# The impact of hidden economy on the general budget in Algeria

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**Abstract:** This research aims to study the hidden economy as a phenomenon in Algeria;, Which includes all illegal economic activities, In addition to studying the impact of this hidden economy on the general budget in Algeria by estimate the size of tax evasion as a result of existence of hidden economy activities;; And then calculate the contribution tax evasion in amplification of the budget deficit in Algeria.

**Key-words:** Hidden economy, tax evasion, tax leaks, public budget.

**Résumé:** L'objectif de cette recherché est d'étudier l'économie informelle en tant que phenomena très visible en Algérie.

Ce phénomène qui englobe toutes les activités économiques non soumises au contrôle delois de l'État et éviteainsi de payer des impôts et aussid'étudier l'impact de cette économie cachée sur le budget général de l'Algérieet enestimant la taille de l'évasion fiscale, puis calculez la contribution de cette evasion fiscale pour exagérer le deficit budgétaire en Algérie

Mots-clés: l'économie informelle, evasion fiscale, fuites fiscales, budget public.

ملخص: يهدف هذا البحث لدراسة الاقتصاد الخفي باعتباره ظاهرة تعاني منها الجزائر؛ حيث يشمل جميع الأنشطة الاقتصادية التي لا تخضع لرقابة وقوانين الدولة وبالتالي فهي تتهرب من دفع الضرائب، ودراسة أثر هذا الاقتصاد الخفي على الموازنة العامة في الجزائر من خلال تقدير حجم التهرب الضريبي الناتج عن وجود أنشطة الاقتصاد الخفي ؛ ثم حساب مدى مساهمة هذا التهرب الضريبي في تضخيم عجز الموازنة العامة في الجزائر.

الكلمات المفتاحية: الاقتصاد الخفي، التهرب الضريبي ، التسرب الضريبي، الموازنة العامة.

#### 1. Introduction

In the last few years, the phenomenon of the hidden economy has received ever increasing attention among the public and politicians in all countries of the world, the hidden economy is known under many names such as the underground, subterranean, submerged, clandestine, shadow, informal or irregular economy.

There are three main reasons why they have become concerned about the hidden economy (Tanzi 1980b):

- (1) The rise of the hidden economy is interpreted as a reaction to the overburdening of individuals and firms.
- (2) An increase in the size of the hidden economy caused by a rise in tax burden hay lead to a fall in tax receipts. The "Laffer-curve" is affected by the change in the allocation of labor between the taxed and the untaxed sectors.
- (3) Economic policy measures may be of a wrong magnitude or even in a wrong direction if they are based on mistaken indicators of the state of the economy. In particular, the official unemployment rate is too high

The hidden economy leads to the state's loss of an important part of the tax revenue, which is an important component of the public revenues; this may lead to imbalances in the state budget

In this research we will study the impact of the hidden economy on the state budget

By answering the following question:

What is the impact of the hidden economy on the public budget in Algeria?

#### 2. The Definition of the Hidden Economy:

The first problem researcher meets with, by approaching this topic, is about the definition and the consequent meanings of The hidden economy.<sup>1</sup>

As Tanzi (1999) remarks, exist at least two definitions and thus two measures of the hidden economy. The first, is connected to the production (or income) missed in the official statistics; the other, refers to "...revenue not reported to, and not discovered by, the tax authorities". Consequently, "...the first measure implies that the country is richer than the official statistics show"<sup>2</sup>, the second (namely, tax evasion) indicates that the tax administration draws less revenue than it should.

Feige is also considered that the One of the broadest definitions of it, includes "...those economic activities and the income derived from them that circumvent or otherwise elude government regulation, taxation, or observation."<sup>3</sup>

Schneider is considered that the one commonly used working definition is: all currently unregistered economic activities, which contribute to the officially calculated (or observed) Gross National Product.<sup>4</sup>

The hidden economy is known by different names, such as the shadow economy, gray economy, black economy or lack economy, cash economy or informal economy. All these synonyms refer to some type of hidden economy activities. We use the following definition: The hidden economy includes all economic activities which are hidden from official authorities for monetary, regulatory, and institutional reasons. Monetary reasons include avoiding paying taxes and all social security contributions, regulatory reasons include avoiding governmental bureaucracy or the burden of regulatory framework, while institutional reasons include corruption law, the quality of political institutions and weak rule of law. For our study, the hidden economy reflects mostly

<sup>&</sup>lt;sup>1</sup> - Roberto Dell'Anno, Estimating the Shadow Economy in Italy: a Structural Equation Approach, University Of Aarhus, Denmark, Working Paper No. 2003-07, p03.

<sup>&</sup>lt;sup>1</sup> - Vito Tanzi, Uses and Abuses of Estimates of the Underground Economy, the Economic Journal, (109 june), 1999. p344.

<sup>&</sup>lt;sup>3</sup> - Edgar L. Feige, The Underground Economies: Tax Evasion and Information Distortion, Cambridge University Press (1989), p01.

<sup>&</sup>lt;sup>4</sup> - Friedrich Schneider, The Size and Development of the Shadow Economies and Shadow Economy Labor Force of 22 Transition and 21 OECD Countries: What Do We Really Know?, Center for the Study of Democracy, 2003, p24.

legal economic and productive activities that, if recorded, would contribute to national GDP<sup>1</sup>, therefore the definition of the hidden economy in our study tries to avoid illegal or criminal activities.

#### 3. Characteristics of the hidden economy:

In very general terms, the informal economy is the hidden economy portion of the market economy that produces goods and services for saleor for other forms of remuneration. The term "hidden economy" thus refers to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements.

The hidden economy is largely characterized by:

- Low entry requirements in terms of capital and professional qualifications.
- A small scale of operations.
- Skills often acquired outside of formal education.
- Labor-intensive methods of production and adapted technology.

The hidden economy does not comprise the reproductive or care economy, comprised of unpaid domestic work and care activities.

Traditionally, the hidden economy was perceived as comprising mainly survivalist activities. Various negative aspects were used to describe the hidden economy ranging from undeclared labor, tax evasion, unregulated enterprises, illegal and criminal activity.<sup>2</sup>

Nevertheless, the vast majority of hidden economy activities provides goods and services whose production and distribution are perfectly legal.

In addition, hidden economy activities are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labor legislation or other regulations.

<sup>2</sup> - Jantjie Xaba, Pat Horn and Shirin Motala, The Informal Sector in Sub-Saharan Africa, International Labour Office, Geneva, 2002, p11.

<sup>&</sup>lt;sup>1</sup> - Friedrich Schneider and Leandro Medina , Shadow Economies Around the World: What Did We Learn Over the Last 20 Years?, IMF Working Papers 2018, p04.

The hidden economy can however include restricted illegal and restricted legal operations or legal and irregular operators, but no criminal operators<sup>1</sup>.

The hidden economy should not be confused with the criminal economy.

Due to the heterogeneous character of the hidden economy, numerous

definitions have been elaborated. This study cannot cover all the existing definitions of the hidden economy. However, some of the main definitions inuse will be explained in order to illustrate the multitude of perspectives from which the hidden economy can be viewed.

To distinguish the difference between the formal economy and the hidden economy we have the following table.

**Table 1:** the difference between the formal economy and the hidden economy

|         | The main                   | Market             | Technology          |  |
|---------|----------------------------|--------------------|---------------------|--|
|         | objectives                 | Regulation         |                     |  |
|         | -Achieve revenues in the   | the absence of     | -Traditional, local |  |
|         | Market                     | entry              | -Heavy use of the   |  |
|         | -Ease of entry, lack of    | barriers           | Work                |  |
|         | respect                    | -Counterfeit       | -Small production   |  |
|         | for the rules              | goods              | units               |  |
| Hidden  | -Lack of labor legislation | -Markets are not   |                     |  |
| Economy | -Self-financing            | protected          |                     |  |
|         | -Non-payment of any        |                    |                     |  |
|         | taxes and                  |                    |                     |  |
|         | fees                       |                    |                     |  |
|         | -Self-employment,          |                    |                     |  |
|         | payment for                |                    |                     |  |
|         | the unit                   |                    |                     |  |
|         | -Achieve the maximum       | -barriers at entry | -Modern and         |  |
|         | profit                     | (product           | imported            |  |
|         | Possible                   | standards)         | -Intensive use of   |  |
|         | -Log codified, the         | -Trademarks        | capital             |  |
|         | presence of                | registered         | (machinery)         |  |
|         | Unions                     | and protected      | -Large-scale        |  |
| Formal  | -Application of labor      | -Protected         | production          |  |
| Economy | legislation –              | markets            |                     |  |
|         | -Take advantage of         | (shares, licenses, |                     |  |
|         | national and               | fees)              |                     |  |
|         | foreign loans              |                    |                     |  |
|         | -Payment of taxes and      |                    |                     |  |
|         | fees                       |                    |                     |  |

<sup>&</sup>lt;sup>1</sup> - ILO, A policy framework, 2002

| -Wages and labor |  |
|------------------|--|
| contracts        |  |
|                  |  |

**Source:** Owen Lippert and Michael Walker, The Underground Economy: Global Evidence of Its Size and Impact, The Fraser Institute, Vancouver, British Columbia, Canada, 1997, p05.

The main difference between formal economy and hidden economy is about three essential criteria as we showed in the above table, the main objectives of activists, market regulations respects and the technology used in the economic activities.

#### 4. The impact of the hidden economy on the public budget

All governments seek to achieve stability and Permanence of internal financing resources that is because of the negative effects of external financing and also the known conditional borrowing policy of global financial institutions.

The State also needs many permanent financial resources to carry out its public services duties and also it needs to increase these resources for funding more and more future duties.

Taxes are among the most important revenues used by the State to cover its public expenditures, where Their effectiveness varies from country to other and Because tax objectives have evolved with the evolution of state functions, So that it converted from just a financial objective to include other social and economic objectives where all natural and legal persons must bear its burdens by law.

Taxes are the most important sources of internal financing rather its constitute the most important resource for many countries due to their stable and durable nature, On the contrary of oil revenues and loans the first one is subject to international market prices and the second one is hard to obtain.

In fact, most developing countries that rely on oil wealth (Like Algeria) have found themselves in front of the big problem of fluctuating revenues because of volatile oil prices which leads to imbalance in funding sources and forcing them to find other means of more stable and durable resources.

Taxes have become one of the most important financial resources to cover the expenses of any country, and contribute significantly to bridge their budget deficit.

Tax evasion will harm the state treasury; So that it will lose an important part of its financial resources, this will results to failure of the State in public expenditure policy thus, the State will be unable to perform its basic duties towards its citizens. Therefore, tax evasion can be considered as a barrier to achieving the basic objectives of the tax, which is finance the treasury with sufficient revenues to cover expenditures and to implement the state budget.

The first and most important negative effects of hidden economy existence in Algeria is that part of the income generated within the economy is not taxed, And this occurs when individuals don't disclose their income or the nature of their functions, or both to the tax authorities. There are also some forms of taxes, such as VAT and sales tax, not collected as a result of tax evasion.

When the volume of the hidden economy becomes very large, it leads to loss a substantial part of public revenue<sup>1</sup>. This loss of revenue caused by tax evasion in hidden economy will increase activities tax levels in formal economy, the Government revenues will also be less than they should be, and then increase the budget deficit of the state. Thus, the tax system based on income taxes in the presence of large size of the hidden economy is unfair, this creates great pressure for a system of indirect taxation. There is also the risk of tax evasion spread that will also drive other citizens to evade too.

The value of tax evasion was about \$ 8.2 billion between 1990 and the end of 2007.

The Statistics also indicate that 33% of Algerian institutions evade entirely from paying taxes and the rest aren't without the method of fallacy in invoices.

According to statistics of the Ministry of Finance in 2005 the estimated amounts of tax evasion is about 600 billion Algerian dinars<sup>2</sup>.

#### A: Estimation of tax evasion

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<sup>&</sup>lt;sup>1</sup> - Karim Mostafa Ali Hassan Jawhar, The Informal Sector in Egypt, Master Thesis, Faculty of Commerce, Ain Shams University, Egypt, 2005, p117.

<sup>&</sup>lt;sup>2</sup> - Hisham Gharbi, The Dimensions and Economic Implications of Money Laundering, Master Thesis, Faculty of Economic Sciences, galma University, algeria, 2007, p15.

Where the hidden economy leads to a leakage in the income tax revenue that could not have occurred if the hidden economy had not existed, the size of this leakage in the tax proceeds depends on two main factors<sup>1</sup>.

- The average rate of income tax, representing the ratio of the actual proceeds of income taxes GDP.
- The value of hidden or undeclared income.

Under the assumption that the average price of income tax is similar in both the formal and hidden economies,

The amount of tax leakage can be determined by multiplying the average price of the income tax in the hidden income value as shown in the following table (02).

Table 2: Calculating the value of tax evasion resulting from the existence of the hidden economy (1997-2013) (Values in billions of dinars)

| Year | GNP | Tax<br>revenue | Average<br>tax rate <sup>2</sup> | The<br>Hidden<br>income | Leakage of tax revenues <sup>3</sup> |  |
|------|-----|----------------|----------------------------------|-------------------------|--------------------------------------|--|
|      |     |                |                                  |                         |                                      |  |

<sup>&</sup>lt;sup>1</sup> - Atef Walim Andrews, The Shadow Economy, Encyclopedia of University Youth, Alexandria, Egypt, 2005, p250.

<sup>&</sup>lt;sup>2</sup> - Average tax rate = tax revenue / GNP

 $<sup>^{3}</sup>$  - Tax leakage = Hidden income × Average tax rate.

| 1997 | 2780.2  | 320    | 11.5  | 861.86  | 99.11  | 30.97 | 3.56 |
|------|---------|--------|-------|---------|--------|-------|------|
| 1998 | 2830.5  | 350    | 12.36 | 848.15  | 104.83 | 29.95 | 3.7  |
| 1999 | 3248.2  | 380    | 11.69 | 1006.94 | 117.71 | 30.97 | 3.62 |
| 2000 | 4098.8  | 380.75 | 9.28  | 1504.25 | 139.59 | 36.66 | 3.4  |
| 2001 | 4235.6  | 415.84 | 9.81  | 1466.36 | 143.84 | 34.59 | 3.39 |
| 2002 | 4455.3  | 482.9  | 10.83 | 1464.90 | 158.64 | 32.85 | 3.56 |
| 2003 | 5264.2  | 524.9  | 9.97  | 1691.38 | 168.63 | 32.12 | 3.20 |
| 2004 | 6150.4  | 580.4  | 9.43  | 1881.4  | 177.41 | 30.56 | 2.88 |
| 2005 | 7563.6  | 640.4  | 8.46  | 2381.02 | 201.43 | 31.45 | 2.66 |
| 2006 | 8520.6  | 720.8  | 8.45  | 2876.55 | 243.06 | 33.72 | 2.85 |
| 2007 | 9306.2  | 766.7  | 8.23  | 3124.09 | 257.11 | 33.53 | 2.76 |
| 2008 | 10993.8 | 965.2  | 8.77  | 4055.61 | 355.67 | 36.84 | 3.23 |
| 2009 | 9968.0  | 1146.6 | 11.5  | 3509.73 | 403.61 | 35.2  | 4.04 |
| 2010 | 11991.6 | 1298.0 | 10.82 | 4531.62 | 490.32 | 37.77 | 4.08 |
| 2011 | 14526.6 | 1527.1 | 11.5  | 5290.58 | 556.03 | 36.41 | 3.82 |
| 2012 | 16115.4 | 1908.6 | 12.36 | 5124.69 | 606.76 | 31.79 | 3.76 |
| 2013 | 17205.1 | 2018.5 | 11.69 | 5010.55 | 587.73 | 29.11 | 3.41 |

**Source:** Source: Prepared by researcher using exporters:

Table (02) shows that the average rate of dropout in income tax revenues to total tax revenues is estimated at 33.20% for the years 1997-2013.

- A continuous increase in the value of the tax leakage during the years 1997-2013 is observed in parallel with the continuous rise in the gross domestic product and tax revenues, Even during the decline in output, there is a rise in tax evasion; While the GDP dropped from 10993.8 billion dinars in 2008 to 9968 billion dinars in 2009, the tax leakage increased from 355.67 billion dinars in 2008 to 403.61 billion dinars in 2009.
- The Algerian state loses the equivalent of 3.4% of its revenues each year as a result of tax evasion as a result of the existence of the hidden economy, Where the average rate of tax leakage during the period 1997-

<sup>-</sup> Ministry of Finance, Publications of the Financial Laws for the years 1997 to 2013.

<sup>-</sup> Bank of Algeria, statistical reports for years from 1997 to 2014.

2007 was about 283 billion dinars, This indicates how huge is the amount lost by the State every year as a result of these hidden economic activities.

## B: contribution of the tax evasion to exaggerate the total deficit of the budget

The tax leak resulting from hidden economy existence contributes to increase of the Public budget deficit by deepening the gap between public expenditures and public revenues of the state. In other words, the more there is an increase in tax evasion, the more there is a decline in the general will of the state, thus increasing the probability of a budget deficit and non-coverage of public revenues so all stable economies seek always to reduce this deficit to the lowest possible level.

To find out the extent of the contribution of the tax leak to the deepening of the deficit of the public budget in Algeria, we rely on the following table (03) to clarify that.

**Table (03)**: Contribution of Tax Leak in the General Budget Deficit (1997-2013) (Values in billions of dinars)

| Year | Revenue | Expenditure | Balance<br>budget | of | Leakage of tax revenues | Leakage /<br>Disability% | Balance of<br>budget+<br>leakage |
|------|---------|-------------|-------------------|----|-------------------------|--------------------------|----------------------------------|
| 1997 | 926.6   | 845.1       | + 81.5            |    | 99.11                   |                          | 180.61                           |
| 1998 | 774.6   | 876.0       | - 101.4           |    | 104.83                  | % 103.38                 | + 3.43                           |
| 1999 | 950.5   | 961.7       | - 11.2            |    | 117.71                  | %1050.98                 | + 106.51                         |
| 2000 | 1578.1  | 1178.1      | + 400             |    | 139.59                  |                          | 539.59                           |

| 328.34   |         | 143.84 | + 184.5  | 1321.0 | 1505.5 | 2001 |
|----------|---------|--------|----------|--------|--------|------|
| 211.24   |         | 158.64 | + 52.6   | 1550.6 | 1603.2 | 2002 |
| 452.83   |         | 168.63 | + 284.2  | 1690.2 | 1974.4 | 2003 |
| 515.31   |         | 177.41 | + 337.9  | 1891.8 | 2229.7 | 2004 |
| 1232.03  |         | 201.43 | + 1030.6 | 2052.0 | 3082.6 | 2005 |
| 1429.86  |         | 243.06 | + 1186.8 | 2453.0 | 3639.8 | 2006 |
| 836.41   |         | 257.11 | + 579.3  | 3108.5 | 3687.8 | 2007 |
| 1290.97  |         | 355.67 | + 935.3  | 4175.7 | 5111.0 | 2008 |
| - 166.69 | %70.77  | 403.61 | - 570.3  | 4246.3 | 3676.0 | 2009 |
| + 416.32 | %662.59 | 490.32 | - 74.0   | 4466.9 | 4392.9 | 2010 |
| + 492.53 | %875.63 | 556.03 | - 63.5   | 5853.6 | 5790.1 | 2011 |
| -111.84  | %84.43  | 606.76 | - 718.6  | 7058.1 | 6339.3 | 2012 |
| + 436.53 | %338.71 | 587.73 | - 151.2  | 6092.1 | 5940.9 | 2013 |

**Source:** Prepared by the researcher using the following sources: - Ministry of Finance, publications of financial laws for the years from 1997 to 2014.

#### Table (03) shows the following:

- The balance of the general budget recorded a deficit during the years 1998 and 1999, as well as from 2009 to 2013.and it is noted that the tax leak can cover this deficit and turn it into a surplus in the public budget if it has been collected.
- If the value of the Tax Leakage is calculated and added to the state revenues, the deficit will shrink in 1998 from 570.3 billion dinars to 166.69 billion, And from 718.6 billion dj in 2012 to 111.84 billion in same year While the budget will record a transition from deficit to surplus in other years, moving from a deficit of 101.4 billion dinars in 1998 to a surplus of 3.43 billion, And from a deficit of 11.2 years 1999 to a surplus of 106.51, As well as the year 2010 from a deficit of 74 to a surplus of 416.32, And 2011 from a deficit of 63.5 to a surplus of 492.53, And also in 2013 from a deficit of 151.2 to a surplus of 436.53 as shown in the previous table (03).

<sup>-</sup> Bank of Algeria, Annual Reports 1997-2014.

Through the previous analysis we conclude that Algeria loses every year large amounts due to tax evasion and non-registration economic activities. These funds, which the state loses every year, can contribute to raising the value of the state's public revenues Thus reducing the overall deficit in the public budget, and even turned the deficit into a surplus, Therefore, the State has to take care to these permanent resources, And trying hard to preserve it and contain the tax leak in scientific ways sound, By integrating the hidden economy activities into the formal economic activity.

#### 5. Conclusion:

The hidden economy reflects all economic activities that are not subject to state control and laws and thus evade paying taxes, There are many effects resulting from existence of the hidden economy, the most important it affects the public budget, Where the State each year loses a large part of its public revenues because of the non-payment of these hidden economic activities to the taxes, This leads to the amplification of the state budget deficit due to the existence of the hidden economy.

The main findings of the study were as follows:

✓ The hidden economy causes the evasion of the economic institutions to which is belongs to it to pay taxes;

- ✓ Every year, the State loses a large part of its public revenues as a result of the existence of hidden economic activities;
- ✓ Algeria loses large amounts of more than 380 billion dinars annually due to the spread of hidden economic activities;
- ✓ The rate of tax evasion to Algeria's GDP is estimated at more than 3% per annum;
- ✓ Algeria can raise its public revenues and eliminate the budget deficit by attracting and integrating the activities of the hidden economy into official activity;

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