

FINANCIAL INCENTIVES TO ENHANCE CAPITAL INVESTMENTS IN THE EMERGING MARKET ECONOMY OF SOUTH AFRICA

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Abstract

Governments often provide financial incentives to enhance capital investments, as capital is one of the four main production factors in the business environment. Financial incentives may attract capital investments, which should increase economic development and job opportunities in the long run.

The objective of this research embodies the improvement of financial decision-making with reference to financial incentives to enhance capital investments in emerging market economies. While there are a variety of financial incentives which can be applied, this research paper concentrates on the well-known financial incentives, viz. the wear and tear allowances, the initial and investment allowances, the investment tax credits, cash grants, as well as tax havens and tax holidays.

South Africa is a developing country and is classified as one of the 21 emerging market economies of the world. As the empirical study focuses on the top listed South African companies, the conclusions of this study may also be valuable to other countries with emerging market economies, where the enhancement of investments is one of the key attributes.

Keywords: Accelerated Depreciation, Cash Grants, Initial Allowances, Investment Allowances, Investment Tax Credits, Tax Havens, Tax Holidays, Wear And Tear Allowances

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Introduction and objective of research

The globalization of financial markets, the increasing competition amongst enterprises, as well as social and technological changes, have led to an increasing uncertainty and instability in the financial and trade environments (Zopounidis & Doumpou, 2002:167). To counter these uncertainties and instabilities, governments provide financial incentives to enhance capital investments, as capital is one of the four main production factors (along with labour, raw materials and entrepreneurial talent). Governments offer a great amount of financial incentives to attract skills, technologies and capital investments. These financial incentives benefit the countries offering them, as well as the companies using them. Financial incentives may attract capital investments, which then may create more job opportunities which provide an increasing number of people with personal income to survive. Financial

incentives are another way of achieving goals faster in the free market, compared to the usual business development. (Weigand, 1983:147).

The objective of this research focuses on the improvement of financial decision-making with reference to financial incentives to enhance capital investments. While there are a variety of financial incentives which can be applied, this research paper concentrates on the well-known financial incentives which are often available in emerging market economies to enhance capital investments. They are as follows:

- Depreciation allowances, including the wear and tear allowances, initial allowances and the investment allowances;
- Investment tax credits;
- Cash grants;
- Tax havens; and
- Tax holidays.

South Africa is a developing country and it is classified as one of the 21 emerging market economies of the world (MSCI Barra, 2010). It should be emphasised that the enhancement of investments is one of the key attributes of an emerging market economy (Heakal, 2010). As the empirical study focuses on the top listed South African companies, the conclusions of this study may be valuable to enhance capital investments in other emerging market economies. The financial incentives mentioned above will be discussed in the following sections.

Depreciation allowances

Depreciation allowances embody three types of financial incentives, viz. the wear and tear allowances, the initial allowances and the investment allowances. It must be emphasised that the prerequisite which must be met to ensure that the depreciation allowances hold any value to a firm, is that the enterprise must have a tax basis consisting of taxable income against which the depreciation allowances can be written off. In the absence of an adequate tax basis due to insufficient taxable income, depreciation allowances will be of no value to an enterprise. When contemplating this financial incentive to enhance capital investments, a government should ensure that the target enterprises are already profitable businesses, and are not newly established firms without any tax basis yet. The three types of depreciation allowances receive attention in the following sections.

2.1 Wear and tear allowances

This financial incentive may be calculated according to the declining balance method where the annual write-off amounts decrease annually, or the straight-line method where a fixed amount is written off every year. Enterprises usually get accelerated depreciation for tax purposes during the first part of the asset lifespan when they apply the declining balance method, compared to firms which use a straight-line depreciation method. Receiving accelerated depreciation should influence an enterprise in two manners, namely (Berg, De Waegenaere & Wielhouwer, 2001:207):

- The depreciation is off-set against the taxable income and the tax liability decreases consequently, which benefit the net cash inflow after taxation of the enterprise; and
- When future depreciation is received earlier, the advantage of the time value of money may play a part by benefiting the particular enterprise.

The cost of an asset for the purpose of the wear and tear allowances is usually considered to be the cost price which would have been incurred had such an asset been acquired in terms of a cash transaction negotiated at arm's length. These assets should typically have the following features:

- the asset must be owned by a taxpayer; or
- the asset must be acquired by the taxpayer under an installment credit agreement.

A wear and tear allowance is normally allowed to the extent that a qualifying asset is used for trade purposes. Therefore, if an asset is used 80% of the time for trade and 20% for private purposes, the allowance will often be granted on 80% of the amount by which the value of the asset has reduced. If an asset is used for trade for less than a full year of assessment, the allowance must also be apportioned. This would usually apply if an asset is acquired or disposed of during a year of assessment. A wear and tear allowance usually accompanies an initial or an investment allowance (Harcourt, 1968:82).

2.2 Initial allowances

An initial allowance is a form of an accelerated depreciation allowance which is granted in the year the asset is brought into use. The remaining balance of the asset is often written off accordingly with smaller wear and tear allowances over the lifespan of the asset. The initial allowance does not result in a total write-off greater than the cost of the asset. There is actually a deferment of the tax liability for the taxpayer, which is counterbalanced by the reduced wear and tear charges in later years. An initial allowance will benefit an enterprise due to the time value of money, as the cash flow benefit will be received earlier during the lifespan of the asset.

The following numeric example will explain the additional tax benefit of an initial allowance of 40% and a straight line wear and tear allowances over the asset lifetime of five years, when the cost of capital equals 10% per annum, a tax rate of 30% is applied and the cost of the asset amounts to €100 000:

Present value of tax benefit of the initial allowance at the end of the first year =

$$€100\,000 \times 0,4 \times 0,3 / 1,10 = €10\,909$$

Present value of the tax benefit of the wear and tear allowances over the asset life-

$$\text{span} = €100\,000 \times 0,6 / 5 \times 0,3 \times [(1 - \{1 / (1,10)^5\}) / 0,10] = €13\,647$$

The total tax benefit for this scenario is therefore equal to €24 556.

When no initial allowance is available and only the wear and tear allowances are applied, the present value of the tax benefit will be as follows:

$$€100\,000 / 5 \times 0,3 \times [(1 - \{1 / (1,10)^5\}) / 0,10] = €22\,745$$

The preceding example proves that when a government provides an initial allowance, the present value of the tax benefits may be significant, but the determining factors will be:

- the extent of the initial allowance,
- benefit due to the time value of money, and
- that the target enterprises have adequate tax basis to utilise the depreciation allowances.

2.3 Investment allowances

Investment allowances have the same nature as the other two depreciation allowances and are therefore classified accordingly. An investment allowance does not, however, impact on the tax value of an asset and is therefore not

shown on the balance sheet of an enterprise. It represents an additional write off for tax purposes over and above any initial allowance and wear and tear allowances totalling the cost price of the asset. The tax benefit thereof is usually received at the end of the first year of the asset lifespan. The following numeric example will explain the additional tax benefit embodied by an investment allowance of 35%, when the cost of capital equals 10% per annum, a tax rate of 30% is applied and the cost of the asset amounts to €100 000:

$$€100\,000 \times 0,35 \times 0,3 / 1,10 = €9\,545$$

Similar to the application of an initial allowance, the amount of the tax benefit will depend on the extent of the investment allowance, the time value of money, and whether the target enterprises have adequate taxable income to employ the investment allowances. Previous studies by Hong and Smart (2010:82) have also shown that income shifting by enterprises may tempt governments to abolish the investment allowance to counterbalance revenue losses, and thus increasing the effective tax rates of enterprises. On the other hand, the importance of international tax planning should also be emphasized, as capital investments may counter the negative consequences of revenue losses by governments in the long run. One of the main goals of governments should be to lower corporate tax rates by employing, amongst others, the investment allowance to attract more capital investments. This may increase the standard of living in any country.

Investment tax credits

In comparison to a depreciation allowance, which requires that enterprises must have a tax basis consisting of taxable income against which the depreciation allowances can be written off, the amount of the investment tax credit is equal to a percentage of the cost of new capital investments which may be deducted from an enterprise's tax liability (Brigham & Daves, 2004:656). Although taxable income is not mentioned as such when applying the investment tax credit, it is without any doubt implied, as an enterprise must have taxable income in order to arrive at a tax liability. In this sense the investment allowance and the investment tax credit is much the same. It should be realised that the extent of the benefit written off against the tax liability of an enterprise will depend on the percentage of the investment tax credit, the time value of money, and whether the target enterprises have adequate tax liabilities to benefit from the investment tax credit. When an investment tax credit is written off against the tax liability of an enterprise, the firm's net cash inflow after taxation will increase.

To compare the extent of an investment tax credit and an investment allowance, the following numeric example can be employed. The time value of money is here ignored as the investment tax credit and the investment allowance are both employed at the same point in time. If the investment tax credit is equal to 10%, while the cost of the asset amounts to €100 000, the investment tax credit will be €10 000 which can be offset against the tax liability of the enterprise. Should a tax rate

of 30% be applied (as in preceding numeric examples), the extent of an investment allowance must be as follows to match the tax benefit of the investment tax credit:

$$€10\,000 / (€100\,000 \times 0,3) = 0,333 = 33,3\%$$

Given the preceding tax rate, an investment tax credit of 10% will therefore be equivalent to an investment allowance of 33,3% at the same point in time.

According to Altug, Demers and Demers temporary investment tax credits do not always lead to an increase in investments, but may lead to more volatility in investments (2009:509). It is therefore not only the extent of the investment tax credit that matters, but whether it has a temporary or permanent nature may also be of prime importance for enhancing capital investments.

Cash grants

Cash grants as financial incentives to enhance capital investments, do not require a tax basis due to taxable income or a tax liability, like the depreciation allowances or the investment tax credit respectively do. As a cash grant increases the cash flow of an enterprise, it helps to partially decrease the sensitivity for the cash outflow of investments, which is advantageously to a firm (Agca & Mozumdar, 2008:208). Enterprises receive a cash inflow when needed, which will increase the solvency and liquidity of the firm.

By giving cash grants, the government should get what they want, and that embodies an enhancement of capital investments. The details of the projects which an enterprise must undertake to qualify for a cash grant is always specified by government, for example in terms of the type of project relating to the business activities, the minimum project lifespan, the minimum investment amount required and the number of permanent employment opportunities which must be created (Shah, 2009:345). Governments offer cash grants to enterprises with the expectation that the firms will bring capital investments to the country and create jobs to help stimulate the local economy (Martinez & Price, 2005). It should be emphasised that if enterprises deviate from the specifications of the investment project, according to the legal agreement between the government and the particular enterprise, the government may require that the cash grant should be partially or fully refunded by the enterprise.

Tax havens

Tax havens are countries with jurisdictions that actively make themselves available for tax avoidance and tax reduction, but this is no longer the principal function of a tax haven. Various aspects of financial planning are the main functions that make tax havens so attractive (Ginsberg, 1997:5). Along with its low tax rates, tax havens may also postpone the imposition of tax, which allows rapid financial development of firms and the enhancement of capital investments (Dharmapala & Hines, 2009:1058). While the tax reduction schemes may erode the tax revenues of those countries, the reduction of

the tax liabilities of enterprises should enhance capital investment in tax havens (Hong & Smart, 2010:82). It is, however, a prerequisite that tax havens should be politically established and be properly governed. A country can be classified as a tax haven when it complies with the following criteria (Addison, 2009:705-706):

- no or low taxation is charged;
- a deficiency of the exchange of information prevails;
- a deficiency of transparency exists; and
- no or very little real activities occur in those countries as the actual business operations materialise mainly abroad.

Tax havens operate as a channel for world trade and a large portion of the world's money is either in a tax haven or is distributed through one. Tax havens enhance capital investments through generating tax free revenues. This financial incentive offers economic diversification for the particular country making use of this financial incentive. It must be remembered that the main goal of enterprises worldwide is to maximize their return on their invested capital with the lowest risk involved. Countries which decide to operate as tax havens, should experience an enhancement of capital investments on the assumption that they have good legislation, a stable political environment, a responsive authority, as well as low or no taxes (Ginsberg, 1997:607).

Tax holidays

Tax havens and tax holidays are closely related to one another, as both these financial incentives avoid or reduce the tax liabilities of enterprises. Tax holidays are a financial incentive that grants enterprises a partial or total exemption from corporate income tax for a limited period (Lin, 2006:163). Countries will often seek to attract capital investments by offering a tax holiday. When the tax holiday period is over, the normal corporate tax will usually apply. Some countries may grant a tax holiday to enterprises on the condition that the firms must stay in the country during a stipulated period. If depreciation allowances or investment tax credits are deferred until after the tax holiday, this particular financial incentive

should not cancel the benefits of other financial incentives, but the present value of the depreciation allowances or investment tax credits may be much lower (Mintz, 1990:84). Tax holidays are according to Cleeve the most effective of all the fiscal incentives in attracting capital investments (2008:135).

Research methodology

The objective of this research was formulated as the improvement of financial decision-making with reference to financial incentives to enhance capital investments in emerging market economies. The perceptions of business leaders of large enterprises in a country with an emerging market economy are therefore essential to achieve the research objective. The empirical sample was defined as the top 20 listed companies in South Africa, based on their annual turnover for the 2008 financial year (Financial Mail, 2009). They are considered to be the leaders of large enterprises in the business environment of this country which has an emerging market economy.

A questionnaire was constructed, based on the literature study, and sent with a covering letter to the executive managers of the 20 companies. Three of them replied that the questionnaire was not applicable as they are only involved in financial investments and not capital investments. The actual sample was consequently reduced to 17. It was necessary to follow up and eventually 10 completed questionnaires were available, which provides a response rate of 58,8%.

Empirical results

The empirical results obtained are provided under the following headings:

8.1 The importance of the determining factors when using financial incentives

The perceptions of the respondents on the importance of the factors which should be taken into account when applying financial incentives to enhance capital investments, are shown in Table 1.

Table 1: The importance of the factors considered when using financial incentives to enhance capital investments, according to the perceptions of the respondents

Factors	Extremely important	Highly important	Mode- rately important	Little important	Not important
Utilising an available tax basis of your group of companies	1	4	4	1	
Deferring tax payment to a later stage	3	3	2	2	
Reducing future tax payments		8		2	
Increasing cash flows of your group of companies by receiving a cash grant			5	2	3

Creating job opportunities in your group of companies	2		2	5	1
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A clear depiction of the responses according to the preceding table is necessary to arrive at the right conclusions. Weights were therefore given to the various responses of the respondents. Weighting of the responses was possible as it was stated explicitly on the questionnaire that the five point Likert interval scale used forms a continuum (Albright, Winston & Zappe, 2002:224-229 & 245). The following weights were given to the responses to rank the factors which are considered when financial incentives are applied:

Assign a weight of 5 for: Extremely important
Assign a weight of 4 for: Highly important
Assign a weight of 3 for: Moderately important
Assign a weight of 2 for: Little important
Assign a weight of 1 for: Not important

The weighted responses on the importance of the factors contemplated when applying financial incentives to enhance capital investments, appear in the next table.

Table 2: Weighted responses on the importance of the factors considered when using financial incentives to enhance capital investments, in a declining order of importance

Total weighted score calculated	Declining order of importance	The importance of various factors
37	1	Deferring tax payment to a later stage
36	2	Reducing future tax payments
35	3	Utilising an available tax basis of your group of companies
27	4	Creating job opportunities in your group of companies
22	5	Increasing cash flows of your group of companies by receiving a cash grant

It is interesting to notice that increasing the cash flows of the enterprise by receiving a cash grant has the lowest weight. From a theoretical point of view, cash grants would have been the main choice, as it has no prerequisite of an adequate tax basis or a tax liability. It can be concluded that, as the enterprises involved in the empirical survey are the top companies in South Africa,

8.2 The importance of the financial incentives for capital investments

The perceptions of the respondents on the importance of the financial incentives to enhance capital investments are

an adequate tax basis or a tax liability is no obstacle to them against obtaining financial incentives which require a tax basis or a tax liability.

The three factors which have the highest weights focus on the deferment of tax payments (that must eventually be paid), reducing future tax payments (which will benefit the future cash flow of the enterprise) and the utilisation of the enterprise's available tax basis, addressed in Table 3. It is important to mention that it was stated explicitly on the questionnaire that the assumption is made that the financial incentives are available to the respondents.

Table 3: The importance of the financial incentives to enhance capital investments (on the assumption that they are available), according to the perceptions of the respondents

Financial incentives	Extremely important	Highly important	Moderately important	Little important	Not important
Wear and tear allowance	1	2	6	1	
Initial allowance	1		5	3	1
Investment allowance	1	1	3	4	1
Investment tax credits	1		3	6	
Cash grants	1		1	5	3
Tax havens			2	5	3
Tax holidays		1	1	5	3

The responses of Table 3 were weighted as discussed previously and the following table provides the results obtained.

Table 4: Weighted responses on the importance of the financial incentives to enhance capital investments, in a declining order of importance

Total weighted score calculated	Declining order of importance	The financial incentives
33	1	Wear and tear allowance
27	2	Initial allowance
27	2	Investment allowance
26	4	Investment tax credits
21	5	Cash grants
20	6	Tax holidays
19	7	Tax havens

The importance of the well-known wear and tear allowances is emphasised by the respondents. It is, however, necessary to mention that according to Table 3 only three of the 10 respondents rated this financial incentive as extremely or highly important, while six respondents allocated a “moderately important” to the wear and tear allowance for enhancing capital investments. The total scores of the initial allowance, investment allowance and the investment tax credits are the next important incentives.

According to the preceding table, cash grants, tax holidays and tax havens are not perceived by the respondents to be very important financial incentives to

enhance capital investments. Countries should rather pay attention to the depreciation allowances and the investment tax credits to enhance capital investments according to the respondents.

8.3 The expected success rates of the financial incentives to enhance capital investments

It is interesting to study the expected success rates of the financial incentives used for enhancing capital investments, as it is presented in Table 5.

Table 5: The expected success rates of financial incentives to enhance capital investments, according to the perceptions of the respondents

Financial incentives	Average expected success percentages	Median of the expected success percentages
Wear and tear allowances	77,2%	80,0%
Initial allowances	50,6%	50,0%
Investment allowances	40,6%	30,0%
Investment tax credits	19,4%	17,5%
Cash grants	18,8%	12,5%
Tax havens	10,0%	0,0%
Tax holidays	6,3%	0,0%

Note: One respondent did not provide any answers, while another respondent answered it only partially.

The average expected success percentages of Table 5 correspond to a large extent with the results obtained from Table 4. The sequence of the financial incentives in a declining order of the average expected success percentages to enhance capital investments, is the same as the sequence of the financial incentives in a declining order of importance, except in the case of tax havens and tax holidays. The average and the median of the expected success percentages of the wear and tear allowances and the initial allowances are equal to or exceed the 50% level, while the average and the median of the expected success percentages of the other financial incentives indicate that the respondents do not believe that they will be very successful.

Conclusions

This research focuses on financial incentives used to enhance capital investments. As South Africa is classified as an emerging market economy, the conclusions of this research may also be important to other countries with

emerging market economies, where the enhancement of investments is one of the key characteristics. The main conclusions of the empirical study, which has the top listed South African companies as its sample, are as follows:

1. The three most important factors as perceived by the respondents, when making use of financial incentives to enhance capital investments, are the deferment of tax payments (that must eventually be paid), reducing future tax payments (which will benefit the future cash flow of the enterprise) and the utilisation of the enterprise's available tax basis. It may be surprising that the improvement of the cash flow of an enterprise is not rated as very important when they receive a cash grant. A possible answer may be found in the fact that the respondents, who are the top companies in South Africa, have an adequate tax basis or a tax liability needed to obtain financial incentives which require either a tax basis or a tax liability.
2. The empirical results of this research paper underlines the importance of the well-known wear and

tear allowances. It should, however, be mentioned that a minority of the respondents rated this financial incentive as extremely or highly important, while a majority of respondents allocated a “moderately important” to the wear and tear allowance for enhancing capital investments. The other financial incentives which are also considered as important by the respondents to enhance capital investments are the initial allowance, investment allowance and the investment tax credits.

3. The sequence of the financial incentives in a declining order of the average expected success percentages to enhance capital investments, is the same as the sequence of the financial incentives in a declining order of importance, except in the case of tax havens and tax holidays. The conclusion regarding the financial incentives in a declining order of importance is therefore confirmed when the respondents indicated the expected success percentages of the various financial incentives.

4. The average and the median of the expected success percentages of the wear and tear allowances and the initial allowances are equal to or exceed the 50% level, while the average and the median of the expected success percentages of the other financial incentives indicate that the respondents do not believe that they will be very successful.

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