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An evaluation of tax fraud cases limited by fiscal control in Algeria 2007–2013

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ABSTRACT
In this paper we attempt to provide an estimation of the scale of fiscal fraud as practiced by certain companies in Algeria. Given its hidden aspect, the full extent of this phenomenon remains difficult to quantify, and would suggest that there are currently no methods in existence that would enable its magnitude to be measured.

It is our belief, however, that the use of a direct means of assessment, based on data provided by the tax authorities, can allow a significant proportion of tax fraud to be exposed. This illegal practice can be limited through fiscal control, carried out to inspect the sincerity of tax declarations and to penalise fraudsters for concealing their incomes and evading their tax obligations and/or to recover the sums due.

KEYWORDS Tax fraud; external fiscal control; documentary on-the-spot check; tax reassessments; Gross Domestic Product (GDP)

1. Introduction

Without resources and revenue, a state cannot assume any of its obligations to build and to form a modern, contemporary, and democratic state that maintains its main prerogatives and functions – i.e. order, provision of education, health, social services, justice … etc. (Leroy 2009; 2010). The State is bound to ensure that all those who are liable pay tax, which is an act of public authority, because it is the best way to make the tax mesh effective and thus to cover the national budget. Most developing countries, especially African countries, experience significant budgetary imbalances (Ghura 1998; Chambas 2005), which can place an important constraint on the supply of public goods (Attila, Chambas, and Combes 2009).

Citizens are linked to their society by taxation, which has become the cornerstone of this relationship, because society has evolved through its

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political, economic, juridical, and social institutions and has become strongly linked to taxation (Bouvier 2014).

Resistance to taxation is an ancient phenomenon, as has been demonstrated throughout history by fiscal revolts, as well as intellectual, political and social battles, such as those of the French population during the French Revolution of 1789. The resulting conflicts, agreements and compromises (Malia and Bury 2008) made it possible, over the course of time, for citizens to accept the value and the distribution of taxes.

Today, citizens of developed countries are concerned with the purpose of their tax contributions and the allocations of public money (Bouvier 2002). They see themselves as clients, rather than taxpayers. Taxes are perceived as a price to be paid for a service rendered to a state that is the beneficiary, rather than as an act of solidarity, or even as a social obligation (Bouvier 2014).

In this respect, tax fraud is a complex phenomenon of concern to governments, implying confrontation between certain taxpayers and the State (Salin 2014), and modifies the relative burden of taxation on each taxpayer, according to the two criteria of opportunity and skill, constraining horizontal equity, but also vertical equity of the levy, and thus intervening in the reflection on the optimal tax system (Koleva and Monnier 2009).

The tax system in Algeria is essentially declarative, as is the case in many other countries, with a spontaneous obligation to pay the taxation to which the taxpayer is subject. The opportunity for fraud arises from this system, since the taxpayer can avail of this informational advantage by minimising his tax returns, thereby reducing tax payments and inflicting losses on the public treasury. Thus, tax authorities have an obligation to defend the interests of the State, the public treasury, and to combat fraud in all its forms or at least to mitigate its effects under the law, through the legal power of the control [1] of activities with a high presumption of fraud. This power is the counterpart of the declarative system to ensure the preservation of the constitutional principles of 'equality of all before tax' (Spire 2009) and that of 'fair competition' (Pharo 2005), by ensuring a fair distribution of tax burdens, favouring conciliation mechanisms (Spire 2014), and thus improving tax compliance.

In comparison to developed countries such as those of the Organisation of Economic Cooperation and Development (OECD), and in particular the United States of America, economic research on tax fraud in Algeria remains quite limited. Losses related to tax fraud are pervasive, a fact that cannot be ignored, and which today is now even more significant than ever.

The analysis of fraud cannot be carried out separately from the empirical fiscal control procedures which provide a direct means of estimation carried out on the basis of data provided by the tax authorities (Schneider and Enste 2000). Moreover, given the breadth of this field of study, our focus is on tax fraud committed by companies[2], thus excluding the problem of social fraud, fraud by the parallel economy (the informal sector), money laundering, etc. We will attempt to estimate the amount of fraud that has been limited by means of fiscal control. Therefore, what is the extent of the fraud contained through fiscal control in Algeria?

In this article we first examine, through the literature review, the theoretical foundations relating to fiscal fraud, and the administrative organisation of fiscal control. Second, we present some administrative data concerning the taxpayers' statements and the relevant amount of tax reassessments. Then, we present the results of the analysis which can provide an estimation of the proportion limited by means of fiscal control in relation to the Gross Domestic Product. In the final section we present our conclusions.

2. Literature review

The effective understanding of the problem of tax fraud implies the ability to provide specific answers to certain questions. Among these is the possibility to question the nature and characteristics of the socio-economic groups involved in fraud, the extent of the fraud, and the methods used for its estimation. This complex web actually converges into one single enquiry about how to improve the tax administration's coercive policy. This is exactly where econometric studies would help to bring about improvements.

Several econometric studies on fraud have tested the conclusions and results produced by theoretical research using data provided by the tax administration; the subject of these different studies is significant in that it affects various countries.

Based on tax data provided by the 'Revenue Department' in the United States, Groves (1958) focused on the factors that might influence the individual when declaring income on tax returns. Schwartz and Orleans (1966) conducted a study focusing on the impact of various types of sanctions, some of which are moral in nature, on tax regularity. In Norway, Mork (1975) studied the difference between the imposed taxable income and the actual income reported to the tax authorities.

According to Callahan[3] the US federal government lost $305 billion in 2010 due to tax fraud, representing 24 percent of its $1.2 trillion budget deficit in 2010 and costing each taxpayer an additional $2,200 to offset the loss of revenue.[4] (DeZoort et al. 2012).

Allingham and Sandmo's (1972) contribution also revealed that a certain amount of information regarding the tax system is needed for a taxpayer to assess the benefits and costs associated with fraudulent behaviour. These two authors concluded that an increase in the likelihood of a tax audit would unequivocally reduce tax fraud.

In the early 1970s, Clotfelter (1983) carried out another analysis on data established by the Internal Revenue Service (IRS). This analysis was derived from the results of the Taxpayer Compliance Measurement Programme (TCMP) that were communicated to the researchers. It dealt with the actual procedures of the tax administration, the most important of which were: the proportion of tax declarations checked, the number of prosecutions initiated, and the seriousness of the sentences handed down for convictions of tax fraud.

According to the studies of Vogel (1974), and Wärneryd and Walerud (1982), the opportunity for committing fraud is considered a contributing factor to the taxpayer's act of minimising his tax returns. Slemrod (1990) shows that no tax structure can be implemented without coercive tax collection. In other words, the tax constraint guarantees the effectiveness of the tax collection processes.

Assuming a random control strategy, Witte and Woodbury (1985) initially confirmed that fiscal controls could be important incentives to tax honesty, which is consistent with the theoretical results. Our results suggest that higher audit rates can have a significant and beneficial effect on voluntary reporting.

Finally, in a more recent study, Lefebvre, Perelman, and Pestieau (2014) were interested in tax fraud in Belgium and its explanatory factors.[5] They attempted to assess the importance of tax fraud, and to explain the behaviour of taxpayers practising it. On the basis of different sources of information, administrative data, and investigations, they resolved that it is essential to fight against tax fraud by adopting a different control strategy for each type of tax.

3. Methods of estimating tax fraud: fiscal control

The authors Schneider and Enste (2000) presented several direct and indirect methods for estimating tax fraud, including the direct method used in our study, which itself is based on fiscal control. This method relies on administrative data, resulting from the comparison between the income declared by individuals and the income reconstituted as a result of tax administration audits. This difference helps to reveal a portion of the taxable income withheld.

The information provided by this method is reliable and relevant because individuals who are subject to audits cannot lie; the tax authorities have collected tax information based on founded and detailed elements on the various hidden revenues. Thus, these individuals will tell the truth for fear of sanctions (Mirus, Smith, and Karoleff 1994).

The limitations of this method are that the audit concerns only individuals suspected of fraud; such a sample is not randomly selected from the total population. Moreover, the given estimations reflect only a portion of the fraud that has been discovered and identified by the tax administration (Schneider and Enste 2000).

Certain criticism surrounds the direct estimation methods of tax fraud. However, they remain the favourites of many experts, including Pacolet et al. (2007). These experts attest that the use of administrative data provided by the fiscal audit is promising for attaining a more credible estimate of tax fraud (Diallo et al. 2010).

Meanwhile, given the hidden nature of fraud and the absence of reliable data, one can only make an estimate. As Bazart (2000, 77) states: 'It is very certain that only by a more precise identification of the determinants of fraud that it will, one day, be possible to remove the indecisiveness inherent in the phenomenon, thus, making it far more easily measurable'.

4. Results of different types of fiscal control

4.1. Documentary on-the-spot check: internal fiscal control 'CSP'

This form of control is carried out on the premises of the tax administration and generally carried out without the knowledge of the taxpayer. This procedure consists for the management service in carrying out an overall consistency check of the file. It consists of a critical and exhaustive control of tax returns using documents in the file, information received by the service, or additional information and justifications requested from taxpayers.

The purpose of this control is to:

- Detect defaulting taxpayers, to prevent and correct errors found in the declarations;
- Ensure the consistency of the overall income declared with the tax and property situation of the taxpayer;
- Rectify and correct errors, anomalies, insufficiencies, inaccuracies, omissions and concealments, identified or revealed;
- Reassesses and establish taxation of fraudulent companies.[6]

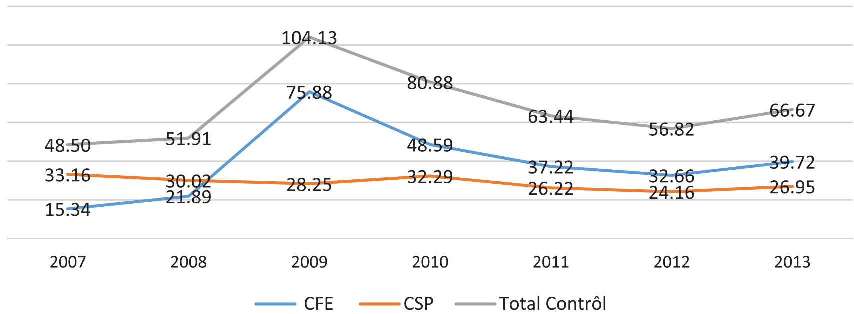

Figure 1. Results of different fiscal controls *(2007-2013): in Billions of DA.*

Table 1. Numbers and results of different fiscal control *(2007-2013): in Billions of DA.*

Year	2007	2008	2009	2010	2011	2012	2013
Number of control CFE	2.632	2.731	2.864	2.888	2.234	2.261	2.679
Tax reassessments CFE	15.34	21.89	75.88	48.59	37.22	32.66	39.72
Number of control CSP	30.894	32.795	30.365	30.029	27.291	28.672	27.932
Tax reassessments CSP	33.16	30.02	28.25	32.29	26.22	24.16	26.95
Total tax reassessments	48.51	51.91	104.13	80.88	63.45	56.82	66.67

Source: Direction des Recherches et Verifications 'DRV' Division of Researches and Checks – 'DRC'
Reassessments before effective tax collection

This type of control has registered fluctuations varying from an amount of 26.95 billion Algerian dinar (DA) in 2013, which remains significantly lower than in 2010, when a significant tax reassessments to the order of 32.29 billion DA was recorded and in 2007 when it recorded tax reassessments of 33.16 billion DA. This represents an average of almost 28.7 billion DA per year, which is very significant and stable compared to external control that require more time and effort and which have yielded 38.76 billion DA annually. Its percentage of the total tax reassessment of audits has decreased considerably by more than 68 percent in 2007, stabilising at 40 percent between 2010 and 2013 and reaching the lowest rate of 27 percent in 2009.

This development specifies that the '**CSP**' leads to the verification of between 27.932 and 32.795 tax records each year, a coverage rate of about 14 percent in 2010, which remains high compared to that in France, which is 08.15 percent.[7] This coverage rate implies that a company is checked once every seven years with a quadrennial audit period, but this coverage rate remains satisfactory since the files are initially subject to a formal control, but must reach 20 percent in order to be able to cover the entire tax base. The average return of the CSP varied between 1,073 million DA in 2007 and 0,842 million DA in 2009. However, it remains significantly lower than the average return per case subjected to an external control or **CFE**.

4.2. External fiscal control CFE

The external tax control (the accounting and the punctual accounting controls) is a set of techniques allowing precise control of certain elements; 'It also aims to examine at company premises the accounting documents of a taxpayer and to compare it with operating elements in order to ensure:

- Respect of accounting standards;
- Verification of books and accounting documents;
- Accounting translation of all operations affecting the active life of the company;
- The consistency between the accounting entries and the tax bases contained in the tax returns;

- Coherence between the information provided and the extra-accounting data.[8]

The CFE includes: study and analysis of the tax file, launch of research on tax information, examination of the accounts of the companies in the form and in the background (complete, regular, arithmetically exact and evidence-based accounting), control of accounting information provided by the company externally, rectify errors, omissions and deficiencies identified in the declarations to be corrected and finally reconstruction of the tax bases.

It may happen that the auditor notices a defect in the presentation of the accounts or the supporting documents, omissions, serious and repeated inaccuracies, but also an absence of supporting documents, false invoices or invoicing of complacency, can be discovered on this occasion, concealment of an achievement or a transfer of profit or income. For the control to be legal and regulatory, the company's accounts must be reviewed for the entire non-prescribed period (four years).

The CFE focuses on the actual and most significant cases of tax fraud, with the number of such audits having more than doubled and increased by 146 percent during the years under study. The proportion of such audits out of total tax reassessments controls also increased significantly beyond 30 percent in 2007, ranging from 50 percent to 60 percent between 2010 and 2013, and reaching the highest rate, which was 72 percent in 2009. The DGE, or Division of Large Enterprises, is in charge of large companies, and where budgetary issues exist at a higher rate.[9] The audit of 72 companies out of 2.234 companies verified in 2011, which is equivalent to 3.2 percent[10], would in itself have accounted for approximately 30 percent[11] of the tax reassessments due to the external control, which represents a major share.

The average number of cases inspected annually over this period ranges from 2,234–2,888, representing a low coverage rate of around 01.35 percent compared to the potentially verifiable tax population.[12] The overall result is mainly related to the type and size of the companies audited, and the number of cases of this type of control remains generally stable over the seven-year observation period, which has been marked by a slight decline over the last four years between 2010 and 2013.

This means that a selected company will be subject to an external control once every 74 years. It also means that the average return per business per year ranges from 5.82–26.49 million DA per case over the entire series which is significantly higher than that of the CSP. The large companies that fall under the Division of Large Enterprises (DGE), i.e. all 'leading' companies would be checked every 25 years on average with a coverage rate of 04 percent.[13]

It would appear that this type of control pays off by increasing the adjustments for the tax authorities and by increasing the amount of tax fraud prevented. This means that the strategy of increasing the turnover of companies subjected to fiscal control in turn increases the coverage rate and has reached the targeted budget. This has enabled the tax administration services to concentrate on companies with very high turnover rates. It also allowed the selection to become increasingly profitable due to the judicious and targeted choice of companies under audit.

4.3. Tax reassessments in relation to GDP

Despite the changes in the GDP, which almost doubled during the period under study, the share of tax reassessments resulting from fiscal audit has fluctuated over the period 2007–2010, from 0.35 percent to 1.04 percent in relation to GDP[14] and between 0.53 and 1.51 percent in relation to non-hydrocarbon GDP.[15] This rate appears to be small, but it remains significant and varied from 3 percent to more than 9 percent of Algerian tax revenue in 2009. This represents a serious estimation of the fraud that has been contained by the state through fiscal controls.

5. Discussion: purpose and objectives of fiscal control

5.1. Tax base cover that tends to focus on budgetary issues

The coverage rate appears to be relatively low, although it is comparable to that in other OECD countries, notably the United States, Canada, and even Sweden. Other States have significantly higher coverage rates due to the use of different methods of control. This confirms the results of the analysis carried out, which showed that European countries with a large percentage of companies being checked (the Netherlands, Germany and the United Kingdom) with the exception of France; correspond to the countries with the lowest fraud rates (Brac de la Perrière 2004). The increase in this rate must be generalised throughout the country and for all categories of companies.

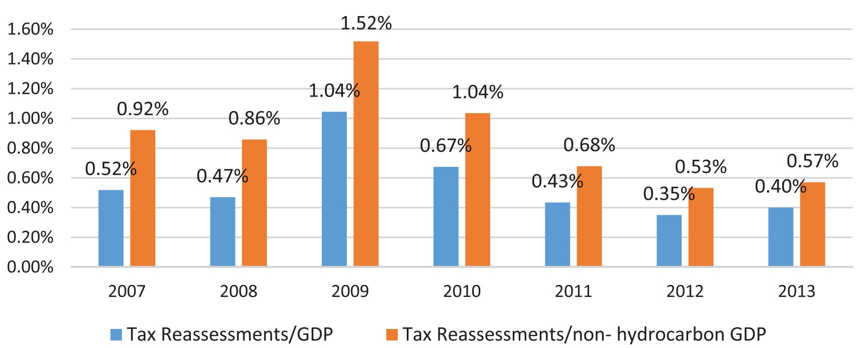

Figure 2. Tax reassessments in relation to GDP and to non- hydrocarbon GDP *(2007-2013)*.

Table 2. Tax Reassessments *in Billions of DA* in relation to GDP, to non- hydrocarbon GDP *(2007-2013).*

Year	2007	2008	2009	2010	2011	2012	2013
Total tax reassessments **(01)**	48,51	51,91	104,13	80,88	63,45	56,82	66,67
Gross Domestic Product (GDP) **(02)**	9.352,9	11.043,7	9.968,00	11.991,16	14.588,6	16.208,8	16.650,2
Non- hydrocarbon GDP **(03)**	5.263,6	6.046,1	6.858,9	7.811,2	9.346,0	10.672,4	11.682,2
Algerian tax revenue **(04)**	766,75	965,29	1.146,61	1.297,94	1.527,09	1.908,57	2.031,01
(01)/(02)	0.518 %	0.47 %	1.044 %	0.674 %	0.434 %	0.35 %	0.40 %
(01)/(03)	0.921 %	0.858 %	1.518 %	1.035%	0.679 %	0.532%	0.570 %
(01)/04	**6.33 %**	**5.38 %**	**9.08 %**	**6.23 %**	**4.15 %**	**2.98 %**	**3.28 %**

Work out by our care with the data received from the 'DRV'
Source : Office National des statistiques Algérien : disponible sur le site. www.ons.dz/

It seems that the tax administration's strategy is to focus on companies with very high turnover revenues and in particular DGE-affiliated taxpayers in order to better combat fraud. With this new management approach, the Algerian state has moved from using a horizontal system of management, controlling the type of taxes, to a vertical system of management by controlling the size of companies through the creation of the DGE, whose affiliated companies are specifically monitored by the tax authorities.[16] With the very high minimum turnover consideration, the number of companies under focus is reduced and the coverage rate increases with stricter and more frequent audits, especially for fraudulent companies.

The majority of countries that created DGEs have acknowledged their positive impact on tax behaviour, especially with regard to VAT (Ebrill et al. 2001). This step has also enabled African countries to improve tax mobilisation, as the public levy has shown an upward trend since the second half of the 90s, which coincides with the creation of these structures.

The likelihood of tax fraud is reduced when the probability of being detected by the tax authorities increases and the taxpayer weighs the benefits against the losses associated with fraud. The studies of Vogel (1974) and Wärneryd and Walerud (1982) considered the opportunity to commit fraud as the determining factor in whether the taxpayer minimises his tax returns.

The fact that there is a low level of cover deserves to be examined for several reasons. First, the level of cover varies greatly depending on the size of the taxpayers. The tax audit services select from a portfolio of taxpayers[17] for which they are responsible. They allocate resources where the issues, in particular budgetary ones, appear to be the most important and require a strong presence in terms of audit.

It is also worth noting that corporate tax records are very important in the country's largest cities[18], where there are fewer checks, a low coverage rate, and less chance of being inspected than in other smaller cities. This implies that tax fraud is concentrated in large cities rather than in small ones, as taxpayers are discouraged by the high probability of audit, as shown in the study by de Courson and Léonard (1996).

5.2. The control Policy must reconcile different purposes

Covering fraud issues by the control services is paradoxical. Basically, the control services are not constrained by a budgetary objective expressed in adjusted amounts. Nevertheless, when we look at the coverage rate by category of company, we see that the services tend to focus their audits more on the companies whose errors have a significant budgetary impact, whereas they represent only low stakes in terms of fraud.

Conversely, the coverage rate for small companies that are only subject to the CSP is significantly lower. This choice can be explained by concern for the efficient management of public resources, but it may appear rather questionable in terms of deterrence and may result in 'small' fraudsters largely evading to control.

The frequency of audits for all companies differs, even as the number of such companies increases. This difference is, however, relative to the inequality between firms in the face of control. Indeed, the disparities, already noticeable among the different types of companies across the turnover threshold, are expanding somewhat more.

5.3. The choice between the purposes of control is not always obvious

The controls carried out by the tax services follow different rationales and objectives, which are well summarised in three aims as defined by the tax authority: a budgetary purpose, a repressive purpose and a dissuasive purpose. However, if the repressive purpose does not present particular difficulties, the reconciliation between a budgetary objective and a dissuasive logic is more complex.

In fact, from a budgetary perspective, it is in the interest of the control services to concentrate on the most important taxpayers, especially since the cases of irregularity 'but not necessarily the cases of fraud' are most commonly due to ignorance of the Algerian tax regulations, especially with regard foreign companies managed by the DGE.

However, in a dissuasive logic, it is preferable to seek to include maximum coverage of the tax base, including taxpayers of a smaller size, in order to maintain the tax administration's presence and visibility. This is especially necessary since fraud and irregularity, even if they are committed less frequently by small companies, are often, in proportion, of greater magnitude at the level of large accounts.

5.4. Repressive and dissuasive Objectives of tax controls

Bazart (2001) concluded that since the taxpayer is provided the opportunity for fraud by the reporting system he avoids paying taxes by declaring lower tax returns. The tax administration is obliged to inspect these tax returns if it feels that they are fraudulent, and to inflict penalties[19] and sanctions[20] on the taxpayers, in order to set an example to deter future fraudsters by showing them what happened to their peers. These conclusions are confirmed by the study of Allingham and Sandmo (1972).

The fiscal controls of companies which have revealed irregularities and anomalies in their tax return must bring accusations against those professionals responsible for preparing non-compliant tax returns, for negligence and complicity in tax fraud. This will discourage the client and his advisor because the financial impact and the damage to the reputation of the accounting firm will be obvious. If these professionals had worked in compliance with tax and accounting rules and regulations, there would be no such significant fraud.[21]

That being so, the formal acceptance that uncertainty about tax provisions would limit individual fraud can be tempered. The conclusions of the economic studies as to the outcome of this collaboration, suggesting that it generates a sophistication of tax-avoidance strategies.[22] Klepper and Nagin (1989) emphasise that coercive actions should also be extended in order to make all parties responsible for the tax game (Bazart 2002).

In addition necessary measures that are part of the strategic orientation of fiscal control have been promulgated in the course of these last financial laws: the introduction of the tax flagrance procedure[23], the implementation of a punctual accounting control procedure[24], specific programming, periodic census, and various guarantees available to taxpayers, an upward revision of the tax turnover threshold … etc. A set of fiscal and criminal sanctions and several means to remedy violations of tax legislation and to ensure the recovery of unpaid duties have been implemented.

In many states, and in particular those of developed countries, it has been understood that a citizen who accepts tax[25] and pays it voluntarily, will reduce hostile tax behaviour (Delalande 2012). This ensures more revenue for the State rather than repressive measures that are costly. For even with these measures, reaching a zero level of tax fraud and absolute reconciliation between taxation and citizen is not easy to achieve in the short term (Barilari 2007).

6. Conclusion

Tax fraud, in particular, is one of the major problems for an economy like Algeria's which is, essentially, in a time of crisis due to the recession in oil prices and the major repercussions that this can bring. The most significant of these is the shortfall in tax revenues and thus on the public treasury.

It is for this reason that the utmost importance be given to combating this phenomenon by limiting a greater share of fraud. This can be achieved by increasing the coverage rates in order to include as wide a tax base as possible.

In addition, audits should be proportional to the taxable turnover of companies, especially for those companies affiliated to the DGE. This will be made possible by a reinforcement of human resources (increasing the number of inspectors) and their specialisation by type of activities.[26] Furthermore, it requires a targeted programme of audits, ensuring a greater presence of the tax administration, and an increase in the duration of the period under control amongst other things. More intensive, repressive and dissuasive control needs to be implemented with the rigorous application of fiscal sanctions and criminal penalties, and every possible means to rectify violations of the tax legislation and to ensure through greater efficiency and more rapid control the recovery of unpaid duties.

The objective of these measures must be a State that guarantees not only rights, fairness, equity, justice, and a strict redistribution of tax burdens, but which also ensures repressive measures towards any act that harms the public finances of this State through fiscal fraud. There must be a real political commitment with the rigorous application of all criminal and fiscal sanctions and penalties. This requires the means to correct infringements of the tax legislation and to ensure the recovery of unpaid dues, with the ultimate aim of achieving the optimal fiscal system, with a higher tax compliance rate and better social cohesion.

This study is limited in that it has only covered tax fraud relating to companies. It has not dealt with the informal sector, which was estimated to be 31.2 percent relative to GDP in 2007 by the studies of Buehn and Schneider (2011), tax evasion, social fraud and money laundering, etc. We have attempted to demonstrate that we have made a reasonable assessment of this phenomenon and its contribution to tax revenues. It does, however, shed some light on this shadowy area of the Algerian economy, and implies that the fraud that escapes the state is of much greater magnitude and significance.

Notes

1. The right of control is governed by article 18 of the Algerian Tax Procedures Code (CPF)
2. Companies: Taxpayers subjected to fiscal control are governed by the General Instruction N°001 MF/DGI/DG/07 of January 9th, 2007, Relating to single lump sum tax (IFU).

   https://www.mfdgi.gov.dz/images/pdf/circulaires/instruction%20IFU.pdf
   https://www.mfdgi.gov.dz/index.php/component/content/article?id=166:regimes-d-imposition

   The field of application of the mode of reality: the mode of reality is fully applicable to:

- Legal persons concerned with the IBS (taxes in the benefice of the companies).

- Natural persons concerned with the IRG (total income tax) in the category of the Industrial and Commercial Benefit whose business turnover exceeds 30 million (Algerian dinars) DA.

- With the creation of the (IFU) to target the companies subjected to the control: the minimum turnover of companies increased from 3 million DA in 2007–05 million DA in 2010 and reached 10 Million DA in the supplementary Finance Act of 2011. Moreover, from the Finance Act of 2015 to the present, it has increased to a turnover greater than 30 Million DA.

- DGE (Direction des Grandes Entreprises) = Division of Large Companies.

3. See D. Callahan, "Tax Evasion: The Real Costs," April 2011, available at https://www.ourfiscalsecurity.org/tax-evasion-real-costs/.
4. DeZoort, Harrison, and Schnee 2012. The tax fraud problem has also been described in the context of the 'tax deficit' (i.e. the difference between taxes owed and taxes collected on time). The Internal Revenue Service (IRS 2006) estimated the annual cost of the U.S. tax gap in 2001 at approximately $350 billion, with much of the loss coming from tax fraud rather than from errors. Cebula and Feige (2011) estimate the 2010 tax deficit to be as high as $500 billion.
5. The study is also interested in social fraud and the difference which can exist between the two types of fraud.
6. Documentary on-the-spot check also allows for the selection of files for in-depth control. It covers all taxes due for the entire non-prescribed period (four years) and differs from external control because of: the shorter duration of examination, a streamlined procedure, and the nature of the operations which are subject to it.
7. Companies: The number of taxpayers subjected to the fiscal control is 213.000, a coverage rate of 30.029/213.000 = 0.14098 or 14.09 percent for the year 2010.

   France : 2010 : CSP IS : 4.73, CSP TVA : 1.52, CSP IR : 1.9 = either 08.15 percent against 14.09 percent Algeria, source: Report of the National Union of Solidarity and Public Finance: When the reduced means of fiscal control lead to a decrease in its presence … : worrying drop in the coverage of the economic and fiscal fabric, September 2018.
8. Article 20, and Article 20 Bis of the Algerian Code of Tax Procedures (CPF), which govern the regulatory and tax procedures to be followed during an external tax control CFE.

   External Tax Control CFE is represented by the accounting control and the punctual accounting control. Accounting control: Article 20 of the Algerian Code of Tax Procedures (CPF). Punctual Accounting control: Article 20 Bis of the Algerian Code of Tax Procedures (CPF).

   N.B: The punctual accounting control follows the same rules governing the accounting control.
9. Large companies that are managed by the (DGE); are defined as large companies with annual turnover of more than 100 million dinars, oil companies, foreign companies, groups of companies in 2005; (Letter N°21 of the DGI), Legal basis Articles 10 and 11 of the Finance Act 2009, Article 63 of the Finance Act Supplementary 2009 and the Ministerial Decree of 1st /10/ 2009.

   The creation of the DGE is the work of the financial law provisions for 2002 (Article 32). The DGE became operational on January 02, 2006, Letter N°65 of the DGI.

10. 72 companies represent 3.2 percent of a total of 2.234 controlled companies.
11. Tax reassessment of DGE in 2011: 18, 14 Billion out of 63.45 Billion CFE, which represents about 30 percent.
12. The number of businesses decreased considerably when the turnover threshold was revised upwards in 2011, which increased the coverage rate of the tax population subject to the real tax system to allow the tax administration services to concentrate on companies with very high turnover.
13. Companies: Taxpayers subjected to the audit of the DGE for the year 2011 is 1835, number of external tax controls (CFE) of DGE for the year 2011 : so a coverage rate of 72/1835 = 3,9 percent. DGE Tax Populations (Letter N°65 from DGI)

    Large taxpayers managed by the (DGE): Companies, which are defined as large companies, are those with annual turnover of more than 100 million dinars, oil companies, foreign companies and groups of companies in 2005. (Letter No. 21 from the DGI), Articles 10 and 11 of the LF 2009, Article 63 of the CFL 2009 and the Ministerial Order of 01/10/2009. The creation of the Division of Large Companies (DGE) is the result of the provisions of the Finance Act for 2002 (Article 32). The DGE, became operational on 02 January 2006, Letter N° 65 from the DGI). https://www.mfdgi.gov.dz/index.php/com-smartslider3/modernisation-voir-plus/49-nouvelle
14. Pacolet et al. (2007, 21) state that the analysis of the results of the fiscal controls carried out by the administrations over several years would have yielded between 2.4 and 3.7 percent of the total tax revenues in 2006.
15. The proportion of tax reassessments is established in relation to total GDP only as a guide, because in all fraud estimation studies, the proportion is done so. But in reality, and to give the true image of the controlled tax fraud, it must only be done in relation to the Non-Hydrocarbon GDP, because all the tax reassessments appearing in the table concern only the general regime (common law) for taxes such as TAP, IBS and IRG / Salary, VAT and do not concern hydrocarbon taxation such as the tax on the oil income (TRP), of oil superficiary tax and the 'Hydrocarbon income tax (IRH). The control (CSP or CFE) of Sonatrach, oil companies and the holding companies by the DGE is done only for the general regime (common law). The control of the taxation of hydrocarbons is not a legal attribution of the tax administration, due to the difficulty of calculating this type of tax.
16. The (DGE) managed only about 2,000 companies in 2011, with a total amount of recovery (ordinary taxation) that is close to 286 304 Million DA, recorded in the first seven (07) months of 2011, representing 47 percent of the ordinary taxation recovered by the DGI (Taxation Directorate) in the same period.

    In the case of the corporate income tax (IBS), and the value added tax (VAT), collected by the DGE during the period mentioned above, these represented 76 and 56 percent respectively of the amounts of the same taxes collected by the Directorate of the cities in all the territory of the country.www.mf.gov.dz/article/300/Grands-Dossiers/181/-La-modernisation-de-l'administraion-fiscale.html

    The (DGE) began with 800 companies in 2006, for a tax population, currently to the order of 2,034 companies (50 percent Algerian, 50 percent foreign) that are part of the DGE's portfolio, and with an evolution rate of 154 percent.

    The budgetary revenues are mainly derived from the oil tax, while almost

50 percent of the ordinary tax is recovered at the level of the DGE.

To illustrate this, the amount recovered by the DGE in 2006, which amounted to 265 billion DA, increased to 512 billion DA in 2010, representing a rate of change of 93 percent.

http://www.mf.gov.dz/article/3/Actualit%C3%A9s/183/La-fiscalit%C3%A9-ordinaire-atteint-1.352-mds-DA-%C3%A0-fin-septembre-2011-(DGI).html, also cited in Letter N°65 from DGI

17. Working methods (programming: choice of companies to be verified), based on more "qualitative" and "better targeted" controls, through data mining. The JIBAYATIK system is currently being installed at the level of all tax administration centres in the Algerian state.
18. 99 percent of the tax revenues collected across the country come from 12 cities (wilayas) only, out of the 48 cities (wilayas); there are 36 which contribute only 1 percent to the total tax revenues.
19. In the case of fraudulent manoeuvres, an increase corresponding to the rate of concealment by the taxpayer shall apply. Penalties in Algeria may vary from 50 percent to 100 percent: Art. 193 (2): Algerian Direct Tax Code.
20. Financial penalties (tax fines) and judicial sanctions with the risk of imprisonment: Art. 303: Code of Direct Taxes and Related Taxes amended by articles 28 of the Finance Act for 2003 and 13 of the Finance Act 2012.
21. Benson 2014. Benson has provided a valuable advice to tax preparers to understand and follow the applicable provisions of the Tax Code and Professional Standards.
22. Klepper and Nagin (1989); Hite and McGill (1992) Erard (1993) separate different types of advisors and therefore different results.
23. The tax flagrance is governed by Article 20 quarter within the Code of Tax Procedures: was created by article 18 of law n°. 10–01 of 26 August 2010 on the supplementary finance act of 2010.
24. The punctual accounting control was introduced by the provisions of Article 22 of the Complementary Finance Act 2008; it was amended by the provisions of the Finance Act for 2010 under Article 20 of the Code of Tax Procedures.
25. Percentage of revenue paid to the State in the form of taxes (Austria 43 percent, Sweden 42.7 percent and Norway 39.1 percent)
26. Buildings and Public Works, Industries, Hydrocarbons

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Availability of data and materials

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