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EFFICIENCY OF THE TAX SYSTEM IN MOROCCO: AN EMPIRICAL EVALUATION

KTIT JALAL, ELMAATAOUI RACHID, OUMANSOUR NOR-EDDINE, KARI ABDELKADER

Abstract:

The objective of this paper is to identify some incentive aspects of the tax system in Morocco, particularly those relating to tax expenditures and to analyze its level of economic efficiency. The evolution of this system highlights the multiplication of tax expenditures and the importance of these tax expenditures relating to VAT, followed by corporation tax, registration and stamp duties, and those related to income tax.

By sector of activity, the evolution of tax expenditures reveals the large share of tax expenditures granted to the real estate sector followed by those attributed to the energy sector.

The tourism and printing and publishing sectors are the least important sectors in terms of tax incentives granted compared to all sectors of activity.

The analysis of the efficiency of tax expenditures according to the DEA method, by retaining tax expenditures by sector of activity in Inputs and their respective added values in Output, shows a downward trend in the average efficiency score of all sectors of activity over the 2007-2019 period, which fell from 0.6 in 2007 to 0.52 in 2019.

The automotive and chemical industries and real estate industries show a relatively high degree of efficiency in the use of tax expenditures, while the publishing, printing and industrial sectors food have been shown to be less effective hence the need to consider a far-reaching reform of the tax incentive system.

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Introduction

Confronted by the doctrinal demands of the market economy and its disengagement from economic activity, The state cannot invest indefinitely for lack of sufficient financial means.

It must then promote investment to trigger or maintain a determined level of growth. . Otherwise, the state resorts to tax relief or exemption policies, the psychological effects of which can lead to changes in the behavior of economic agents.

In fact, these advantages granted to investors through the tax intervention instrument remain a rather old practice but a still relevant today.

On the eve of political independence, Morocco has undertaken strategies to boost investment within the framework of economic policy, to replace the private sector and encourage it to act and then develop, by virtue of a policy of liberalization and the adoption of the market economy.

In this context, it should be remembered that most of the incentive measures aimed at attracting new investments which, knowingly and firmly, increase the budgetary burden on the economy and can be considered as real subsidies (public expenditure) which causes an infringement of the principle of equality and fiscal justice before taxes and, at the same time, opens the debate on the effectiveness and efficiency of these devices.

In this regard, supposed to be a lever deployed by the State as part of its support policy for the benefit of certain categories of taxpayers or sectors of activity, the derogatory taxation is often singled out for what it costs to the State without any real quantitative or qualitative assessment of its effects on the sectors concerned by these tax expenditures.

Instead of investing, the state must then promote investment and quite often resort to tax relief or exemption policies, the psychological effects of which can lead to changes in the behavior of economic agents(M.Nmilli, 2011,P.171). In this logic, these tax incentives are therefore similar to tax expenditures to trigger or maintain a determined level of growth.

Based on these findings, it is judicious to analyze the level of efficiency of the so-called incentive policy through tax expenditures and its opportunity cost in Morocco in order to learn lessons on the potentialities or weaknesses of our tax system.
It is from this angle that we suggest a research problem which aims to measure the degree of efficiency of the tax incentives granted to certain activities in order to propel the investment dynamic of the productive sector in Morocco.

It must be noted that the incentive aspects relate in particular to the complexity of the Moroccan tax system because these provisions alter the readability of taxation and lead to a debate on the choice between the exemption and the budget subsidy which is the subject of a such careful examination and rigorous monitoring (CESE, 2012).

This notion raises several unresolved difficulties, particularly in the area of public management. The need to implement this concept arises, above all, a problem of transparency in the management of government spending, as well as a need to estimate the shortfall for the government generated by these preferential tax measures. Hence the legitimacy of responding concretely to the following fundamental question:

What economic efficiency can we attribute to the tax expenditures granted to the productive sectors in Morocco?

It seems interesting to us to divide the plan of this paper into three points to provide the answers to this problem and to address its various aspects.First, in the first point, it is a question of presenting the contours of the concept of tax expenditures and of questioning its conceptual and theoretical framework.

Then, the second point provides a synthetic and analytical assessment of the conduct of the financial strategy in terms of tax expenditures in Morocco during the period 2005-2019.Finally, the last point analyzes via a quantitative approach, the efficiency of tax expenditures at the sectoral level using the DEA method in order to assess the relevance of their maintenance or elimination.

I.   THE CONTOURS OF THE CONCEPT OF TAX EXPENDITURE

1. Taxonomy of tax incentives

In the literature, reflection on the concept of tax incentives is initiated in the United States by Stanley Surrey (1970). The latter outlined a new approach aimed at highlighting the similarity between tax breaks and public subsidies.

For the OECD, "tax expenditures consist of provisions of tax law, regulations or practices reducing or deferring the tax due for a small portion of taxpayers compared to the benchmark tax system" (OECD, 2010)

In France, from which the Moroccan economic system is largely inspired, the most commonly accepted definition consists of considering tax expenditures as "legislative or regulatory provisions whose implementation results in a loss of revenue for the State and therefore for taxpayers a reduction in their tax burden compared to what would have resulted from the application of the standard, that is to say the general principles of tax law'' (JP JOUYET and al, 1987).

In Morocco, the role of tax expenditure has gradually established itself as an instrument of public policy for economic and social reasons; the entire incentive device is inserted, in the bosom of common law and published in an annual report. The said report attempted to give a pure and simple definition of the concept of tax expenditure by indicating that "tax expenditures are part of the tax policy tools of governments, they can be defined as deviations from the benchmark tax system. These are in fact incentive measures resulting in the State waiving part of its tax revenue in order to support the productive or social sector "(Direction Générale des Impôts (DGI), 2018).

However, the functioning of tax expenditures take place, first of all, at the level of the tax base through total or partial exemptions, deductions, allowances, and tax-free provisions. Secondly, in terms of the structure of tax rates, through preferential rates granted to certain activities. And finally, on the level of cash flow, via deferred taxation, tax deferrals, immediate deductions and declining depreciation.

These tax freebies, commonly called tax loopholes, embrace almost all tax measures giving rise to an exemption or a reduction in taxation, whether through a reduction in the rate or in the tax base. The definition of the reference standard is however very difficult because it refers to conceptions of taxation which are sometimes divergent.

These tax measures can take the form of tax credits, tax deductions, income exemptions, reduced tax rates, relief, haircuts, tax credit deferral or tax holidays.

The examination of the main tax expenditures from the angle of the room for maneuver and the socio-economic acceptability of their rationalization makes it possible to identify the typology of tax exemptions between those which aim to encourage investment, agriculture and mobilization of savings, those linked to the promotion of social housing and exports and those aimed at supporting purchasing power.

2. The corrosive effects of the use of tax expenditures

2.1   The windfall effect

According to S.Stanley (1970), tax expenditures generate costs and generate benefits for a group of taxpayers or certain sectors of the economy. Indeed, tax incentives favor those who pay taxes and generate unexpected gains in accordance with the progressivity of income tax. The poorest population is not included in this targeting process and therefore cannot benefit from any preferential benefit from tax expenditures. In addition the cost of these advantages, individually granted ,remains always shared between winners and losers.

In general, this derogatory tax has an incentive effect leading the taxpayer to modify his behavior in the direction desired by the legislator and to devote, for example, savings intended to partially compensate for the loss of purchasing power or, help him to acquire his dwelling house.

The problem that arises acutely is to question the way in which the taxpayer will actually react to these "incentives" and thus adopt a behavior simply to take advantage of a windfall effect resulting in a result that is counterproductive to those "incentives". targeted objectives.

2.2   Budgetary, administrative and economic effects

Tax expenditures generally refer to measures that have the effect of reducing or deferring taxes payable by taxpayers. They can take many forms, including income not subject to tax or tax exemptions. In other words, tax expenditures constitute a deviation from a basic tax regime 1 assimilated to preferential and derogatory tax measures aimed at achieving various strategic objectives, whether at the economic, social, cultural or other levels.

On the other hand, and through fiscal policy, these preferential measures represent an alternative to other forms of government intervention.

The nature of the preferential tax measures programs contained in tax systems is intrinsically inequitable (Luc godbout, 2006) which could generate horizontal inequalities and undermine tax justice. This is made possible when all taxpayers have the same needs or the consumption preferences of a product which has benefited from a tax advantage which at the same time slows down the possibilities of mobilizing financial resources. The latter are beginning to constitute a bottleneck by its budgetary burden on the tax system and a major factor which continues to grow and make worse the budget deficit.

Otherwise, the tax expenditures are more difficult to administer given that the tax administrations do not have enough experience in the administration and control of tax expenditure programs characterized by many exceptions, which could lead to fraud or even to unintentional errors.

In the same order of ideas, tax incentives distort decision-making and generate imperfections in market mechanisms. When tax expenditures favor a specific sector of the economy. What should cause a deviation resources to the privileged sector and therefore create a crowding out effect on sectors, some of which are considered strategic.

These distortions, which result from these advantages, therefore result in an amplification situations of the annuity altering the free play of fair competition and thus nourish an uncertain perception and a negative view of the neutrality of the tax.

In front of the growing number of tax incentives, the costs of tax compliance are significant, in terms of time and money that taxpayers must face.

In addition, uncertain interpretation and more opaque regulation of legal disposition, on tax expenditures make the tax structure more complex and open up possibilities to manipulate the tax system, which encourages tax evasion and evasion.

Another problem that may affect the tax expenditure policy, is that which concerns the development of regional economic agreements and multilateral agreements which will modify the fiscal autonomy of states by imposing constraints on fiscal interventionism and the freedom of action of states.

It must be noted that the definition of the benchmark tax system, against which the tax incentives should be compared between countries, is often subject to controversy. Is about personal income tax, for example, there is no internationally recognized benchmark.

Thus, we observe that different reference systems are used in the analyzes of tax expenditures and that countries generally follow their existing tax systems closely. Like these systems often vary from country to country, it is generally difficult to make international comparisons of tax expenditures (OECD, 1996).

II. THE CONDUCT OF THE FINANCIAL STRATEGY FOR TAX EXPENDITURES IN MOROCCO

1. Current Situation

The purpose of this first point is to present, in a synthetic manner, the salient features of the conduct of the financial strategy in terms of tax expenditures during the period 2005-2019, knowing that this has undergone significant changes since 2005, the year in which the first report was published on tax expenditures in Morocco.

Today, and after more than a decade of application of the financial strategy in terms of tax expenditures, the tax system in Morocco has experienced largely positive results in terms of modernization and consolidation of tax revenues by broadening the tax base, including the weight of tax expenditures which continues to increase, with increasing impacts restrictive in terms of its public finances.

Indeed, the tax expenditure system seems to go through two distinct phases with two different trends: this is the period between 2005-2012 and the other period between 2013-2019.

The first phase was characterized by a strong progression and continuous swelling of the amounts of these preferential measures to reach an unprecedented extraordinary amount of 36310 in millions of Dirhams in 2012, marking a variation of 11% compared to the previous year.It is important to point out that this year is considered to be the most doped by derogatory measures ever recorded. Regarding the second phase, we note the slowdown in the growth of these tax incentives in terms of volume.

From a more analytical perspective, the analysis of the evolution of tax expenditures (Graph1), clearly shows that the average amount of tax expenditures in Morocco over the period from 2005 to 2019 is estimated on average at 28 850 in millions of dirhams.

We note in particular negative variations of (-8%) respectively for the fiscal years 2012-2013 and 2014-2015 and a decrease of the order of (-12%) for 2016-2017, with the exception of the financial year 2016 where the trend is reversed and becomes positive, either a slight variation of (+ 2%) compared to 2015.

Graph 1: Total tax expenditures and their annual variation

Legend: Total tax expenditure (in millions of Dirhams) — Annual variation in tax expenditures
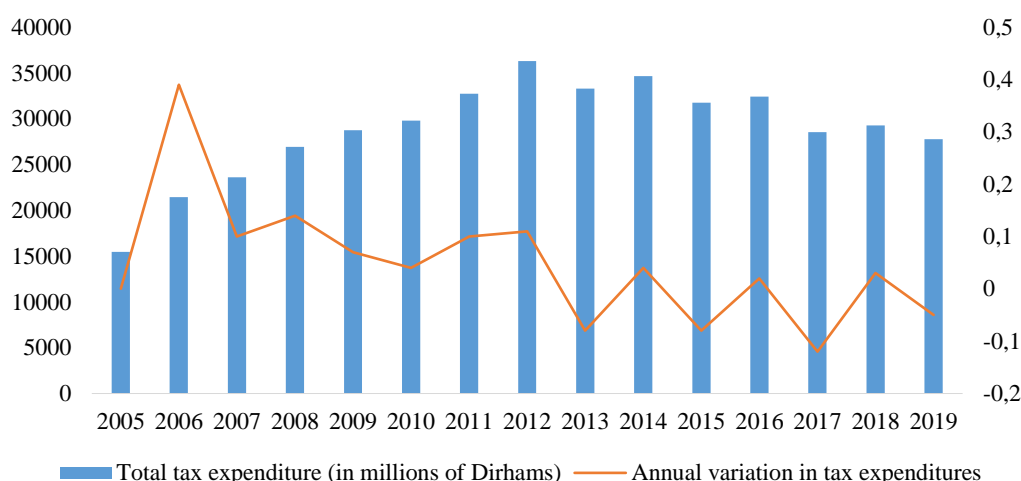
Source: calculations by the authors using data from the DGI.

Reading(graph 1) also shows that at the end of 2019, the overall annual cost of the tax incentive system amounted to 27,785 Million in Dirhams with a decrease of (-5%) compared to a cost of 29,270 Million in Dirhams. already registered in 2018, due to the application for the second consecutive year of the target benchmark. With this new reference system for tax expenditures, these derogatory measures have seen their number tend to decrease.

In addition, an examination of the structure of the different categories of tax expenditures compared to the totals of these same expenditures over the period 2005 and 2019 shows that value-added tax (VAT) related expenditures represented almost half on average (47.4%). which represents the biggest of the incentives and thus marks the dominant weight in the composition of tax expenditures in terms of cost, followed by corporate tax(I.S) with an average share of around 19.4%, followed by Registration and Stamp Duty (DET), they absorb almost 14%.

In terms of income tax (I.R), it takes up 13% to support purchasing power, facilitate access to housing and encourage or mobilize savings. Finally, the domestic consumption tax(T.I.C) and import duties, deemed to be the lowest, they absorb 3.8% and 3.5% respectively.

From the above, it can be seen that the structure of tax expenditures by type of tax has evolved from year to year, with an almost stable structure, but this evolution remains largely characterized by the predominance of relative tax expenditures relating to the VAT, IS and IR trilogy.

2. Progress in quantifying derogatory measures

In Morocco, this tax expenditure lever has been widely used over time without any evaluation or appreciation the achievement of the objectives assigned to these tax exemptions. Indeed, and with the first publication of the first report in 2005 on tax expenditures accompanying the finance law, there has been undeniable progress in quantifying this expenditure. We went from the number of measures recorded from 337 in 2005 to 418 in 2017 and from the number of measures assessed from 102 to 309 for the same period.

Totaling 15.4 billion Dirhams in 2005, expenditure reached DH 34.7 billion in 2017.It is by applying the principles to the determination of the reference system (DGI, 2018, p.2).We have observed a significant reduction in the quantification of tax expenditures for 20172.

In fact, the number of recorded expenditures goes from 418 to 291, or less 127 measures, and that assessed expenditure in turn goes from, 309 to 231, or less than 78 measures. As for the amount of expenditure evaluated, it is reduced by more than 6 billion Dirhams, going from 34.7 billion Dirhams to 28.5 billion Dirhams.

Despite the desire shown for more than a decade to drastically reduce these expenditure, it is clear that their amount remains very high and their governance is still marked by the following failures:
- There is still no study of the economic and social impact of the derogatory measures in force to find out whether the objectives which motivated this expenditure have been achieved or not.
-New expenses continue to be introduced into the tax system without having a prior impact study and sometimes without setting a temporary horizon for these exemptions. It must be said that the lobbies behind these exemptions do not disarm and do not fail to have influence on the tax decision.(N. Bensouda, 2010, 2013).

Graph 2: Number of derogatory measures by type of tax
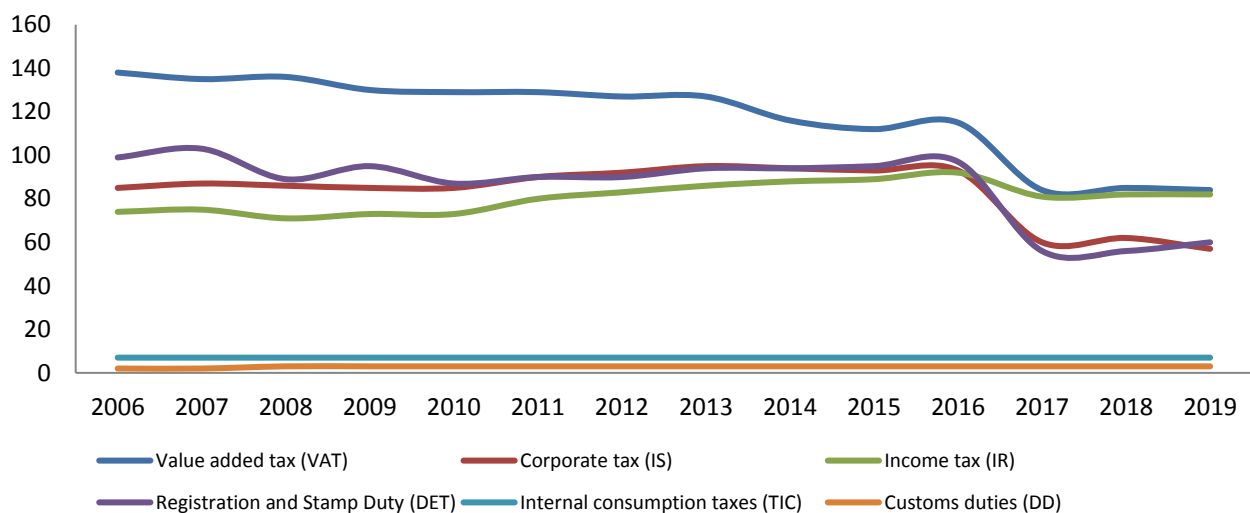
Source:the general direction of taxes (DGI)

In the same vein, it is clear that the legislator continues to reduce these exemptions to be in line, moreover, in line with the recommendations recommended by the national meetings on taxation of 2013 and 2019 of the Ministry of the Economy and finances, the Economic, Social and Environmental Council, and those of the Court of Auditors.

In the same order of ideas, on the 2020 tax expenditure report, we learn that the distribution of suppressed tax expenditures observed between 2006 and 2019 as they emerge from the various reports accompanying the various bills of the finance law is as follows in the following table:

Table 1: Breakdown of tax expenditures suppressed in million Dirhams

Years	Number of measures	Amount of measures	Percentage %
2006	32	1 313	6,60
2007	7	882	4,43
2008	15	2 744	13,80
2009	10	1 631	8,20
2010	12	1 639	8,24
2011	0	0	0,00
2012	3	2 938	14,77
2013	5	622	3,13
2014	3	1 347	6,77
2015	15	4 887	24,57
2016	13	784	3,94
2017	5	508	2,55
2018	1	301	1,51
2019	9	293	1,47
Total	**128**	**19889**	**100**

Source: Tax expenditure reports: 2006-2019

The year 2019 stood out with a very small number of cancellations of these tax expenditures to represent only 293 million dirhams, the lowest amount recording 1% of the overall volume suppressed since the 2006 budget year.

In this context, we must question the relevance of these deletions by the legislator. In other words, were these deletions subject to a prior assessment or was the decision to cancel them accidentally made?

In fact, it seems that the objective of this change of measurement instrument is rather to show that tax expenditures are decreasing, when in reality they are increasing and the incentives have mainly resulted in increasing the concentration of the tax burden on a reduced number of taxpayers who actually pay tax.

Thus, during the past fifteen years, the rate of tax burden has hovered around 22% of gross domestic product, on average, which reflects a polarization of its weight, on the one hand, on a number of taxpayers who provide a good part of State budget revenue and a contribution base which remains far from representing the true fiscal potential of the country, on the other hand. This ratio of tax burden is largely high compared to other countries with similar economies.

Noting in passing that this rate does not provide information on the organization of the tax burden given that the agricultural sector still benefits from total tax exemption in terms of value added tax and partially in direct taxes.

At the same time, the proliferation of tax regimes and the proliferation of exemptions or tax benefits for activities that contribute significantly to the formation of GDP ,normally, pushes the structured economy to be taxed in full force, thus supporting a real tax burden rate much higher than the average pressure rate of all parts of the economy.(DGI, 2019, p.57).

It should be noted in this regard that other factors still persist, with prominent effects on the tax burden in Morocco, among others: tax evasion and fraud, a prosperous informal

sector who feeds capital flight and business transactions that lead directly to payments abroad and that continue to elude the tax authorities and remain unchecked by the tax base.
Evolution of tax expenditures broken down by business sector

The graph 3 below shows the distribution of tax expenditures by business sector for the period 2005 - 2019 shows evidence that they evolve in a variable way over the years.(Graph 3).

In general, the analysis of tax expenditures by business sector highlights several elements that deserve to be clarified. Thus we observe that the average annual evolution of these tax expenditures recorded, in large part, to companies operating in the real estate sector monopolize the lion's share, taking the order of 18% of tax expenditures. For its part, the sector of agriculture, fishing represents a fairly significant share of 11.22% of all tax expenditures.

As for Safety, Health and Social Security sector and Measures benefiting all sectors, they in turn garner a significant portion of 10.39 % and 8.61 % respectively of these tax gifts. While the manufacturing-based export sector, including clothing and electrical equipment and the extractive industry, only holds an average share of 8.19 %,after we can find the Food industries with 7.59 % (CESE, 2019).

On the other hand, the sectors apparently the least important in terms of tax incentives are coming back to energy sector, education and arts-craft and therefore only represent an average of less than of 1%.

Graph 3: Average distribution of tax expenditures by sector (2005-2019)
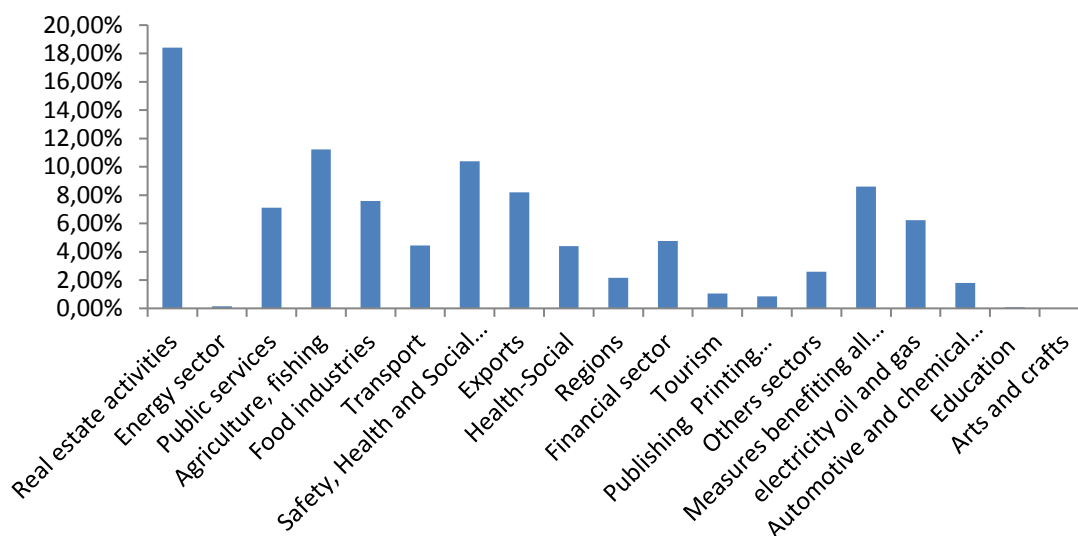
Source: Calculations by the authors, from the DGI Data.

3. Evaluating the efficiency of tax expenditures: An empirical trial

In order to assess the level of performance and efficiency of public intervention in certain sectors deemed to be priorities via tax expenditures, the Data Envelopment Analysis (DEA) method is used because it's simple and easy to implement and does not require the use of sophisticated econometric tools. In addition, one of the major advantages of this method lies in the fact that it's applicable to multiple production activities, both in "output" and in "inputs". (Tim Coelli and Sergio Perelman, 1996).

To address the issue of the efficiency of tax expenditures using the DEA method, data by tax expenditure activities sector such as Inputs and value added data are used. The objective is to analyze the degree of efficiency of tax expenditures during the period 2007-2019.

3.1 Presentation of the DEA method

The DEA method is a non-parametric method inspired by Farrell's model (1957) which sought to assess the technical and allocative efficiency of firms (Tim Coelli and Sergio Perelman, 1996). A sector is technically efficient if it operates on the production possibility frontier. It is considered efficient from an allocative point of view, if it minimizes its costs under the production constraint. The DEA method is thus equivalent to a constrained optimization process that uses linear programming. The term "Envelopment" is used here to denote the assumption that the production frontier envelops all observations.

This method uses the Inputs and Outputs of entities to construct an empirical efficiency frontier. This frontier brings together the "best practices", that is to say the entities which cannot reduce their factor consumption given their production volume, and consequently generates the levels of efficiency from the information on the inputs. and the outputs of the entities studied.

On the other hand, the inefficiency of other entities is measured by their distance from this efficiency frontier. Consequently, the DEA method makes it possible to calculate the efficiency scores which measure the intensity of the efforts made by the compared entities, to analyze how the observations combine to form the efficiency frontier and to explain certain origins inefficiencies (slacks)[3].

In addition, based on linear programming, this method makes it possible to identify empirical production functions based on microeconomic theory (Seiford, 1996), which compares all similar units while simultaneously taking into account several dimensions. Each unit is considered a Decision-Making Unit (DMU)[4]. Inputs are resources used to create outputs of a given quality. Each DMU[5] consumes varying amounts of "m" different inputs to produce "s" different outputs.

Specifically, DMU consumes amounts $X_j = \{x_{ij}\}$ of inputs (i = 1,….,m) and product of amounts $Y_j = \{y_{rj}\}$ of output (r = 1,…..s).

For each decisional unit k:

E_K = weighted sum of outputs / weighted sum of inputs =

$(W1 * Out1 + W2 * Out2 \quad +…….) / (V1 * Inp1 + V2 * Inp2 + ……)$

The DEA method allows the calculation of separate weights for each unit and the weights are those which give the best result for the unit considered. So, the idea is that for each DMU_K:

- Maximize E_K

 - Under constraint: $E_K \leq 1$

For all DMUs in the population considered (no other DMU is declared to be over efficient).

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[3] The analysis of the output and input slacks respectively indicates the quantity of production units that must be increased while keeping intact the production factors or the quantity of production factors that must be reduced to be efficient with the same production.
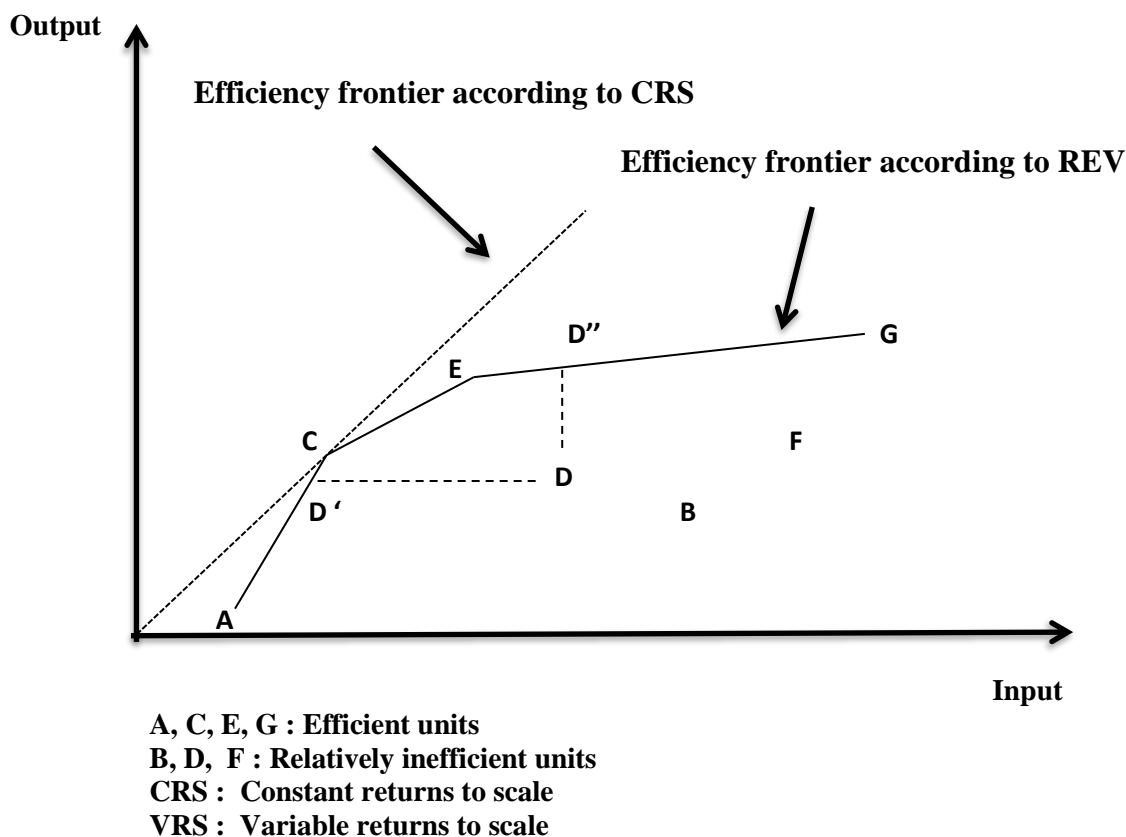
[4] Decision Making Units, or Decision Making Units, can technically be a production unit, a country or a region. In this study, DMU represents one line of business.

[5] By convention, it is established that the number of DMUs must be equal to or greater than 3 times the number of inputs and outputs

- All weights are positive.h

Based on the principle of iterative comparison, this technique identifies a frontier that contains all the efficient DMUs managing to provide better results with a minimum of resources (max output-mini input).

Figure 4: Comparison of different methods of assessing relative efficiency

A, C, E, G : Efficient units
B, D, F : Relatively inefficient units
CRS : Constant returns to scale
VRS : Variable returns to scale

Source: Coelli, T. and Perelman, S(1996)

The principle of this method is to find the frontier of the feasible domain on which the best DMUs are located and then to measure the distance which separates the other DMUs from the latter. This distance is expressed using an "efficiency score". Efficient DMUs have scores equal to 1 while inefficient DMUs have a score between 0 and 1.

The method can be approached according to two criteria. The first relates to the orientation in inputs (optimization of the consumption of inputs for a given level of outputs) or in outputs (maximization of outputs for a constant level of inputs) and the second concerns the type of returns to scale chosen (constant or variable). According to this last criterion, the results remain comparable with very similar scores and an identical classification of the DMUs.

In this article, by focusing on the efficiency of tax expenditures allocated to the different sectors of the economy, the DEA method allows an approach in terms of sector benchmarking to offer an analysis of performance even if the factor endowments are different,

by proposing, on the basis of linear programming techniques, the identification of sectors that have benefited from tax expenditures, considered efficient since they are located on the production frontier.

From this identification, it is possible to position all the sectors belonging to the analyzed network and assign them a corresponding inefficiency score.

Thus, the main contribution of this method in this study is to find the frontier of the feasible domain on which the best DMUs are located (the activity sectors) and then to measure the distance which separates the other DMUs from the latter. This distance is expressed by means of an "efficiency score"

Efficient DMUs have scores of 1 while inefficient DMUs have a score between 0 and 1.

The DEA method adopted in this work is approached according to two criteria:

- The first relates to the orientation in inputs, seen the objective of the State during the last years is the optimization and the rationalization of the public expenditure in general and that of the tax expenditure allocated to the activity sectors in a particular way;

- The second relates to the variable returns to scale according to which the results remain comparable with very similar scores and an identical classification of the DMUs.

We have retained in this study a single output and a single input:

- The Output is the added value of each sector of activity (in Millions of Dirhams) it is measured by the share released from production after deduction of Intermediate Consumption;

- The Input is the tax expenditure allocated to each sector of activity (in Millions of Dirhams): it includes all the tax incentives relating to VAT, registration and stamp duties, IS, IR, import duty and Internal Consumption Tax.

3.2 Analysis results and Interpretation

The use of the DEA method to assess the efficiency of the productive sectors in terms of the absorption of tax expenditures shows a downward trend in the average efficiency score of all sectors of activity over the period 2007-2019. This score fell from 0.6 in 2007 to 0.52 in 2019.

Graph 5: Evolution of the average efficiency score of tax expenditures
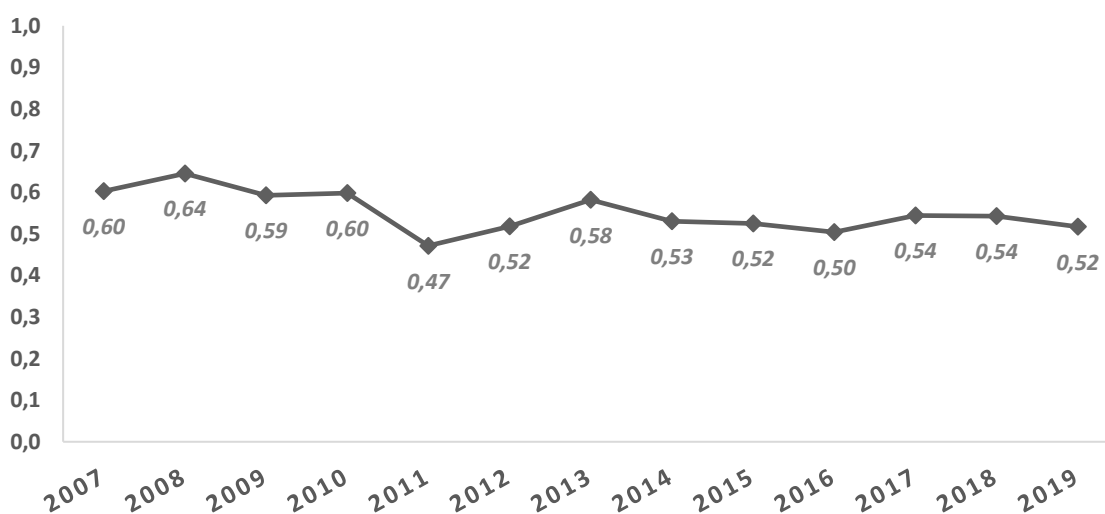
Source: calculations by the authors

While the year 2011 had the lowest average score (0.47), the average efficiency scores during the period 2012-2019 are slightly trending upwards online at a time when we are witnessing a certain decrease in tax expenditures allocated to all sectors, going from 36.3 billion dirhams in 2012 to 27.5 billion dirhams in 2019 (or -24%).

This result suggests a relatively less important capacity of the productive sectors concerned to effectively use these tax expenditures to produce more added value and to show resilience in the face of unpredictable changes in the economic situation. However, this overall development hides differentiated performance from one sector to another.

Indeed, two sectors out of the eleven sectors covered by this study, namely the automotive and chemical industry and the real estate activities sector, display a relatively high degree of efficiency in terms of the use of tax expenditures with respectively scores average of 1 and 0.99 during the period 2007-2019. On the other hand, the publishing, printing and food industry sectors were less efficient with lower average scores respectively 0.09 and 0.18.

Table 2: Efficiency scores by business sector

Sectors of activity	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	average	Rank
Real Estate activities	1	1	1	1	1	1	1	0.99	1	0.99	0.99	1	1	0.99	2
Safety, Health and Social Security	0.6	0.64	0.53	1	1	1	1	1	1	1	1	1	1	0.91	4
Agriculture and fishing	0.49	0.75	0.74	0.64	0.61	0.57	0.92	0.56	0.96	0.77	1	0.85	0.69	0.74	5
Financial sector	0.94	1	0.67	0.4	0.23	0.23	0.29	0.27	0.13	0.11	0.12	0.16	0.14	0.36	6
Food industry	0.14	0.19	0.24	0.23	0.13	0.14	0.16	0.16	0.11	0.1	0.15	0.32	0.28	0.18	10
Transport	0.31	0.54	0.6	0.51	0.24	0.32	0.33	0.3	0.19	0.19	0.24	0.28	0.26	0.33	7
Automobile industry and chemical	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mining activities	0.15	0.2	0.16	0.41	0.25	0.4	0.47	0.4	0.21	0.19	0.24	0.04	0.04	0.24	9
Tourism	1	0.91	1	1	0.54	0.88	1	1	1	1	1	1	1	0.95	3
Publishing, Printing and other sectors	0.06	0.17	0.15	0.11	0.07	0.07	0.08	0.05	0.05	0.06	0.06	0.15	0.13	0.09	11
Exports	0.92	0.7	0.43	0.28	0.11	0.09	0.15	0.19	0.12	0.14	0.2	0.17	0.15	0.28	8

Source: calculations by the authors

In terms of the evolution of the efficiency score of the different sectors of activity, the graph below provides a better visualization of this evolution between the two sub-periods 2007-2011 and 2012-2019.

Graph 6: Evolution of efficiency scores by sector between the periods 2007-2011 and 2012-2019
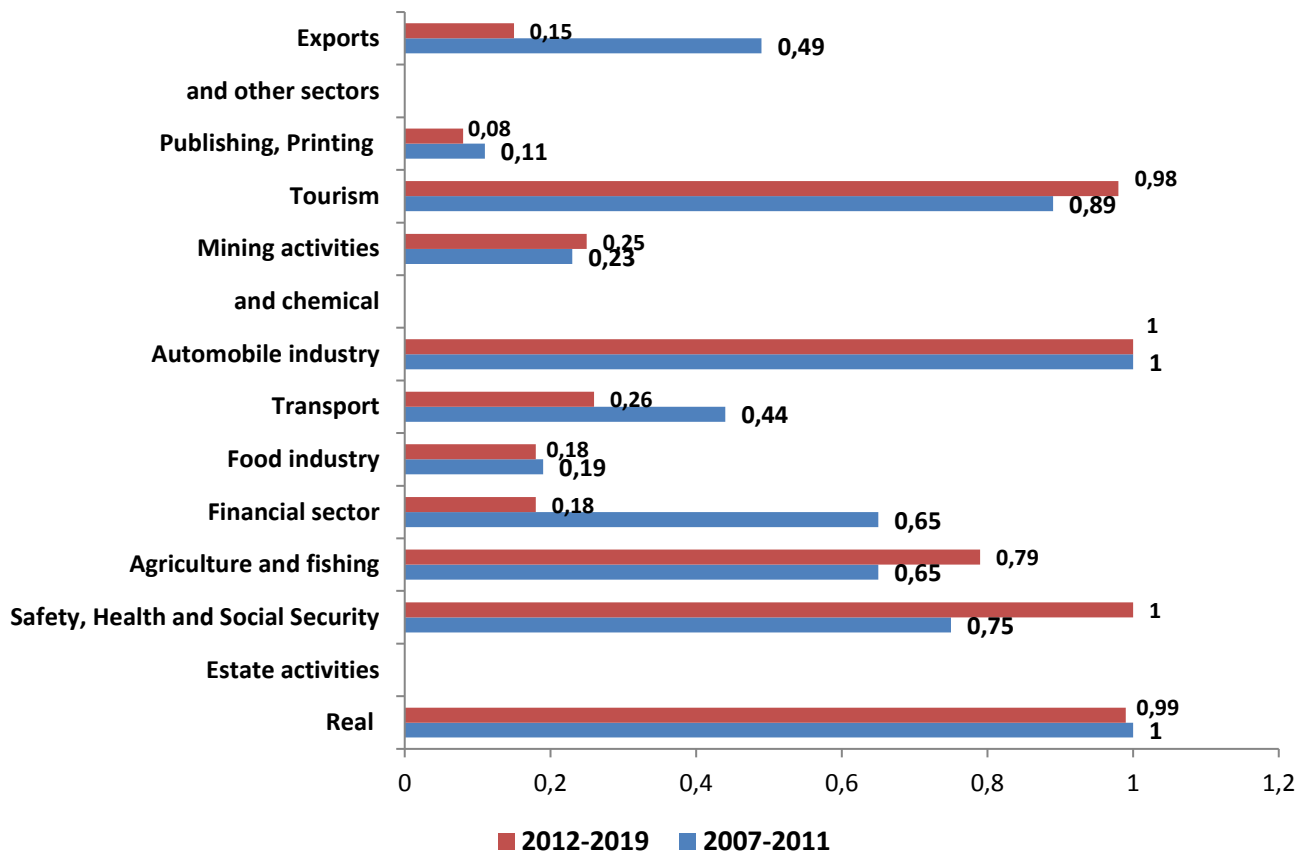
Source: calculations by the authors

The sectors of the automotive and chemical industry and to a lesser extent that of real estate activities evolve on the frontier of efficiency, while other sectors show weaker results between these two sub-periods, in particular the publishing and printing sectors and that of the food industry.

These results are largely in line with the analysis observed in the study of the performance of the beneficiary productive sectors in terms of added value creation. In other words, the sectors whose macroeconomic performance improved significantly between the two sub-periods 2007-2011 and 2012-2019, correspond to those whose efficiency scores are considered relatively high between the two periods.

Indeed, if the average tax expenditure allocated to the real estate activities sector for the period 2012-2019 has increased by 44% compared to the period 2007-2011, while the added value generated by this sector has increased by 32% between the two sub periods. Concerning the automotive and chemical industry sector, its efficiency is shown by a positive evolution of its added value between the two sub-periods (+ 36%) when the tax expenditures allocated to this sector recorded a negative variation (- 34%).

The reasoning with the indicators specific to the sectors studied reveals a close relationship between the action of public authorities offering tax advantages and the reaction of real estate developers as well as their counterparts in the automotive and chemical sector.

With the exception of these two sectors, compared to the cases studied so far, the other sectors do not seem to react to tax incentives as intended by the legislator. In fact, the objective assigned by the latter seems diverted from its initial vocation, since the benefits of the incentive were used for purposes other than those intended. With such a tax incentive policy for investment, we can conclude, at this level of the analysis, that the incentive policy, having cost the State tax expenditures, seems to us to confirm the absence of a causal relationship. Between the extent of tax expenditures and the efficiency of the volumes of investments made.

Conclusion

The discussion in this paper has attempted to determine the examination of the provisions of the finance laws since 2005 to 2019 includes and makes it possible to identify a certain number of areas generating injustice and tax discrimination.

It should be remembered in this regard that if the Moroccan tax system contains a measure with an incentive effect, its corollary is potentially the risk of distortions in economic behavior in terms of investment, savings, consumption and labor supply, short and long term.

Tax expenditures represent significant amounts, in particular because of their number and their renewable nature. These advantages, granted in this context, deprive the treasury of precious resources for the financing needs necessary for growth. Moreover, certain unjustified, tax advantages continue to apply unfairly benefit some taxpayers to the detriment of others.

This unequal treatment of taxpayers undermines the consistency of compulsory deductions and more particularly placing the tax burden more on work and the middle classes which no longer make it possible to safeguard equality before tax and at the same time cause additional costs for the community.

It is clear from our analysis that the ranks of the activity sectors covered by this study, clearly show that two sectors out of eleven sectors, more precisely, the automotive and chemical industry and the real estate sector, display a degree relatively high efficiency with significant added values in terms of tax expenditure uses. Then, comes third, the tourism sector followed by the Security, Health and Social Welfare sector considered to be less important, which indicates that these productive sectors are much less efficient in terms of the absorption of tax expenditures.

Given this reality and its pressure by its budgetary weight on public finances, the inefficient use of all these tax expenditures must not constitute tax optimization niches, but it must also be limited in time and more precisely matched with well-defined objectives expressed in a clear and precise manner.

In this regard, it is a question of applying the rules of sound management of tax expenditures. In fact, each legislative proposal for derogatory measures must, imperatively, be accompanied not only by a precise assessment of its budgetary cost but also and above all a preliminary study of its socio-economic impact, together with well-specified objectives, within a well-determined time horizon or even a well-defined targeting of beneficiaries to assess the results, on the one hand, and with the aim of maintaining them or abandon them, on the other hand.

So, the public authorities are now forced to give more priority to tax expenditures relating to the encouragement of innovative sectors, creating added value and jobs, and

oriented towards research and development which are the engines of growth economic and social.

Improving the level of tax governance is required, it is more relevant to review and question the legitimacy of these tax expenditures, in order to lead to tax fairness which inevitably constitutes a lever for social justice.

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