 25% and 45% of earnings, depending on economic conditions)

Table [3] shows the percentage of the two companies' contribution to the Iraqi public budget.

**Table [3].** the public treasury's allocation of the profits of both the National Company and the Iraqi Insurance Company (in thousands)

seq	years	National Company profits	Iraqi company profits	Total profits	percentage of profits	Public treasury share
	2009	2519362	399960	2,919,322	%45	1,313,694.9
	2010	4497324	424511	4,921,835		2,214,825.75
	2011	4664479	1375276	6,039,755		2,717,889.75
	2012	5745451	1707939	7,453,390		3,354,025.5

	2013	3711402	1213076	4,924,478	%25	1,231,119.5
	2014	3801023	1768129	5,569,152		1,392,288
	2015	3990242	1527156	5,517,398		1,379,349.5
	2016	8350485	3374725	11,725,210	%45	5,276,344.5
	2017	8075726	2624047	10,699,773		4,814,897.85
0.	2018	6885112	3983206	10,868,318		4,890,743.1
1.	2019	7592286	4475833	12,068,119		5,430,653.55
2.	2020	6606222	3738638	10,344,860	%60	4,655,187
3.	2021	7383811	6558392	13,942,203		8,365,321.8
4.	2022	9742889	7229545	16,972,434		10,183,460.4

Source: Researcher's work based on the two companies' annual reports for the period 2009-2022

## Statistical Analysis and findings

A. Data Description: The data utilized in the study are:

1.1 Dependent Variable:

Public Treasury Share of Profits = PTS

1.2 autonomous Variables:

- total mobilized financial resources (total profits of the National Insurance Company and the Iraqi Insurance Company) = TP
- Real GDP growth rate (GDP = GDP)
- Inflation Rate (INF) = INF

Table [4]. Study variables

years	Total profit TP	Public treasury shares PTS	real growth rate GDP	Inflation rate 2012=100 INF
2009	2,919,322	1,313,694.9	3.38	8.3
2010	4,921,835	2,214,825.75	6.4	6.8
2011	6,039,755	2,717,889.75	7.55	10.2
2012	7,453,390	3,354,025.5	13.94	12.6
2013	4,924,478	1,231,119.5	7.63	5.6
2014	5,569,152	1,392,288	0.2	-2.7
2015	5,517,398	1,379,349.5	3.83	11.7
2016	11,725,210	5,276,344.5	9.57	0.4
2017	10,699,773	4,814,897.85	4.03	1.2
2018	10,868,318	4,890,743.1	-1.19	-2.3
2019	12,068,119	5,430,653.55	6.38	0.2
2020	10,344,860	4,655,187	-11.18	0.4

<b>2021</b>	<b>13,942,203</b>	<b>8,365,321.8</b>	<b>7.65</b>	<b>-0.9</b>
<b>2022</b>	<b>16,972,434</b>	<b>10,183,460.4</b>	<b>4.89</b>	<b>1.3</b>

Source: Prepared by the researcher based on: - Data from Table(3)

-Publications from ministry of planning and development cooperation -- central statistical organization -- directorate of national accounts, annual statistical Abstract, for multiple years.

## B. Statistical Analysis

The Partial Least Squares Structural Equation Model (PLS-SEM) was employed to analyze the correlations between the independent variables (inflation rate, total profits, real GDP growth rate) and the autonomous variable (public treasury share). PLS-SEM relies on a variance-based methodology, rendering it appropriate for forecasting correlation in intricate models, especially when data is abnormal or samples are small.

## SmartPLS Report

Please cite the use of SmartPLS: Ringle, C. M., Wende, S., and Becker, J.-M. 2015. "SmartPLS 3." Boenningstedt: SmartPLS GmbH, <http://www.smartpls.com>.

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## C. Descriptive Tests:

Table (5) presents a descriptive statistical overview of a set of important economic and financial variables, including total profits, the public treasury's share, the GDP growth rate, and the inflation rate. Table (5) presents fundamental statistical indications for each variable. These indicators help understand the overall data distribution, its level of dispersion, and the degree of deviation from the normality, so aiding in the interpretation of the results and analysis of variable correlations.

**Table [5]** Results of Descriptive Tests for the Study Variables

Variabl es	symp pl	- Mean-	- Median -	-Min-	-Max-	Standa rd Deviati on	Excess Kurtos is	Skewne ss
Total profit	TP	88547 32	103448 60	29193 22	169724 34	394596 1	-0.687	0.409
Public treasur y share	PTS	40871 29	465518 7	123112 0	101834 60	262605 6	0.531	0.96
Growth rate	GDP	4.506	6.38	-11.18	13.94	5.668	3.399	-1.346
Inflatio n rate	INF	3.771	1.3	-2.7	12.6	5.099	-1.289	0.502

Source: researcher's Work based on the outputs of the Smart PLS Report program.

The TP variable, had an arithmetic mean of (8,854,732) and the median of (10,344,860), with a substantial range from the minimum value of (2,919,322) to the maximum value of (16,972,434). This indicates a substantial degree of variability among observations, as evidenced by the high standard deviation value (3,945,961). The skewness coefficient (0.409) is marginally positive, signifying that the distribution is somewhat right- skewed. The kurtosis value (-0.687) is negative, signifying that the distribution is skewed and less peaked than the normal distribution. The PTS variable had a mean of 4,087,129 and a median of 4,655,187. This suggests that the distribution is influenced by extreme values, as the median exceeds the mean. The values span from a minimum of 1,231,120 to a maximum of 10,183,460. The standard deviation is 2,626,056, indicating significant variability in the values. The skewness coefficient of (0.96) is positive and quite high, indicating that the distribution is substantially skewed to the right. The skewness (0.531) is marginally positive, indicating a more pronounced (leptokurtic) distribution relative to a normal distribution. The GDP variable had a mean of (4.506) and a median of (6.38), with a minimum values of -11.18 and positive maximum values (13.94). This indicates a significant fluctuation in both directions. The standard deviation (5.668) underscores significant dispersion. The skewness coefficient was negative (-1.346), indicating that the distribution is significantly skewed to the left. The skewness (3.399) is significantly positive suggesting a sharp peak and the likelihood of outliers. The INF variable exhibited a mean (3.771) and a median of (1.3), suggesting that higher values pushed the mean higher than the median. The values span from (-2.7) to (12.6), and the standard deviation of (5.099) indicate significant variance. The skewness coefficient (0.502) is positive, indicating a mild rightward slope. In contrast, the skewness (-1.289) is negative, signifying that the distribution is flat and less steep than the normal distribution.

#### D. assessment Validity and reliability of the mathematical model:

The validity and reliability test result, presented in the table, were analyzed for the validity and reliability indicators of the constructs. The findings were evaluated with Cronbach's alpha (CA), RHO\_A coefficient, composite reliability (CR), and average variance extracted (AVE), as presented in Table.(6)

**Table [6]** Results of The Validity and reliability test of the mathematical model

Variable	CA	RHO_A	CR	AVE
GDP	1.000	1.000	1.000	1.000
INF	1.000	1.000	1.000	1.000
PTS	1.000	1.000	1.000	1.000
TP	1.000	1.000	1.000	1.000

**Source: Researchers work based on the outputs of the Smart PLS Report program.**

The data shown in Table (6) indicate that all values were equivalent to (1.000). The results of Cronbach's alpha, which assesses internal consistency among items, indicate that: All items related to each construct exhibit full consistency. Although acceptable values often commence at 0.70, and values above 0.90 are considered excellent, reaching an ideal value of 1.000 is uncommon in applied studies and reflects an ideal degree of internal consistency. The rho\_A coefficient results also equaled 1.000. This index is used to measure reliability more accurately than Cronbach's alpha, as it utilizes real estimations of factor weights. The optimal value signifies total uniformity among the assessed items. All constructions attained a composite reliability (CR) score of 1.000, far exceeding the minimum acceptable threshold of 0.70. This outcome indicates that all indicators associated with the construct contribute fundamentally to elucidating the hidden variable, devoid of any measurement error. Regarding AVE, each construct attained a value of 1.000. The general principle dictates that the latent variable accounts for a minimum of 50% of the variance in the measurement indicators, achieving an optimal value (100%) signifies a whole elucidation of the variance without any loss. Table (7), according to discriminant validity, delineates the interrelations among the aforementioned variables (GDP, INF, PTS, TP).

**Table [7]** Discriminant validity of variables

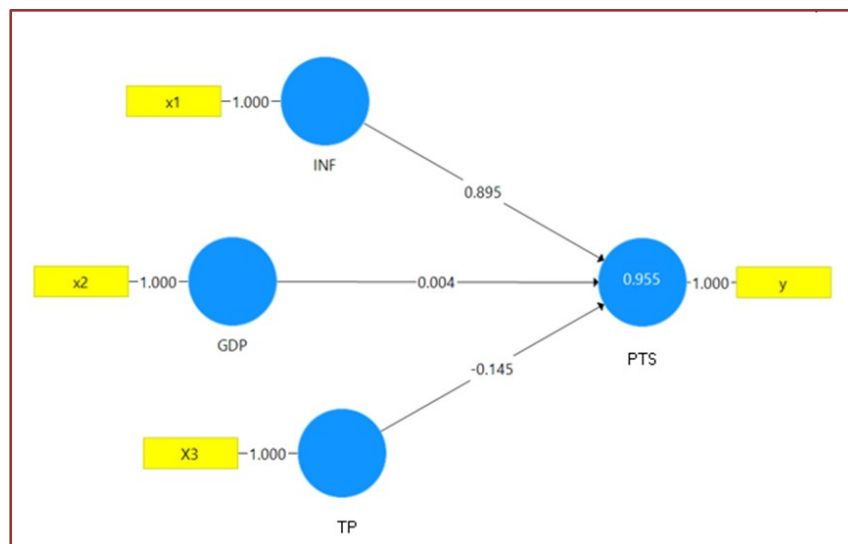
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Discriminant Validity	GDP	INF	PTS	TP
GDP	1.000			
INF	0.017	1.000		
PTS	0.447	-0.508	1.000	
TP	-0.046	0.969	-0.599	1.000

Source: Researcher's work based on Smart PLS Report program outputs

The table above presents the correlation coefficients among the four constructs (GDP, INF, PTS, and TP). It is evident that the correlation between GDP and INF was minimal (0.017), suggesting that both variables are almost independent, hence reinforcing their discriminant validity. Likewise, the correlation between GDP and TP was modest and negative (-0.046), also indicating a lack of interaction between the two variables. The correlation between GDP and PTS was 0.447, indicating a moderately strong relationship, however still within acceptable limits in terms of discriminating between the constructs. The correlation between INF and PTS was negative, with a value of -0.508. Outcome indicates a moderately strong inverse correlation between the two variables; a rise in the values of one correlates with a decline in the values of the other. This value does not signify similar or overlapping measures; instead, it reflects a correlation that can be interpreted within the context of the model. The correlation between INF and TP was exceedingly high (0.969), raising concerns regarding discriminant validity. A high number signifies that the two constructions nearly measure the same concept or exhibit considerable overlap. This undermines the autonomy of each construct. The correlation between PTS and TP was negative (-0.599), reflecting a moderate to strong inverse association. According to the findings the structural model is acceptable, as shown in Figure.(4)



**Figure (4)** assessment Validity for the structural model

Figure (4), illustrates the  $R^2$  value for the TP variable. It demonstrates that 95.5% of the variance in TP is accounted for INF, GDP, and PTS. This elevated proportion signifies, the model's efficacy in explaining the dependent variable.

### E. Analysis of Hypothesis Testing Results

Table (7) presents the path coefficients between the independent variables (GDP, INF, PTS) and the dependent variable (TP), along with the corresponding statistics (T-value and P-value) to assess the significance of these relationships.

**Table [7]** Paths of the relationship between variables.

Paths	Original Sample ( $\beta$ )	Sample Mean	T Statistics	P Values
GDP -> PTS	0.004	0.013	0.045	0.964
INF -> PTS	0.895	0.886	11.137	0.000
TP -> PTS	-0.145	-0.160	1.346	0.179

The analysis of the path (GDP -> PTS), indicated that the correlation between GDP and PTS was not statistically significant. The path coefficient was (0.004), accompanied by a minimal T-value (0.045) and a P-value (0.964), beyond the accepted significance threshold [ISSN 2598 9928 \(online\)](https://doi.org/10.21070/ijler.v21i1.1440), <https://ijler.umsida.ac.id>, published by [Universitas Muhammadiyah Sidoarjo](https://creativecommons.org/licenses/by/4.0/)

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of (0.05). This indicates that the variation in GDP does not explain any significant change in TP, hence the hypothesis positing a significant relationship between the two variables in initial pathway (GDP → TP) is dismissed. The analysis of path (INF → PTS), indicated a positive that the relationship between INF and PTS, strong, and statistically significant. The path coefficient attained (0.895), accompanied by a substantial T value (11.137) and a P value (0.000) which is less than 0.01. This outcome demonstrates that high INF values contribute significantly to enhancing PTS, hence validating the hypothesis regarding this relationship and establishing INF as the predominant component in elucidating the dependent variable. In the path (TP → PTS), the path coefficient was negative (-0.145), with a T value (1.346) below the permissible threshold (1.96) and a P value (0.179) beyond 0.05. This indicates that the correlation between the two variables is statistically negligible, hence necessitating the rejection of the hypothesis regarding a direct effect of TP on PTS. Figure (5) illustrates the structural model of the study.

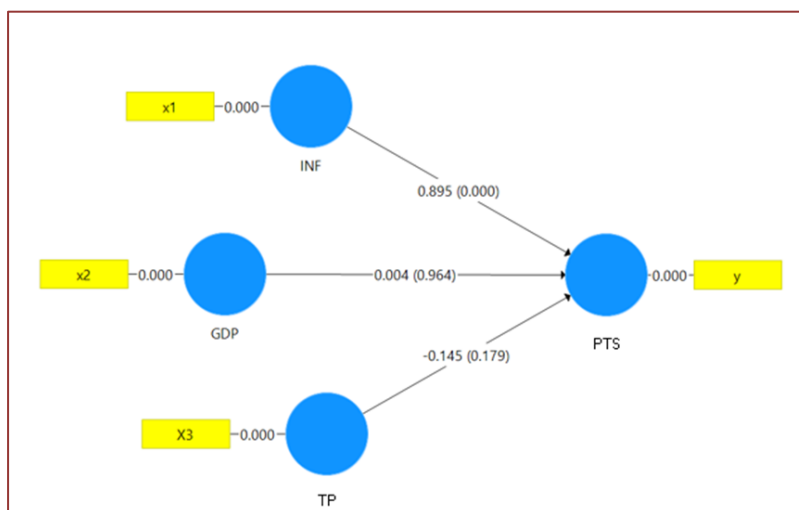


Figure (5) the structural model of the study.

## Conclusions and Recommendations:

### A. Conclusions:

- Main conclusion: Total profits do not exert a positive and significant influence on the public treasury's share, hence refuting the research hypothesis.
- The company's contribution to government revenues is minimal, not surpassing 1% of overall public income, and its contribution to non-oil revenues is negligible.

### B. Recommendations:

- Enhance the regulatory framework for the insurance sector in Iraq.
- Promote investment in the insurance sector via tax incentives.
- Enhance awareness of the significance of insurance among individuals and corporation.

This would augment the role of the insurance sector contribution to the national economy.

## References

- M. A. Becker and D. Starch, "The impact of insurance on economic growth: A review of the literature," *International Insurance Journal*, vol. 51, no. 3, pp. 250-275, 2018.
  - National Association of Insurance Commissioners (NAIC), "Insurance industry tax contributions," 2021. [Online]. Available: <https://content.naic.org/>. [Accessed: Jan. 8, 2026].
  - J. Doe, "The insurance industry and the economy," *Journal of Economics and Insurance*, vol. 45, no. 2, pp. 150-175, 2020.
  - E. Johnson, "The role of insurance companies in the economy," *Journal of Finance and Economics*, vol. 35, no. 2, pp. 180-205, 2020.
  - J. M. Kirk, *Resource Mobilization and Public Policy: A Comparative Analysis*. Oxford, U.K.: Oxford University Press, 2018. [Online]. Available: <https://www.oxfordscholarship.com/view/10.1093/oso/9780190680918.001.0001/oso-9780190680918>. [Accessed: Jan. 8, 2026].
  - J. F. Outreville, "The economic significance of insurance markets in developing countries," *Journal of Risk and Insurance*, vol. 57, no. 3, pp. 487-498, 1990, doi: 10.2307/253304.
  - M. Arena, "Does insurance market activity promote economic growth?," *Journal of Risk and Insurance*, vol. 75, no. 4, pp. 921-946, 2008, doi: 10.1111/j.1539-6975.2008.00291.x.
  - H. A. J. Al-Atabi and Z. Y. M. Al-Bayati, "The role of insurance companies in planning and developing the [ISSN 2598 9928 \(online\)](https://ijler.umsida.ac.id), <https://ijler.umsida.ac.id>, published by [Universitas Muhammadiyah Sidoarjo](https://ijler.umsida.ac.id)
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- Iraqi economy: An applied study in the Iraqi General Insurance Company," *Al-Qadisiyah Journal of Administrative and Economic Sciences*, vol. 16, no. 1, pp. 31-47, 2014. [Online]. Available: <https://search.emarefa.net/detail/BIM-670230>. [Accessed: Jan. 8, 2026].
9. A. Assad et al., "The impact of mandatory auto insurance on financing Iraq's general budget," *Academia.edu*, 2018. [Online]. Available: <https://www.academia.edu/37524209/>. [Accessed: Jan. 8, 2026].
  10. A. Ayman and I. Iman, "The influence of insurance operations on economic advancement in the Algerian economy," *University of Temouchent Digital Repository*, 2022. [Online]. Available: <https://dspace.univtemouchent.edu.dz/bitstream/123456789/3204/1/>. [Accessed: Jan. 8, 2026].
  11. Y. Shikhare, "Foreign direct investment insurance in the Indian insurance sector," presented at the Int. Conf. on Innovation in Engineering and Economics, Solapur, India, 2015. [Online]. Available: [https://cberuk.com/cdn/conference\\_proceedings/2015iciee\\_india7.pdf](https://cberuk.com/cdn/conference_proceedings/2015iciee_india7.pdf). [Accessed: Jan. 8, 2026].
  12. D. Happersberger, H. Lohre, and I. Nolte, "Estimating portfolio risk for tail risk protection strategies," *European Financial Management*, vol. 26, no. 4, 2020, doi: 10.1111/eufm.12256.
  13. S. Ge and M. S. Weisbach, "The role of financial conditions in portfolio choices: The case of insurers," *Journal of Financial Economics*, vol. 142, 2021, doi: 10.1016/j.jfineco.2021.05.019.
  14. P. Zweifel and R. Eisen, *Insurance Economics*. Berlin, Germany: Springer-Verlag, 2012. [Online]. Available: [https://www.academia.edu/22035598/Insurance\\_Economics](https://www.academia.edu/22035598/Insurance_Economics). [Accessed: Jan. 8, 2026].
  15. Insurance Diwan Iraq, "National Insurance Company," 2023. [Online]. Available: [https://insurancediwan.gov.iq/?page\\_id=64725&lang=ar](https://insurancediwan.gov.iq/?page_id=64725&lang=ar). [Accessed: Jan. 8, 2026].
  16. National Insurance Company, "About us," 2023. [Online]. Available: <https://nic.gov.iq/about-us.php>. [Accessed: Jan. 8, 2026].
  17. National Insurance Company, "Insurance policies," 2023. [Online]. Available: <https://bit.ly/45rFmiJ>. [Accessed: Jan. 8, 2026].
  18. Insurance Diwan Iraq, "Iraqi Insurance Company," 2023. [Online]. Available: [https://insurancediwan.gov.iq/?page\\_id=64718&lang=ar](https://insurancediwan.gov.iq/?page_id=64718&lang=ar). [Accessed: Jan. 8, 2026].
  19. Iraqi Insurance Company, "About the company," 2023. [Online]. Available: <https://bit.ly/3VJBdJY>. [Accessed: Jan. 8, 2026].
  20. Iraqi Insurance Company, "Insurance services - Types of insurance," 2023. [Online]. Available: <https://bit.ly/4ery8zi>. [Accessed: Jan. 8, 2026].
  21. Ministry of Finance Iraq, "About budget," 2023. [Online]. Available: <https://www.mof.gov.iq/pages/ar/AbtBudget.aspx>. [Accessed: Jan. 8, 2026].