

## **PERFORMANCE ASSESSMENT OF THE "ALGERIAN TAX SYSTEM" ECONOMIC STUDY OF ORDINARY TAXATION BETWEEN 2000-2016**

Samir MAHTOUT\*  
Kamal OUKACI\*\*

Received: 02/02/2019 / Accepted: 22/05/2020 / Published: 09/07/2020  
Corresponding authors: mahtout\_samir@yahoo.com

### **ABSTRACT**

The Algerian tax system is essentially declarative; it provides two tax structures. The first concerns the taxation of revenues and income earned by physical and legal persons (ordinary taxation), while the second concerns the operations carried out by oil companies (petroleum taxation). This article aims to assess the performance of ordinary Algeria tax system. Thus, we have studied the different taxes in terms of yields and tax burden. The results show that tax revenues come mainly from the taxation of wages and expenses. In conclusion, this taxation cannot contribute to financing the economic development, owing to the scant mobilization of the tax performance.

### **KEY WORDS:**

Ordinary taxation, tax revenues, tax burden.

**JEL CLASSIFICATION:** H20, H24, H25, H27, H30.

---

\* Doctorant à la faculté des sciences économiques, commerciales et des sciences de gestion. Université de Bejaia. mahtout\_samir@yahoo.com, Algérie.

\*\* Professeur à la faculté des sciences économiques, commerciales et des sciences de gestion. Université de Bejaia. oukaci.kamal@gmail.com, Algérie.

## تقييم أداء النظام الجبائي الجزائري: دراسة اقتصادية للجباية العادية خلال الفترة 2016-2000

### ملخص:

النظام الضريبي الجزائري هو بشكل أساسي تصريحي، فهو ينص على هيكلين ضريبيين. الهيكل الأول يتعلق بفرض الضرائب على الإيرادات والأرباح التي يحققها الأشخاص الطبيعيون والمعنويون (الضرائب العادية)، بينما يتعلق الثاني بالعمليات التي تقوم بها شركات النفط (الضرائب على البترول). تهدف هذه المقالة إلى تقييم أداء الضرائب العادية في الجزائر. للقيام بذلك، درسنا مختلف الضرائب من حيث أداء التحصيل والعبء الضريبي. تظهر النتائج أن الإيرادات الضريبية تأتي أساسا من فرض الضرائب على الأجور والنفقات. في الختام، لا يمكن لهذا الهيكل الضريبي أن يساهم في تمويل التنمية الاقتصادية، بسبب عدم كفاية أدائه في التحصيل الضريبي.

### كلمات مفتاحية:

الضرائب العادية، تحصيل الضرائب، العبء الضريبي.

تصنيف جال: H20، H24، H25، H27، H30

## EVALUATION DES PERFORMANCES DU SYSTEME FISCAL ALGÉRIEN : ÉTUDE ÉCONOMIQUE DE LA FISCALITE ORDINAIRE DURANT LA PÉRIODE 2000-2016

### RÉSUMÉ

Le système fiscal algérien est essentiellement déclaratif. Il prévoit fondamentalement deux structures d'imposition. La première concerne l'imposition des recettes et les profits réalisés par les personnes physiques et morales du droit commun (fiscalité ordinaire), tandis que la deuxième vise les opérations réalisées par les entreprises relevant du secteur des hydrocarbures (fiscalité pétrolière). Cet article a pour objectif d'évaluer les performances de la fiscalité ordinaire en Algérie. Pour ce faire, nous avons étudié les différents impôts et taxes en termes de rendement et de pression fiscale. Les résultats montrent que les recettes fiscales proviennent essentiellement de la taxation des salaires et de la dépense. En conclusion, cette fiscalité ne peut contribuer au financement du développement économique, en raison d'une mobilisation insuffisante du rendement de l'impôt.

**Mots clés :** Fiscalité ordinaire, recettes fiscales, pression fiscale.

**CODES JEL :** H20, H24, H25, H27, H30.

### INTRODUCTION

Taxation is considered an important tool in the hands of every government since it helps to achieve several goals, namely economic, budgetary and social ones. Throughout the centuries, taxes have been at the heart of public policy because of the significant impact they have on the economy. The normal running of any society obviously entails the covering of public charges which can only be insured by taxes (Allais, 1990) In addition, taxes have always been considered among the principal organs in forming the power and independence of nations. They represent as well a fundamental tool of the existence of the State (Neurrisse, 1978). Furthermore, state economic and social interventionism has long been the matter of intense debate in the history of economic thought.

In fact, classics believe that taxes are economically neutral, hence they are assimilated as the price paid by the taxpayer for the security and the services brought to him by the State. According to the classics, taxes are dissipative levies (Smith, 1776). Tax contributions have, however, a harmful role on economic activity and they only create difficult choices (Ricardo, 1817) The classics have defined four fundamental tax maxims, including the rule of justice, certainty, convenience and the rule of economy (Smith, 1776).

However, the interventionist tax theory derived from the Keynesian theory considers that the tax is not neutral. Indeed, it is a powerful instrument used by public authorities for fiscal policy purposes, in particular to stimulate overall demand or improve economic growth. The recovery of the economies, particularly those of the developing countries, depends on the implementation of economic policies, especially in fiscal policies that guide long-term actions and to act in line with priorities, the development of an efficient and diversified productive economy. Thus, in the current socioeconomic context, the public authorities are constantly asking the adoption of tax measures that could design tax structures that would further improve the business environment, and generate as much financial return to finance economic development. To this end, public policy-makers must give well-deserved attention to tax policy in view of its major role in the foundations of contemporary societies and also sine qua non of their existence (Neurrisse, 1978). On the other hand, the intense use of the public authorities to tax the economic activity in order finance State's budget requires well-studied and scrupulously defined reflections to reduce harmful effects of taxation on growth economic (Barro, 1990), (Lucas, 1990), (Easterly et al, 1993b), (Engen et al, 1996), (Milesi-Ferretti et al, 1998), (Arnold et al, 2011), (Arseneau et al, 2011)...etc.

Nowadays, the financing of the State budget became more and more a challenge for governments which are looking for appropriate tax measures that can generate budgetary revenues and ensure a permanent income for the State. In Algeria, the tax system is essentially declarative subject to the right of control and verification. It

consists of two distinct large parts. The first part deals with ordinary taxation, it is broken down into direct and indirect taxation, which applies to all the activities of natural and legal persons, goods and services. The second part deals with the oil tax and on specific activities relating to hydrocarbons sector. During the period 2000-2016, ordinary tax revenues contribute 36.8% to total tax revenues (ordinary and oil taxes and 22.51% of Gross Domestic Product Non-Hydrocarbon and Non-Agricultural (GDPNH-NA), despite the efforts to modernize the tax administration on the one hand and increase revenues from ordinary taxation on the other hand.

This study aims to assess the performance of Algerian tax system, in particular ordinary tax system, by examining the evolution of the tax structure and analyzing the performance of the various tax categories. The evaluation focuses on two periods (2000 to 2014) and (2015 to 2016). This purpose makes it possible to measure the impact of the changes observed on the international energy market (the fall in oil prices begun in 2014) on the performance of ordinary taxation in Algeria. This work is based on three sections. The first is to review the theoretical and empirical literature on taxation and its effects on the economy. In the second section, we will present the main stages of Algerian taxation, in particular after the major reforms of 1992, as well as the main taxes constituting the current tax system. The third section will be devoted to evaluate the ordinary tax system through an economic analysis of the various taxes in terms of financial performance and tax burden.

#### **1- THEORETICAL AND EMPIRICAL LITERATURE REVIEW:**

The tax represented by the tax is a benefit of the monetary values required of individuals, due by individuals, according to fixed rules and by means of authority, for the purpose of covering expenditure of general interest<sup>1</sup>. Fiscal policy was always, in particular for developing countries in order to achieve many economical, budgetary

---

<sup>1</sup> Jeze G, quoted by BOUVIER M, (2016). «Introduction au droit fiscal général et à la théorie de l'impôt». LGDJ, 10th edition, P 24.

and social goals<sup>2</sup>. First, the tax is used to mobilize budgetary resources to finance public spending. Governments also use this instrument to direct economic activity towards targeted sectors to promote economic well-being and growth. Finally, it intervenes to ensure equity in income redistribution and to correct externalities (Azizul, 2001). Furthermore, the expected role of the tax system, according to several studies, is particularly the collection of tax revenues to cover government costs (Burgess et al, 1992). The aim of designing a sound fiscal policy is not only to reduce the distortions it creates for economic activity but also to generate absolutely sufficient financial revenues for the proper functioning of the State services (Mackenzie et al, 1997). However, the implementation of simple, fair and efficient tax system is a major challenge, especially for developing countries. Indeed, the tax structures of these economies are suffering from a crisis of mobilization of tax revenues; they must increase in urgency twice the current financial performance to integrate them successfully into world economy (Tanzi et al, 2001). Economic crises frequently as noted recently in these countries have made it possible to give a crucial importance to taxation as a suitable solution to development policy.

However, the failure of these governments to achieve this goal has caused many economic imbalances (Attila et al, 2009) and the inability of public finances to develop growth-generating sectors (education, health, infrastructure), hence the low level of development in these States (Chambas, 2005a).

In order to fix these shortcomings, the success of the tax transitions is the optimal solution, through the improvement of the efficiency of the value added tax and the widening of its tax base (Chambas, 2005b; Brun et al, 2007). The financing public budgets problem through the proceeds of ordinary taxation, in particular for those of most developing economies, is mainly due to a poor conception of a tax

---

<sup>2</sup> Jean-Marc D, (2008). «Richard Musgrave et les fonctions économiques de l'Etat». La revue du Trésor n° 1, P 61.

structure which conforms to socio-economic characteristics of each country, owing to the importance of recoveries made by the taxation of natural resources. The obstacle of corporate taxation in generating sufficient financial resources to these economies, at the time of prolonged external shock, to deplorable economic, social and political crises (Bouilef, 2014). Moreover, the inefficiency of ordinary taxation, both for countries rich in natural resources and for those without natural resources, results in excessive use of optimization behaviour in aggressive taxation, in particular tax evasion and fraud, attractiveness, tax dumping, etc. (Bensahli, 2015).

The debate on tax measures which conducts the economic growth is increasingly intense, given the impact of taxation on economic activity, in particular business environment and economic growth. Arnold et al. (2011) conclude that real estate and consumption taxations are the least detrimental to economic growth. While, taxation of personal income and corporations' profits is more damaging. In addition, Arseneau et al. (2011) suggest that consumption taxation has a more positive impact on economic growth than income taxation.

Lee et al. (2004) conclude that a 10% increase in corporate income tax leads to a 0.82% decline in the economic growth rate. Padovano et al. (2001) show a negative relationship between the marginal tax rate and the average GDP growth rate. Wildmalm (2001) shows that the progressivity of personal income tax is the most damaging factor to economic growth. Furthermore, several other approaches have shown that the component of tax structure, in particular progressive taxation (taxation of personal income) strongly influences entrepreneurial activity (Gentry et al, 2000; Gordon, 1998) It also distorts employment and wages (Arulampalam et al, 2010; Hasset et al, 2006; Felix, 2006). Also, the tax structure, especially corporate taxation, has a significant and negative effect on investment, including foreign direct investment (Hartman, 1984; Boskin et al, 1987; Young, 1988).

## **2- PRESENTATION OF ALGERIAN TAX SYSTEM:**

The Algerian tax system is mainly a declarative system subject to the right of control and verification, it was a historical legacy of the French tax system. Economic reforms undertaken in the late 1980s aiming to liberalize the national economy and to initiate a transition to economy's market required an upgrade of Algerian fiscal policy. Thus, a break was initiated in 1992 with the genesis of new tax structure comparable to that noticed in most countries in transition, particularly those in Latin America and Southeast Asia's region. The main measures introduced were the introduction of three new taxes, in particular value added tax (VAT), instead of turnover taxes, particularly the Unique Global Tax on Production and the Unique Global Tax on Services, the introduction of Corporate Income Tax (CIT) and the creation of Global Income Tax (GIT). Furthermore, reforms also aimed to reduce the tax burden and simplifying the tax structure through the abolition and replacement of archaic taxes international practices in order to improve the financial position of ordinary taxation, in particular reducing disastrous effects of an external shock on hydrocarbon prices, other reforms were implemented in the early 2000s. Several goals have been pursued by these reforms, as the simplification and harmonization of the tax system, the broadening of the tax base for various taxes, the fight against tax evasion and evasion... etc. The main measures to be taken under this consolidation are, in particular the rescheduling of the tax debt of companies facing financial difficulties to increase the level of recovery, and to improve economic entity's tax environment and voluntary tax compliance program<sup>3</sup>. These reforms also aim at the introduction of a preferential tax regime for corporate groups, the reduction of the tax burden through the abolition of the flat-rate payment (FV), the reduction rates of Taxes on Professional Activity

---

<sup>3</sup> The main target of Voluntary Tax Compliance Program is banking the resources and regularization of tax situation. It is part of the government's will to mobilize tax resources in order to finance productive investments and to encourage the business climate and economic agents to integrate formal sphere'.

(TAP) and VAT<sup>4</sup>. A process of modernization of tax administration has been established to carry out these reforms. This process involves equipping the tax administration with an organization and procedures based on international best practices and more suitable means of services (new infrastructure, equipment and staff training). Moreover, the tax system is mainly based on two major principles, in particular the principle of reporting and the principle of withholding tax. As an economic investment incentive, it grants several tax advantages in the form of exemptions, tax withholding, etc. Finally, Ordinary tax system has adopted mainly the Global Income Tax (GIT), which is a single annual tax, applies to the taxpayer's total net income, is declarative and is calculated annually according to a progressive scale.

It also has the Corporate Income Tax (CIT), which is an annual tax on all profits or income earned by companies, the CIT's rate is set according to the nature of the activity. There is also the Tax on Professional Activity (TAP) which is payable by any private or legal person who carries out a professional activity in Algeria. This tax applies on turnover at tax rates determined according to the nature of the activity. Furthermore, VAT is an indirect consumption tax, declared and paid to the State by the corporations (legal providers), ultimately borne by the final consumer, There is also the Single Lump sum Tax (SLT) which is payable by all private and legal persons in industrial, commercial, craft or liberal activity whose annual turnover does not exceed 30,000,000 DA, the tax rate is set at 5% for production activities and sale of goods and a rate of 12% for the other activities.

Finally, the Registration and Stamp duties (RSD) represent a formality to which agreements and deeds under private or authentic signature are subject, relating to many transactions such as transfers (sales, donations, exchanges), leases, mortgages, etc., the applied rates change according to the nature of the act.

---

<sup>4</sup> Articles 23 and 27 of Financial Law 2017.

### **3- PERFORMANCE ASSESSMENT OF ORDINARY TAX SYSTEM DURING THE PERIOD 2000-2016:**

The assessment of the performance of ordinary tax revenues in Algeria, during the period 2000-2016, will be presented through the assessment of direct and indirect taxes' yield, the analysis of the evolution of the ordinary tax burden, in relation to GDPNH-NA and then, by the assessment of tax effort of the main taxes constituting the taxation. Taxes with this study are Global Income Tax (GIT/NS, IRG/TS)<sup>5</sup>, Corporate Profit Tax (CPT), Value Added Tax (VAT), Customs Duties (CD), Registration and Stamp Duties (RSD) and Indirect Taxes (ID).

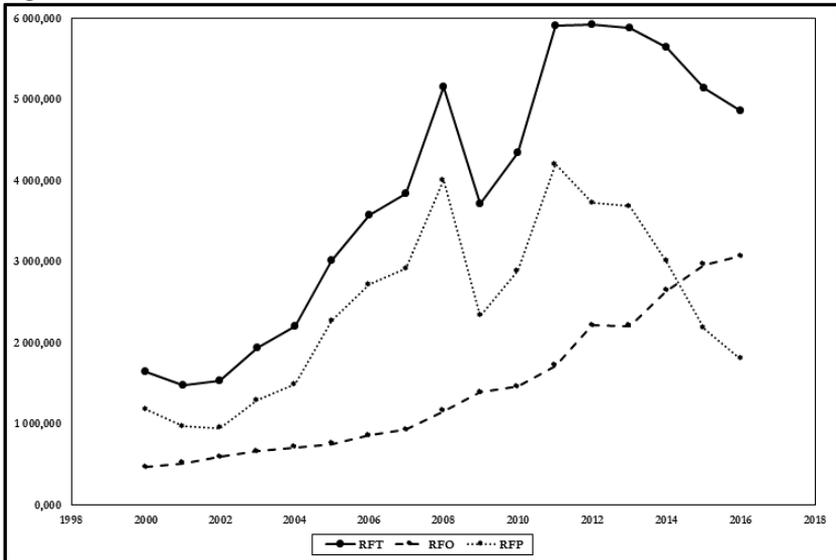
#### **3.1- The structure of Total Tax Revenue (TTR):**

Ordinary Tax Revenues (OTR) increased from 460.9 billion DZD in 2000 to 3,064.8 billion DZD in 2016, with a nominal annual average growth rate of 12.8%. At the same time, Oil Tax Revenues (OTR) also showed a positive trend. Increasing from 1,173 billion DZD in 2000 to 1,801.1 billion DZD in 2016, with a nominal annual average growth rate of 7.6%. We note a particular specificity in tax revenues' trend in Algeria. Indeed, this development is distinct by two major periods, the period between 2000-2014, characterized by the oil tax yield preponderance, while the second period between 2015-2016, is a stage where ordinary tax collection has regained a dominant position, marking a larger contribution in tax revenues' mobilization. The improvement in performance of ordinary taxation performance can be explained by the increase in the collection of all taxes categories. However, the decline in oil tax revenues can be explained by the drop in oil prices that began in 2014, and worsened during 2015 and 2016 (oil prices fell by about 10%, 90% and 21% in 2014, 2015 and 2016 respectively).

---

<sup>5</sup> GIT/NS: means Global Income Tax for non-salaried persons, GIT/TS: means GIT for Treatments and salaries.

**Figure 1:** Evolution of Total Tax Revenues



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

TTR: means Total Tax Revenues (RFT).

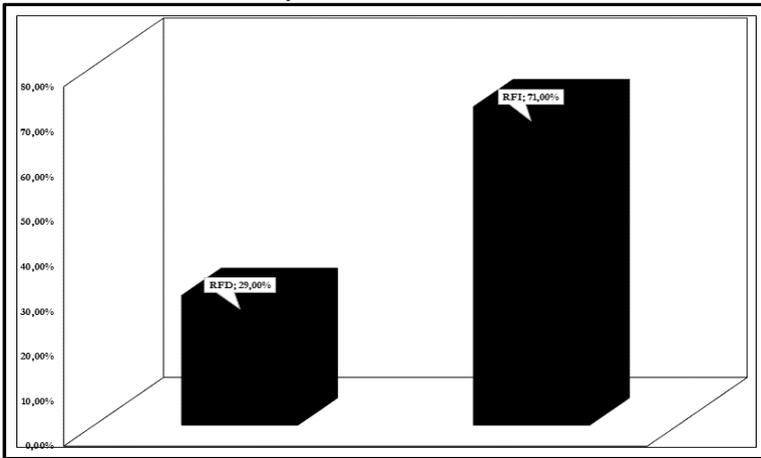
OTR: means Ordinary Tax Revenues (RFO).

OTR: means Oil Tax Revenues (RFP).

### 3.2- Analysis of ordinary taxation's financial performance.

The financial performance of various taxes represents approximately 36.8% of total tax revenues between 2000-2016. This yield will be analyzed in Direct Tax Revenues (DTR) and Indirect Tax Revenue (ITR). Furthermore, this decomposition makes it possible to reflect an image of tax system's structure in Algeria, which means the determination of taxation type from the ordinary financial yield (see Figure 2).

Figure 2: Structure of Ordinary Tax Revenues.



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

DTR: means Direct Tax Revenues (RFD).

ITR: means Indirect Tax Revenues (RFI).

Indirect taxation represented an average of 71% of total tax revenues during the period of study, this result feed through to the increase of products' consumption subject to such taxation, in particular products subject to domestic VAT as well as on imports. The in-depth analysis of the indirect financial yield shows the preponderance of revenue from Turnover Taxes (TT) over other tax categories<sup>6</sup>. However, direct contributions are represented mainly by income, including wages and salaries and non-salaried persons (IRG/TS-IRG/NS), as well as Corporate Income Tax (CIT). Furthermore, these charges account for approximately 28.27% of ordinary tax revenue.

The in-depth auditing of tax yield structure in this tax category shows the preponderance of the GIT/TS with an average contribution of 48.96% to direct tax revenues, compared to only 12.77% for the GIT/NS and 38.26% for the IBS.

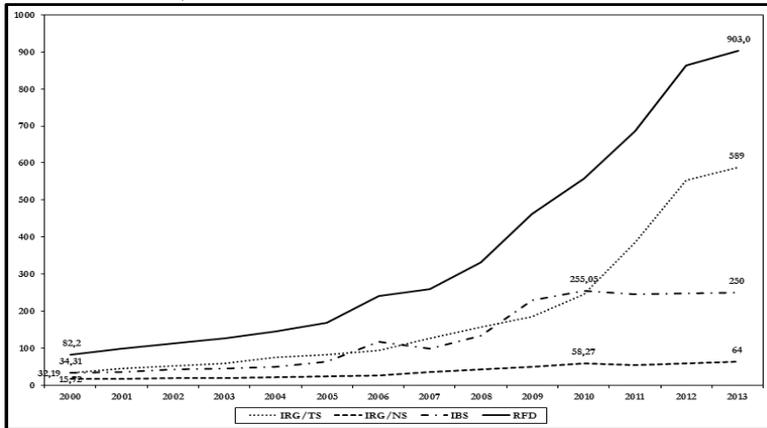
---

<sup>6</sup> An in-depth analysis of the financial performance of indirect taxation shows that the TT yield rise up to 20.66% compared to 22.23% on excise duties.

### 3.2.1. Analysis of direct tax revenues:

This section provides a comprehensive analysis of the evolution of direct tax revenues during the period 2000-2013. The choice of this period is subject to the availability of statistical data on tax recovery. There has been an upward trend in direct tax revenues since 2000, from 82.34 billion DZD to 903 billion DZD in 2013. This result is mainly reflected in the substantial recovery under the GIT/TS following the implementation of several indemnity schemes for the payment of salaries of civil employees under various public institutions. Additionally, the analysis of direct contribution revenues shows that GIT/TS remains predominant (see Figure 3). It represented 65.23% of direct tax revenues and 26.72% of regular tax revenues in 2013, an average of 48.96% and 14.19% between 2000 and 2013 respectively. On the other hand, direct taxation part paid by taxpayers subject to GIT/NS is clearly low and is evolving slowly. In fact, this tax category generates a financial return of 12.77% of direct tax revenues and 3.31% of ordinary tax revenues. This result can be explained by the repetitive deficits of the enterprises, the amount is more and more important remains to be recovered, the various fraudulent practices to evade taxes (tax evasion and tax evasion), as well as the many tax expenditures (exemptions and abatements) to improve the business climate and support domestic and international investment. In addition, the study also shows that the IBS is a component which has undergone a growing trend in terms of ordinary receipts, from 32.19 billion DZD in 2000 to 250.164 billion DZD. This upward trend in revenues can be explained by an increase in the number of taxpayers in this tax category, as well as a downward adjustment of tax rates to reduce the tax burden and broaden the tax base.

**Figure 3:** Evolution of the components of direct taxation (% of direct tax revenues)



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

GIT/TS: mean Global Income tax on treatment and salaries (IRG/TS).

GIT/NS: means total income tax of Non-Salaried persons (IRG/NS).

CIT: means Corporate Income Tax (IBS).

TRC: Tax Revenue per Capita (RFD).

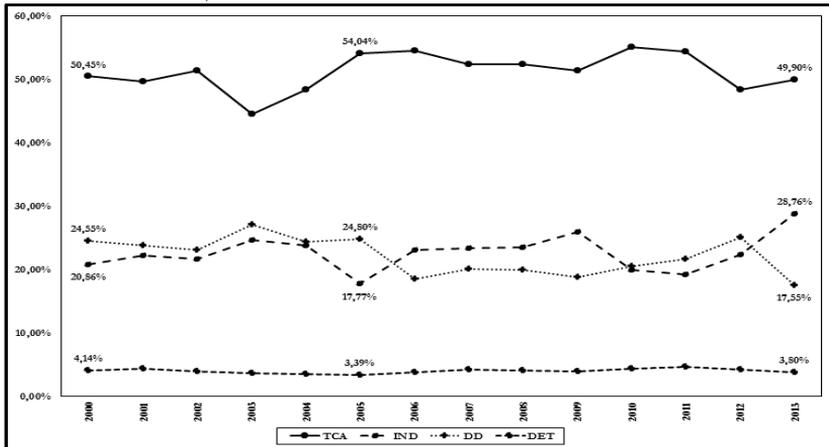
This financial performance's exhaustive analysis of direct taxation shows that the bulk of direct tax revenue comes from labour taxation (salaries tax) and corporate profits.

### 3.2.2. Analysis of Indirect Tax Revenues:

In this section, we will analyze the evolution of indirect tax revenues, in particular the products generated by VAT (VAT/INT), VAT on imports (VAT/IMP) and VAT on petroleum products (VAT/PP), as well as Domestic Consumption Tax (DCT) products and customs revenue. Revenues from indirect taxation was 1,301.1 billion DZD in 2013 compared to 1,345.8 billion DZD the year before, showing a decrease of 3.27%. This result is due to the fall in customs revenues of (-32.34%). Revenues from indirect taxation showed an upward trend throughout the period under review, where they increased by 31.34% compared to 2011. Revenues increased by 350% during 2000-2013 period. Figure 4 shows that this trend in indirect taxation is reflected in the significant increase in VAT, customs duties and indirect taxes, including DCT, miscellaneous budget products, domain products and

other revenues. We noticed also that revenues from Registration and Stamps Duties (RST) are almost stable and marginal, with a financial mobilization of 4.01% of indirect revenues and 2.86% of the total ordinary taxation. However, it is noticeable that the importance of Turnover Taxes (TT) especially VATS remains predominant as they contributed to 52% of total indirect revenues and 36.68% of ordinary tax revenues. Furthermore, customs revenues and indirect contribution revenues (DCT and other revenues) are an important source of Indirect Taxes (ID), representing respectively an average of 16.01% and 16.2% of indirect tax revenues.

**Figure 4:** Evolution of the components of indirect taxation (% of indirect tax revenue)



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

TT: means Turnover Tax (TCA)

ID: means Indirect Tax (IND)

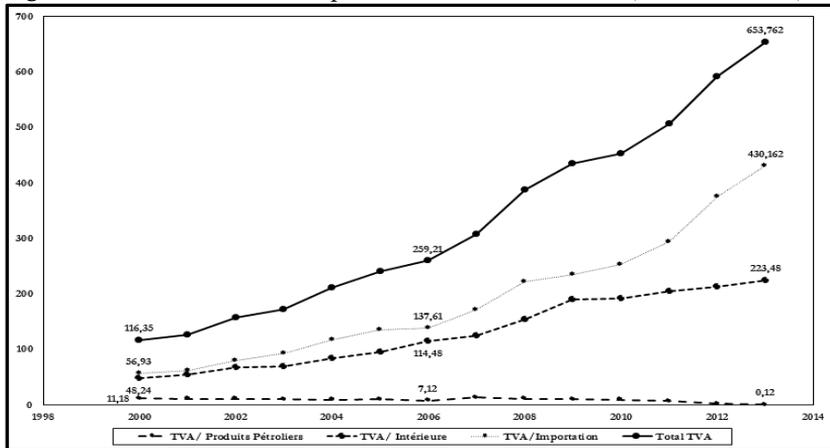
CD: means Customs Duties (DD)

RSD: means Registration and Stamp Duties (DET)

The previous analysis showed the dominant position of turnover taxes in the structure of indirect taxation. We will try in the following section to analyze components of VAT and then determine the place of each of them in terms of yield. The examination of Figure 5 shows that the share of the (VAT/IMP) remains important over the whole period. It rose from 56.93 billion DZD in 2000 to 430.162 billion DZD in 2013. This result is explained by the dramatic increase in imports

during this period. We also noticed that the (VAT/MSA) varies considerably despite the tax expenditures granted in the context of tax benefits. For example, it rose from 48.24 billion DZD in 2000 to 223.48 billion DZD in 2013. This result is mainly reflected in the increase of taxpayers' number subject to VAT, the high rate of VAT and the efforts of the tax administration in terms of controls. Consequently, the analysis of indirect tax revenues showed that the share of VAT (domestic and import) remains dominant during the period 2000-2013.

**Figure 5:** Evolution of the components of value added tax (In % total VAT)



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

VAT/PP: means VAT/Petroleum Products (TVA/Produits Pétroliers).

VAT/Dom: means AT/Domestic (TVA/Intérieure).

VAT/Imp: means VAT/Import (TVA/Importation).

T/VAT: means Total VAT (Total TVA).

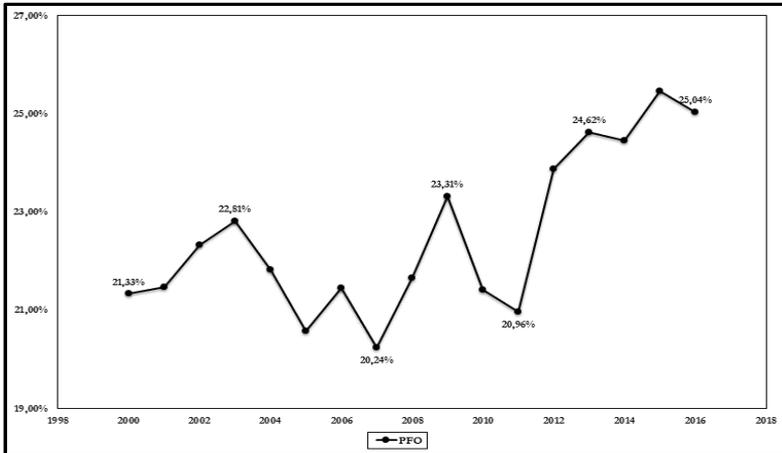
### 3.2.3. Analysis of Ordinary Tax Pressure (OTP):

An examination of Figure 6 shows that the OTR<sup>7</sup> showed a positive trend. However, it is increasing slowly (21.33% in 2000 to 25.04% in 2016). This positive development is explained by the tax reforms implemented in recent years in order to broaden the tax base and improve the tax yield. Furthermore, the downward trend noticed in 2003, 2006 and 2009 indicates that tax revenues are moving indicates

<sup>7</sup> OTR= (Ordinary Tax Recovery/ GDP Non-Hydrocarbons and Non-Agricultural).

that tax revenues are moving slower than GDPNH-NA. In general terms, tax burden recorded an average of (22.51%), indicating a major obstacle to mobilize sufficient tax revenues for financing State budget and developing a productive and diversified economy.

**Figure 6:** Evolution of ordinary tax burden (In % of GDPNH-NA)



Source: Users' calculations based on General Directorate of Taxes (GDT) data.

By way of comparison, the revealed average rate of tax burden (22.51%) is absolutely low compared to those noticed on the international scale (see table1). In 2015, the rate of tax burden in Tunisia was 30.3%, 26.1% in Morocco, an average of 22.8% in Latin American and Caribbean States (GRULAC) and an average of 34.3% in the member states of OECD<sup>8</sup>.

**Table n°1:** Tax burden in certain countries in % of GDP (2015)

Country	Total Tax Revenue % GDP
---------	-------------------------

<sup>8</sup> Calculs des auteurs à partir des données statistiques de l'OCDE.

---

Mexico	17.4
Chilli	20.6
Bolivia	24.7
Jamaica	25.6
Venezuela	20.6
Brazil	32
Argentina	32.1
Costa Rica	23.1
Paraguay	17.9
LAC States	22.8
Morocco	26.1
Tunisia	30.3
Cameroon	16.4
Kenya	18.4
Niger	17
Uganda	12.5
African countries	19.1
OECD countries	34.3

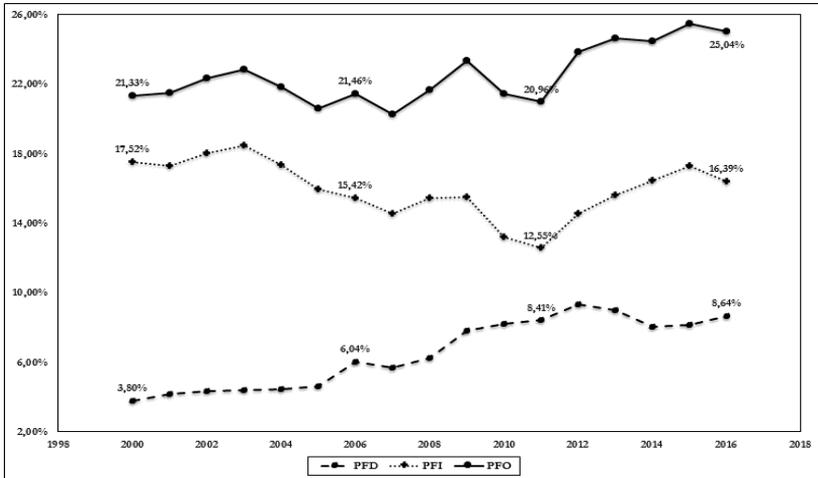
---

*Source: Users calculations based on OECD data.*

### **3.3- Differential analysis of direct and indirect tax burden:**

The ordinary tax burden is a quantitative tool that can conceal contradictory tendencies, and therefore cannot provide information on the detailed structure of tax burden. In this regard, the analysis of the differential tax burden proves pertinent, and it is carried out on two levels. Firstly, in relation to direct tax burden (DTB) and secondly, in relation to indirect tax burden (ITB). Figure 7 show that the direct tax revenues gained nearly five (5) points in percentage of GDP. The direct tax revenues increased from 3.8% in 2000 to 8.64% in 2016. This upward tendency can be explained by the augmentation of levies and taxes that constitute this tax system, particularly withholding taxes on the salaries of public service. On the other hand, the ratio of indirect tax revenue compared to the HH-HA GDP has recorded a recession in the same period, as it has decreased from 17.52% to 12.55% in 2015, then increased to 16.39% in 2016. This situation of the differential tax burden instability is resulted by the irregularities of indirect taxes due to the definition of the taxable matter which is determined by the riskiness of the economic conjuncture and the multiple changes in rates and scales of various levies and taxes. Moreover, the structure of the tax burden is characterised by the modest role of direct taxes, particularly during the period (2000-2007), which represents on average only 6.31% of GDP and 32.66% of the ordinary tax revenue. Whereas, the indirect taxes represent on average 15.85% of GDP and 67.34% of ordinary tax revenue.

Figure n°7: Evolution of direct and indirect tax burden (in % HH-HA GDP).



Source: Users calculations based on the General Directorate of Taxes data.

PFD: Direct Tax Burden.

PFI: Indirect Tax Burden.

PFO: Ordinary Tax Burden.

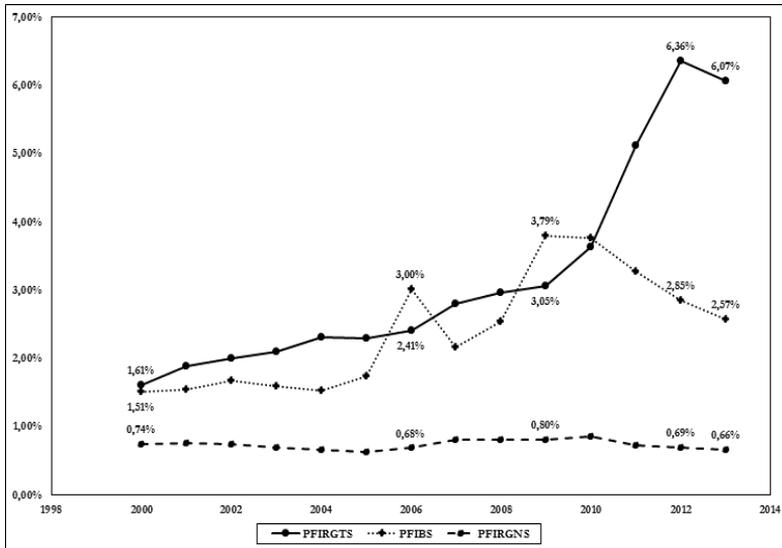
Finally, the upward tendency of direct taxation, as well as the importance of the direct taxation impact, has motivated us to trace more precisely the part of each of the contributions in relation to HH-HA GDP in order to identify tax burden in Algeria.

### 3.3.1. Differential analysis of direct tax burden:

Analysis of figure 8 shows that DTB is unevenly distributed among the various taxes that constitute the tax system. It seems that the current tax system does not fairly tax the revenues of the different income sources. In fact, the average total rate of compulsory deductions of direct taxation during the period from 2000 to 2013 is estimated at 6.5% of (HH-HA GDP). The average tax burden IRG/TS (PFIRGTS) alone represents 3.18% (6.07% in 2013). Hence, the tax burden on direct taxes is due to this category of taxes. Secondly, the part of tax burden on IBS (PFIBS) has an average rate of 2.39% (2.57% in 2013) and lastly, the tax burden on IRG/NS (PFIRGNS) with an average contribution estimated at 0.73% (0.66% IN 2013). To sum up, this analysis shows that direct taxation focuses fundamentally on

working income. In fact, the formal sector employees, specifically civil service employees are those who actually carry the burden of direct taxes.

**Figure 8:** Evolution of tax burden on direct taxes and (in% HH-HHA GDP)



Source: Users calculations based on General Directorate of Taxes data.

PFIRGTS: Tax burden on total income tax of wages and salaries

PFIBS: Tax burden on corporation taxes

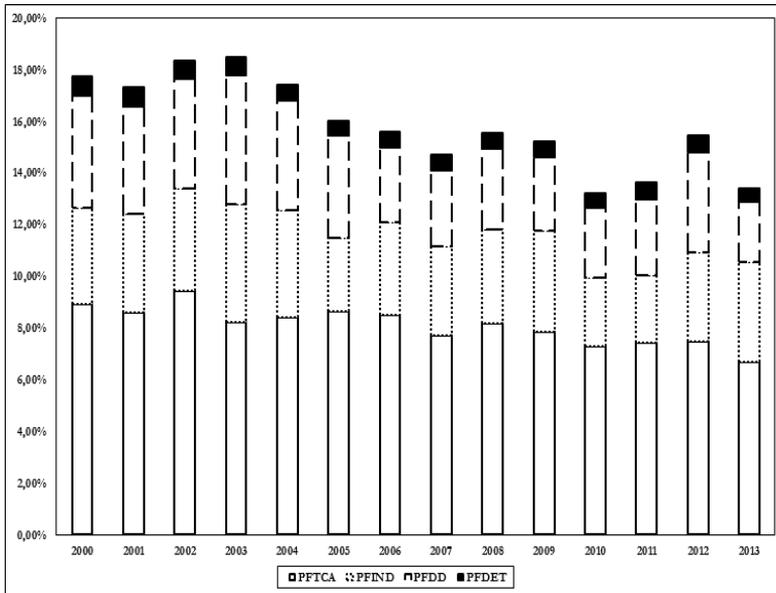
PFIRGNS: Tax burden on total income tax of non-salary

### 3.3.2- Detailed analysis on indirect tax burden:

Figure 9 shows the tax burden of each type of levies and indirect taxes, particularly tax burden on turnover taxes, tax burden on customs duty (TBCD), tax burden on registration and stamp duty and finally tax burden on indirect taxes (TBIT). Thus, we notice that the predominant tax in indirect taxation is the category of turnover taxes, VAT in particular. On an overall rate of 15.8% of compulsory deductions, VAT generates an average yield of 6.46%. On the other hand, the share of customs duty has dropped from 4.35% in 2000 to 2.35% of HH-HA GDP in 2013, i.e. a drop of 2%. This result is mainly due to the process of foreign trading liberalisation begun in the

80's. This analysis shows that the indirect taxation focuses more on consumption. In fact, the households are the one to actually bear the burden of indirect tax, VAT in particular.

**Figure n°9:** Evolution of tax burden of indirect taxes (in% HH-HA GDP).



Source: Users calculations based on General Directorate of Taxes data.

PFTCA: tax burden on turnover taxes.

PFDD: tax burden on custom duty. .

PFDET: tax burden on registration and stamp duty

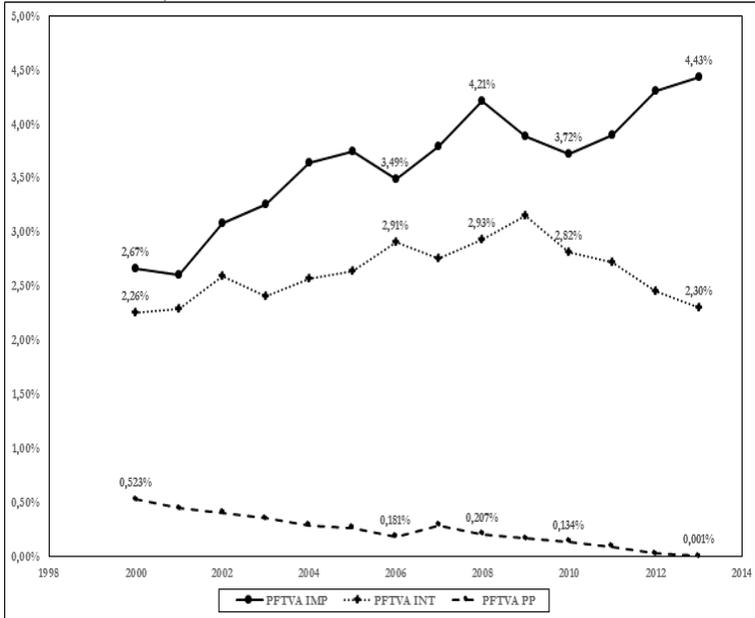
PFIND: tax burden on indirect taxes.

### 3.3.3- Differential analysis of tax burden on Added Value Taxes:

Analysis of figure 10 shows clearly the tax burden of each VAT. In fact, it seems that the tax burden on IMP/VAT holds a dominant part over the whole study period. Furthermore, on an overall rate of compulsory taxes of (6.49%) IMP/VAT generates a yield of 3.62%. Secondly, the importance of tax burden on TVA/INT (Added Value Taxes on domestic services) appears as well with a financial mobilisation of 6.62%. As for the importance of PP/VAT (TB VATPP), it remains quite low with a percentage of 0.24%. At the end of this analysis, it appears that the share of VAT on importation and

domestic VAT remains dominant among indirect taxes. (Indirect tax burden is mainly due to these two types of taxes).

**Figure n°10:** Evolution of tax burden of the elements of value added taxes and (In% HH-HA GDP)



Source: Users' calculations based on the General Directorate of Taxes data.

PFTVA IMP: tax burden of VAT on importation.

PFTVA INT: tax burden of domestic VAT

PFTVA PP: tax burden of VAT on petroleum products.

## CONCLUSION:

This study describes an economic evaluation of the performance of the taxation system in Algeria, particularly the system of ordinary taxation. First of all, we have noticed that the state's tax revenues have significantly increased. This growth is the result of the important recovery of levy and tax system, except for the customs revenues due to the liberalisation of foreign market policy. We have noticed as well a remarkable change in the structure of total taxation revenues since 2014. In fact, the financial revenue of ordinary taxation is becoming more efficient than the financial revenue of oil taxation. The analysis

by the differential tax burden approach shows that the TTR/TS and importation VAT are respectively the main financial sources of direct and indirect taxes, mobilising respectively tax revenues of 3.18% and 6.49% of HH-HA GDP. Although the government has accelerated the reform process since 2000, today's ordinary tax system has not yet achieved its all objectives, in particular, efficiency and equity. This evaluation has also allowed recognizing the great weakness of the system in terms of mobilisation and collection of tax revenues to cover total budget expenditures or at least the current expenditures. The last changes that were noticed on the energy market (oil price dropping, the use of cleaner energy) hastily require reconsideration of the Algerian tax policy to be compatible with these changes. Finally, many international organisations specifically International Monetary Fund (IMF) and the Organisation of Economic Cooperation and Development (OECD) recommend the enhancement of tax system efficiency, especially for the developing countries in order to achieve their development goals. In our case, the challenge of the tax policy consists in finding balance between a tax system that is favourable towards business climate and a taxation level that generates enough revenue to fund the state budget. To this end, the government is called to widen the tax base in order to increase the tax revenue, fight against informal aggressive tax planning and work on improving business climate.

#### **Bibliographic references**

- Arnold J, Brys B., Heady C., Johansson A., Schwellnus C., and Varita L., (2009).** «Tax policy for economic recovery and growth». *The Economic Journal*, 121 (February), F59-F80.
- Arulampalam W., and Devereux M.P., Maffini G., (2010).** «The direct incidence of corporate income tax on wages». *IZA DP N° 5293*.
- Alinson Felix R., (2007).** «*Passing the burden: Corporate tax incidence in open economies*». *University of Michigan*.
- Allais M., (1990).** «*Pour la réforme de la fiscalité*». Clément Juglar.
- Arseneau M., Ha Dao N., Godbout L., (2012).** «Le dosage des impôts et la croissance économique : des leçons pour le Québec». *Chaire de*

recherche en fiscalité et en finances publiques, document de travail 2012/01, Université de Sherbrooke.

**Attila G., Chambas G., Combes JL., (2009).** «Corruption et mobilisation des recettes publiques, Une analyse économétrique». *Recherches Economiques de Louvain* 2009/2, vol 75, 229-268.

**Azizul I., (2001).** «Issues in tax reforms». *Asia-Pacific Development Journal*, Vol 8, n° 1.

**Barro RJ., (1990).** «Government spending in a simple model of endogenous growth». *The Journal of Political Economy*, vol 98, S103-S125.

**Bensahli M., (2015).** «L'optimisation en fiscalité : Équation - Enjeux et Défis». OPU. Alger.

**Boskin M., and Gale W., (1987).** «New results on the effects of tax policy on the international location of investment». In M, Feldstein Ed, *The effects of taxation on capital accumulation*, 201-222.

**Bouilef H., (2014).** «La mobilisation des ressources publiques par la fiscalité ordinaire. ENAG. Alger.

**Bouvier M., (2016).** «Introduction au droit fiscal général et à la théorie de l'impôt». LGDJ 10<sup>ème</sup> édition.

**Brun JF., Chambas G., Laurent M., (2007).** «Economie politique de la réforme de transition fiscale, Le cas du Maroc». *Afrique Contemporaine*, 2007/3, n° 223-224, 309-324.

**Burgess R., and Stern N., (1992).** «Taxation and development». *Journal of Economic Literature*, Vol 31, n° 2, 762-830.

**Chambas G., (2005a).** «Afrique au sud du Sahara, Quelle stratégie de transition fiscale? Afrique Contemporaine». 2005/1, n° 213, 133-163.

**Chambas G., (2005b).** «TVA et transition fiscale en Afrique, Les nouveaux enjeux, Afrique Contemporaine». 2005/3, n° 215, 181-194.

**Commission Européenne, (2011).** «Politique fiscale propices à la croissance dans les Etats membres et amélioration de la coordination fiscale». *Communication de la commission au parlement Européen et au conseil, au comité économique et social européen et au comité des régions, Examen annuel de la croissance 2012.*

**Daniel JM., (2008).** «Richard Musgrave et les fonctions économiques de l'Etat». *La revue du trésor* n° 1.

**Easterly W., Rebelo S., (1993B).** «Marginal Income Tax Rates and Economic Growth in Developing Countries». *European Economic Review, Vol 37, N° 3, 409-417.*

**Engen EM., and Skinner J., (1996).** «Taxation and economic growth». *National Tax Journal, Vol 49, n° 4, 617-642.*

**Gentry WM., and Hubbard RG., (2000).** «Tax policy and entrepreneurial entry». *Graduate School Business, Columbia University, 1-47.*

**Gordon R., (1998).** «Can high personnel tax rate encourage entrepreneurial activity? ». *IMF Staff Papers, Vol 45, n° 1, 49-80.*

**Hartman DG., (1984).** «Tax policy and foreign direct investment in the United States». *National Tax Journal, Vol 37, n° 4, 475-88.*

**Hasset KA., and Mathur A., (2006).** «Taxes and wages». *American Enterprise Institute for Public Policy Research, Working Paper n° 128.*

**Lee Y., Gordon RH., (2005).** «Tax structure and economic growth». *Journal of Public Economic, Vol 89, 1027-1043.*

**Lucas R.E., (1990).** «Supply-Side Economics: An Analytical Review». *Oxford Economic Papers, vol 42, n° 2, 293-316.*

**Mackenzie GA., Orsmond D., Gerson P., (1997).** «The composition of the fiscal adjustment and growth». *International Monetary Fund, Washington, DC, n° 149.*

**MFA, (2018).** Code des taxes sur le chiffre d'affaire. DGI.

**MFA, (2018).** Code d'enregistrement. DGI.

**MFA, (2018).** Code du timbre. DGI.

**MFA, (2018).** Code des impôts indirects. DGI.

31-MFA, (2000-2016). Lois de finances.

31-MFA, (2000-2016). Lois de finances.

**Milesi-Ferretti G., Roubini N., (1998).** «Growth effects of income and consumption taxes». *Journal of Money, vol. 30, n°4, 721-744.*

**Ministère des Finances Algérie (MFA), (2018).** Code des impôts directs et des taxes assimilées. DGI.

**Neurrisse A., (1978).** «Histoire de l'impôt. Que sais-je? ». *Presse Universitaire de France.*

**Padovano F., Galli E., (2001).** «Tax rates and economic growth in the OECD Countries (1950-1990) ». *Economic inquiry, vol 39, 44-57.*

**Pfister M., (2009).** «Une fiscalité orientée vers l'investissement et le développement : Aperçu de quelques enjeux de politique fiscale en Afrique». *Réunion ministérielle et table ronde d'expert de l'initiative NEPAD-OCDE.*

**Ricardo D., (1817).** «*On the principles of political economy and taxation*». Batoche Books, Kitchener 2001.

**Smith A., (1776).** «*An inquiry into the nature and causes of the wealth of nations*». The Electric Book Company Ltd.

**Tanzi V., & Zee H., (2001).** «Une politique fiscale pour les pays en développement». *Fond Monétaire International.*

**Widmalm F., (2001).** «Tax structure and growth: Are some taxes better than others? ». *Public Choice, Vol 107, 199-219.*

**Young K., (1988).** «The Effects of Taxes and Rates of Return on Foreign Direct Investment into the United States». *National Tax Journal, Vol 41, 109-121.*