European Journal of Business and Management www.iiste.org
ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)
Vol.10, No.9, 2018

Taxation Effect on Depreciation: Evidence from the Algerian Tax System

Bouazza Abdelkader[1] Mostéfaoui Sofiane[2*] Sidameur Zaineb[1]
1. Department of Commerce – University of Adrar – Algeria
2. Department of Management- University of Adrar – Algeria

Abstract:
In this article, we attempt to examine the fiscal impact of an important element among the three components of self-financing, namely: Depreciation allowances. In this regard we try to study the effect of taxes on each type of depreciation through the Algerian tax code.Through this study, we conclude that taxation influences the decision of the company regarding the choice of depreciation methods. This influence is felt by the implicit tax cost of each type of depreciation. Nevertheless, the introduction of deferred amortization should allow the company, especially in deficit period, to improve its financial situation. Moreover, this depreciation will not be lost. On the contrary, it can be deferred without limitation of time, as long as the results will remain in deficit.
Keywords: Depreciation - Tax – Algeria

1. INTRODUCTION:

Self-financing resources are one of the main elements of the company's financial strategy. It helps strengthen the financial structure of the company by increasing equity. Self-financing represents the company's ability to replace and grow economic assets. Similarly, it represents the wealth retained by the company itself which constitutes an internal resource intended to cover the financial needs of the enterprise (Raymond H. Peterson, 2002; Don R. Hansen et al, 2009)

In addition, cash flow represents the portion of the capital generated by the activity and retained within the company in the form of three components of the cash flow which are: depreciation and amortization expense, provisions net of write-backs, and net profits from undistributed exercises (Belverd E. Needles, Jr et al, 2007)

As a result, depreciation is the monetary expression of the depreciation suffered by depreciable fixed assets as a result of their use or ownership by the enterprise. It represents the accounting statement of the depreciation of investments in order to reconstitute the invested funds (Hugh Coombs et al, 2005; Robert Parrino et al, 2012).

In this sense, it is different from some other aspects such as:

- Financial amortization which consists of repaying the borrowed capital;
- Amortization of the capital which makes it possible to be refund to the shareholders all or some of the subscribed shares.

In this context, the purpose of our study is to present and analyze the tax treatment of depreciation in the Algerian tax system.

2. THE DEPRECIATION IN THE ALGERIAN TAX LEGISLATION:

Depreciation is the monetary expression of the decrease suffered by depreciable fixed assets as a result of their use or ownership by the enterprise. It is represented by the accounting statement of the investments' depreciation in order to reconstitute the invested funds (Menachem Berg et al, 2001; Anson T. Y. Ho, 2017).

In this sense, it is different from some other aspects such as:

- Financial amortization which consists of repaying the borrowed capital;
- Amortization of the capital which makes it possible to refund to the shareholders all or some of the subscribed shares.

Self-financing only takes into account the concept and the valuation of depreciation because it constitutes a source of financing. This concept of depreciation will be detailed above through:

- The definition of depreciation;
- The elements and characteristics of depreciation;
-The economic and financial role of depreciation.

Depreciation in the broad sense is equivalent to an irreversible reduction, spread over a given period, of the amount brought to certain balance sheet items, for example amortization of a loan.

From this definition we can take the following three ideas:

-This is an irreversible reduction;
-This reduction is spread over a determined period equal to the probable duration of use of the items to be amortized;
-This reduction may affect asset items, such as depreciation of property, plant and equipment or intangible assets, as well as liabilities, for example, amortization of borrowings.

It is also an accounting statement of a decline in the value of an asset resulting from use, time, change of technology and any other cause. Because of the difficulties in measuring this decline, depreciation generally consists of the spread over a probable life span of the value of the property normally depreciable.

There are generally three different conceptions of depreciation (Mervyn A. King, 1975; Moshe Kim et al, 1988; Salwa Hana Yussofa et al, 2014; Jongsang Park, 2016; Sasson Bar-Yosef et al, 1994):

1 - Economic design (depreciation - distribution):
Depreciation is a procedure for distributing the cost of an investment over the period of its exploitation

2 - Financial design (depreciation - renewal):
The purpose of amortization is to provide the resources needed to renew capital assets. It constitutes a depreciation fund intended to finance the new fixed assets.

3 - The legal and accounting concept (depreciation - depreciation):
Depreciation is an accounting process that corrects the valuation of assets. It recognizes the depreciation of the value of fixed assets attributable to the passage of time, technical progress or any other cause.

By adopting this latter concept, the FAP (Financial Accounting Plan) defines depreciation as follows: "Depreciation represents the recognition of the depreciation of investments making it possible to reconstitute invested funds".

Similarly, it consists in spreading the cost of the property over its probable duration of use according to a depreciation plan; any significant modification of the use conditions of the property justifies the revision of the plan being executed"

Therefore, depreciation is the recognition in accounting of the irreversible depreciation of fixed assets. This is due to use, time, and obsolescence. The purpose of the amortization is to allow the company to build up the capital needed to renew the asset.

According to NAP, the majority of fixed assets are gradually losing their value either because of obsolescence resulting from progress or the technological change in particular.

However, the depreciation is used to support the accounting entries of companies of this obsolescence or for any other reason. These depreciation allowances allow the company to set up, at the expiration of the probable useful life of the asset, the equality of the capital to the nominal value of its cost or acquisition cost.

In general, depreciation is the recognition of a diminution of the asset value resulting from the use, time or evolution of the techniques, or from any other cause. This allows the company to generate the necessary amounts for the renewal of the amortized assets.

3. THE ECONOMIC AND FINANCIAL ROLE OF THE DEPRECIATION:

The total amount of depreciation applied annually by an enterprise constitutes an internal resource contributing to the financing of new investments. In addition to the result retained in the company, the depreciation amount forms the cash flow. The latter constitutes a global amount which represents an essential element of the management analysis of the company. Thus, it represents the overall self-financing capacity of the company. In addition, the company's annual depreciation mechanism allows it to renew its capital assets, since it guarantees that it will be kept in its assets equal to the value that has been subtracted to measure depreciation. In addition, depreciation is a source of financing available to the company as long as it is not needed to replace capital assets.

3.1. THE DEPRECIATION TAX SYSTEM:

Depreciation is an important element in the organization's self-financing. It depends on a large part of the annual endowments (Douglas A. Kahn, 1979; Paul K. Chaney et al, 1994; R. R. Officer, 1994). Since in taxation the annuity comes as a deduction from the taxable profit, the choice between the different systems of depreciation allowed by the Algerian tax legislation is not neutral for the amount of the final result, therefore on the self-financing of the company.

In this section, the following items are analyzed:

-The conditions of depreciation deductibility;
-The various depreciation techniques in the Algerian tax system;
-The limit of Algerian tax legislation on depreciation.

3.2. THE CONDITIONS OF DEPRECIATION DEDUCTIBILITY:

From an accounting perspective, depreciation is a charge deductible from the tax base, but this deductibility is subject to compliance with the necessary conditions. As such, depreciation is tax deductible under the following conditions:

1 - Depreciation should only be applied to items subject to depreciation:
In principle, depreciation should be justified by special circumstances. Similarly, they can only be related to items of fixed assets subject to irreversible depreciation. For the tax management, depreciation is the result of use and time.

If depreciation results solely from use and time, no proof of depreciation is required. On the other hand, when depreciation is exceptional, to be admitted as a deduction, a justification is necessary. For example, some fixed assets do not depreciate either with use or with time. This is particularly the case for land and business assets. However, the costs incurred to renovate the equipment increase the value of the asset, which will increase the endowments due to the incorporation of these costs in the cost of the investment.

2- Depreciation should relate to goods listed in the asset side of the balance sheet:

Depreciable property can only be depreciated from the taxable income if it constitutes an asset value of the enterprise. Most of the time, this condition is satisfied if the company owns it. In certain particular cases, the property may be depreciated even though it is not owned by the company. For example, a company that simply has the enjoyment of property under a lease or lease is not allowed to deduct depreciation from its profits. These will be practiced by the owner.

3 - Depreciation must be recorded in the accounts:

Depreciation should not be applied only when the results are profitable. Even in the event of absence or insufficiency of profits, the depreciation is carried out so that the balance sheet is sincere. These depreciations must be recognized at the end of each financial year. In this case, depreciation should be recognized as an expense in the appropriate amortization expense account (formal requirement). In the opposite case, we are dealing with irregularly deferred depreciation which is not deductible. These depreciations recorded must be detailed in the table of fixed assets and depreciation. This must be attached to the accounting documents to be filed with the annual income tax return.

4- Depreciation must correspond to the actual depreciation suffered by the investment:

Exaggerated depreciation, particularly when the rate used does not correspond to the probable duration of use of the property, must be reintegrated into taxable income. In this case, the depreciation charge is calculated on the original value and the accumulated depreciation cannot exceed this value.

It should be noted that there is an exception for passenger vehicles. In this case, the basis for calculating deductible depreciation annuities is limited to a unit acquisition value of 1,000,000 DZD (including tax). This ceiling is applicable from 1 January 1997. It goes without saying that the company must, for the purposes of determining its accounting profit, calculate these depreciations on the basis of the actual acquisition value. If this is greater than 1,000,000 DZD and for the determination of the taxable result, the company reinstates the depreciation corresponding to the portion above this limit. It should be noted that the 1,000,000 cap does not apply when passenger vehicles are the main tool of the business. Examples include rental companies for passenger vehicles.

5- The use of the property must be in the normal course of business:

The depreciable property should not be used except in the normal course of business. This condition is that a charge is deductible only if it is deemed necessary for the operation.

4. THE DEPRECIATION IN THE ALGERIAN TAX SYSTEM:

According to article 174 of the code of direct and assimilated taxes, the linear system is depreciation of right. However, this article allows the use of declining balance depreciation and progressive depreciation. It should be emphasized that the Financial Accounting Plan (FAP) does not impose any specific method. Similarly, there are several types or methods practiced. As regards the depreciation methods used in the Algerian tax legislation, these cover:

- Linear or constant depreciation;
- Declining balance;
- Progressive depreciation.

When it comes to comparing the three methods of depreciation, declining balance is the method that allows the company to recover more quickly the sums invested. This advantage is even more important during periods of high inflation, since the company benefits from less depreciated funds than using the other two depreciation methods.

It should be noted that Algerian tax legislation has not addressed certain depreciation techniques, such as those used by certain countries such as Tunisia and France specified above. In this sense, it is specified that Tunisian and French tax legislation allow the practice of deferred amortization which means the possibility of deferring the depreciation allowances in the event of a deficit situation, while the latter is not incurred by the Algerian legislator (Project of National Accounting Plan, 2005). In this context, the deferred amortization in deficit period will not increase the deficit of the company and it can be used on the subsequent profitable years without limitation of duration. These allocations are deferred regularly to the extent that the cumulative depreciation already applied is at least equal to the cumulative linear annuities. As a result, loss-making companies have a certain fiscal advantage in terms of managing their results. As examples, the most significant techniques of non-recurring depreciation and deferred depreciation can be presented as follows:

1- DEROGATION:

1- Concept of exceptional depreciation: Non-recurring depreciation is a tax measure for investment aid; a company can indeed from the first year, practice a massive depreciation which is justified by no particular depreciation. This exceptional amortization takes the form of a tax subsidy which is refundable since the subsequent annuities will be reduced by the same amount and the advantage is therefore only in cash. Truly, if only for the sake of convenience, most companies consider declining balance depreciation as derogatory amortization. If it ignores the depreciation in effect for a period of 12 months and in case of acquisition during the year, the rest of the pro rata must be respected. It should be noted that the most important depreciation measures are related to the following items:

-Software;
-Equipment intended to save energy;
-Anti-pollution buildings;
-Equipment intended to fight against noise;
-Electric vehicles.

2- The tax treatment of the derogatory depreciation: Technical depreciation and special amortization are subject to the same tax regime:

-They must be accounted in such a way to be deductible from taxable results;
-The annual amortization is calculated taking into account both technical depreciation and amortization allowances;
-The depreciation system deemed to be deferred may concern both technical amortization and exceptional amortization;
-In the event of a sale, the capital gains or losses are calculated taking into account both the technical amortization and the special amortization;

1. THE DEFERRED AMORTIZATION:

1- Principle and methods of recovery: If linear depreciation constitutes a minimum mandatory, declining balance is only an optional maximum. Since it is depreciated at least on a straight-line basis, the company may, in a given year, defer all or part of its depreciation. The possibility of deferred amortization offers the company another technique to manage its results. One may doubt the interest of a company to defer its depreciation. Depreciation deducted from the tax base results in a tax reduction. However, a rule of a sound financial management should lead the company to postpone the moment of the payment of its debts (including its tax debts). The advantage of deferring depreciation is however when the company is in deficit. By deferring depreciation during a deficit period, the company does not increase its deficit, which has the consequence of improving its financial image. In addition, the deferred amortization in a deficit period, far from being lost, may be used by the company at its discretion and without time limit.

2- The advantages of deferred depreciation.

The interest of deferring depreciation in a deficit period is less obvious. As far as the tax is concerned, the postponement of the deferred annuity is spread out in such a way that the depreciation is carried forward often enough in time. On the other hand, the advantage of the deferred amortization period in deficit is, in fact, at the financial level:

-The deferred amortization allows the company to equalize, to leave its result from one year to another and having an almost constant result of giving a better economic image;
-It can also enable the company to increase earnings and distribute dividends;
-It generates a better financial return for the company and therefore can possibly allow it to obtain credit more easily.

5. CONCLUSION:

Through this study, an attempt was made to identify the relationship between taxation and the depreciation of assets, by reviewing the Algerian tax legislation in this area. Through what has been studied, we can say that taxation influences the decision of the company in terms of choice of depreciation methods. This influence is felt by the implicit tax cost of each type of depreciation. Nevertheless, the introduction of deferred amortization should allow the company, especially in deficit period, to improve its financial situation. Moreover, this depreciation will not be lost. On the contrary, it can be deferred without limitation of time, as long as the results will remain in deficit. Through these conclusions, the study of the impact of taxation on depreciation shows that:

- In appearance, depreciation has no costs. Its explicit cost is zero, but it is an implicit cost or opportunity cost that is difficult to avoid. This implicit cost represents the minimum profitability requirement of the shareholders;
- The adjustment of depreciation rates and the introduction of declining balance depreciation improve the status of depreciation, which has a positive impact on self-financing;
- For a better tax management of the company, and for the choice of the means of financing at lower costs, one can propose that the head of company must agree to treat the taxation like a variable of management in its own right and that to all the stages of the life of the company;
- It is particularly interesting to note that sound tax management requires the entrepreneur to make his choice

after a detailed study of the economic, legal and financial consequences of each decision taken while taking into account the fiscal parameter.

REFERENCES:

Anson T.Y. Ho (2017), Tax-deferred Saving Accounts: Heterogeneity and Policy Reforms, *European Economic Review*: 1-33

Belverd E. Needles, Jr. and Marian Powers (2007), *Financial Accounting*, Ninth Edition, Houghton Mifflin Company

Charles E. Davis and Elizabeth Davis (2014), *Managerial Accounting*, Second Edition, Wiley

Don R. Hansen, Maryanne M. Mowen and Liming Guan (2009), *Cost Management: Accounting and Control*, Sixth Edition, South-Western Cengage Learning

Douglas A. Kahn (1979), Accelerated Depreciation: Tax Expenditure or Proper Allowance for Measuring Net Income? *Michigan Law Review* 78(1): 1-58

Hugh Coombs, David Hobbs and Ellis Jenkins (2005), *Management Accounting: Principles and Applications*, SAGE Publications Ltd

Jongsang Park (2016), The Impact of Depreciation Savings on Investment: Evidence from the Corporate Alternative Minimum Tax, *Journal of Public Economics*: 1-43

Menachem Berg, Anja De Waegenaere and Jacco L. Wielhouwer (2001), Optimal Tax Depreciation with Uncertain Future Cash-Flows, *European Journal of Operational Research* 132: 197-209

Mervyn A. King (1975), Taxation, Corporate Financial Policy, and the Cost of Capital, *Journal of Public Economics* 4: 271-279

Moshe Kim and Giora Moore (1988), Economic vs. accounting depreciation, *Journal of Accounting and Economics* 10(2): 111-125

Paul K. Chaney and Debra C. Jeter (1994), The Effect of Deferred Taxes on Security Prices, *Journal of Accounting, Auditing & Finance* 9(1): 91-116

Project of National Accounting and Financial Plan, Accounting Council, February 2005: 4-5

Raymond H. Peterson (2002), *Accounting for Fixed Assets*, Second Edition, John Wiley & Sons, Inc.

Robert Parrino, David S. Kidwell and Thomas W. Bates (2012), *Fundamentals of Corporate Finance*, Second Edition, John Wiley & Sons, Inc.

R. R. Officer (1994), The Cost of Capital of a Company under an Imputation Tax System, *Accounting and Finance* 34(1): 1-17

Salwa Hana Yussof, Khadijah Isa and Raihana Mohdalib (2014), An Analysis of the Gap between Accounting Depreciation and Tax Capital Allowance in Malaysia, *Procedia - Social and Behavioral Sciences* 164: 351-357

Sasson Bar-Yosef and Steven Lustgarten (1994), Economic Depreciation, Accounting Depreciation, and Their Relation to Current Cost Accounting, *Journal of Accounting, Auditing & Finance* 9(1): 41-60