Efficient Management of Fixed Assets and the Impact of their Real Costs on Financial Results

Case study of investments carried out in Angola

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EPIGRAPH

A cynic is a man who “knows the price of everything, but the value of nothing”.

Oscar Wilde

RESUMO

Este trabalho tem como objetivo evidenciar a importância da correta valorização dos ativos fixos demonstrando o seu efeito nos resultados financeiros de uma empresa.

Os investimentos em meios fixos têm um peso muito significante no total dos ativos de uma empresa, a gestão eficiente desses ativos merece um acompanhamento cuidadoso, assim como também é muito importante saber quais as formas e métodos de aquisição a que os meios fixos estão sujeitos, para que se lhes possa adequar a um modelo de valorização eficiente.

A amortização traduz-se no custo de um ativo fixo resultante do seu desgaste pela sua utilização na atividade operacional da empresa. O valor de um bem do ativo fixo é determinado pelo seu preço de compra acrescido de todos os encargos relacionados com a sua aquisição. Deste modo, qualquer despesa de capital relacionada com a compra, fabrico ou construção de um ativo fixo deve ser adicionada no valor global do bem, para que o seu custo possa ser reconhecido corretamente e possa ter um impacto fiável nos resultados financeiros.

O controlo e o acompanhamento são ferramentas indispensáveis da gestão dos ativos fixos e quando implementadas de forma eficiente no processo de valorização obtém-se bons resultados. Para o efeito, são analisados neste trabalho alguns modelos de gestão adequados às diferentes formas de aquisição dos ativos fixos com a finalidade de se obter uma correta valorização.

O estudo faz uma abordagem de modelos práticos e eficazes da gestão dos ativos fixos que podem ser implementados pelas empresas, isto, desde a concepção do orçamento para as despesas de capital, durante o processo de aquisição, fabrico ou construção, até a colocação dos bens em condições de funcionamento ou de uso, concluindo com dois modelos comparativos nos quais podemos evidenciar o impacto da depreciação nos resultados financeiros.

Palavras-chave: Ativo Fixo, Custo, Despesa de Capital, Valorização, Depreciação.

ABSTRACT

This paper aims to highlight the importance of the correct valuation of fixed assets, demonstrating its effect on financial results of an entity.

Investments in fixed assets have a very significant weight on total assets of a company. The efficient management of these assets deserves a careful follow-up, as well as, it is also very important to know the form these items are acquired and the methods of acquisition they are subject in order to be able to adapt to an effective model of valuation.

The depreciation is considered as the cost of fixed assets resulting from their wear by the use during the firm's operating cycle and, in this case, it has a reflex of great relevance in financial results. The value of an item of fixed asset is determined by its purchase price plus all charges related to its acquisition. Therefore, any capital expenditure related to the purchase, manufacture or construction of a fixed asset shall be added to the overall value of the item, so that, the cost (*the depreciation*) can be accounted and recognized correctly and can have a reliable impact in financial results.

The control and the follow-up are essential supporting tools for the management of fixed assets and when they are implemented efficiently in the valuation process the company can obtain good results.

It is discussed in this paper some management models suitable for various forms of acquisition for fixed assets with the aim of obtaining a correct valuation. The study analyzes the practical and effective model for managing the fixed assets that can be adopted by firms from the conception of the budget for capital expenditures, during the process of acquisition or construction, till the placement of the items in operating conditions. Concluding with two comparative models in which can be highlighted the impact of the depreciation in financial results.

Key Words: Fixed Asset, Cost, Capital expenditure, Valuation, Depreciation.

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LIST OF ACRONYMS

AICPA - American Institute of Certified Public Accountants

ACWP - Actual Cost of Work Performed

ADV - Certificate of Verification

ANIP- International Agency of Private Investment

BNA – Angolan National Bank

BC – Budget Code

BL – Bill of Landing

BS – Balance Sheet

BU- Business Unit

CAPEX- Capital Expenditure

CDM – Cost Distribution Model

CI – Coefficient of Importation

CIF- Cost, Insurance and Freight

CRF - Clear Report of Findings

DB - Declining Balance

DU- Single Document

EAC – Estimate At Completion

EBITDA- Earning before Taxes, Interest rate, Depreciations and Amortizations

EPS – Earning Per Share

ETC – Estimate To Complete

EUR - Euro

FASB - Financial Accounting Standards Board

FCL - Full Container Loaded

FOB – Free On Board

GAAP - Generally Accepted Accounting Principles

GCA – General Chart of Accounts

HS – Harmonized System

IAS – International Accounting Standards

IASB – International Accounting Standards Board

IC - Importation Costs

IDE – External Direct Investments

IFRS – International Financial Reporting Standards

KZ - Kwanza

IMSR-Investment Monthly Status Report

IMC- Investment Management Cost

INCOTERMS - International Terms of Commerce

IPE - Pre-Shipment Inspection

IR - Internal Requisition

IS - Income Statement

ISO - International Organization for Standardization

ITC - Industrial Tax Code

LPO - Local Purchase Order

PIP - Pre-Shipment Inspection

P & L- Profits or Losses

PO – Purchase Order

RCE- Request for Capital Expenditure

ROE – Return On Equity

SC- Shipping Costs

SL – Straight Line

SYD – Sum of the Years Digits

UCF – Fiscal Correction Unity

UOP - Units Of Production

USD –United States Dollar

INTRODUCTION

An asset is defined as the collective property and financial rights owned by a natural or legal person and subjected to management (Borges, 2010). According to Gonçalves (2001) apud Gonçalves et al., the asset is the sum of the collective property and financial rights, in other words, the set that the company owns and has to receive. The assets that a company expects using for a period higher than one year in its operating activities are classified as *Fixed Assets* (IAS 16)[1], and they can be tangibles or intangibles such as lands, installations, buildings, goodwill[2], machinery, equipments, stocks, cash, software, etc. also named as *noncurrent assets* or *property, plant and equipment (PP & E).*

Tangible fixed assets include real state, plant, and equipment (Lee and Lee, 2006) and intangible fixed assets are long lived items that differ from property, plant and equipment, represented by a contractual right, or an asset that is not physically identifiable, such as patents, trademarks and copyrights (Marshall and Macmanus, 1998).

Marshall and Macmanus (1998) define the accounting as the process of identifying, and communicating economic information about an entity for the purpose of making decisions and informed judgment. According to American Institute of Certified Public Accountants (AICPA), it is defined as "the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are in part at least of a financial character and interpreting the result thereof" (Berry and Jarvis, 2006).

By the great importance the fixed assets represent and the impact on investments made by firms and by their complexity in managing, a special attention must be given to them due to their impact on financial results of any firm. The accounting information is an important tool on supplying these figures, nevertheless, after obtaining the required information it is necessary to establish an efficient follow up and control. According to Borges et al. (2010), firms' taxation is based on real profit and other taxes as result of their activities, it can be said that the company is a tax entity par excellence (Ferreira, 2003). It is, in this way,

[1] IAS 16 – International Accounting Standard, Tangible Fixed Assets.

[2] An asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. [Source: Financial Accounting Standards Board Accounting Standards Codification Topic 805, Business Combinations (formerly Statement of Financial Accounting Standards No. 141 (Revised 2007))]

necessary that the accounting figures are disclosed in accordance with the legislation and they must have certain credibility (Borges et al, 2010).

The State's financial activity is focused on obtaining pecuniary resources that are applied in public expenditure with aim to satisfy collective needs, in this way, according to Borges et al. (2010), there is no state which can guide properly its economy without having the information about the companies' situation, their efficiency, about the more-income producing sectors, production costs, volume of materials, and mainly the company's net equity value.

Actually the management process is not limited to remember the past and inform the present, it is necessary to forecast the future, planning the activities, determine future objectives in order to optimize the results (Borges et al., 2010).
Based on the assumption that it is not accounted the item but its financial expression, it is evident the need of criteria that allow the assignment, the determination and a value for the corresponding record, that is to say, its measurement and valuation. Then, according to Rodrigues (2005) and the Angolan General Chart of Accounts (GCA), valuing shall correspond to the determination of the amount, by which the transactions and other events should be disclosed on the financial statements, such as, in the balance sheet and on the profit and loss statement.

Purpose and objective of the study

The objective of this work is to demonstrate the impact that a proper valuation of fixed assets has on the financial results, for this purpose it is addressed in this work all the components that comprise the overall value of a fixed asset. It is explained in this paper what is the real cost of an item of fixed asset and how these assets are valued to be able to determine accurately their costs.

With the study we explain some different valuation methods which can be subject to fixed assets according to their form of acquisition.

Structure of the work

This work is structured in 5 sections; firstly we have a brief introduction focusing on the concepts of assets, fixed assets and the importance of accounting in recording accurately the acquisition value of fixed assets. In Section one, we present the literature review, where through various authors we show some concepts related to fixed assets, and the

classification, measurement and recognition of these assets. It is discussed in this section the concept of value focusing on the distinction; under the accounting point of view, we also explain the difference between cost and expenditure.

In section two, we talk about fixed assets purchase process, highlighting the Angolan government role on supporting the investments made into the country and showing some policies adopted by the government to promote and encourage the investment. The process of managing and valuing of fixed assets is discussed in section three, where we make a greater approach on the purchase of goods acquired through importation, having regard to the additional costs that this process implies which are the main determinants of the total value of imported goods. It is also discussed in this chapter the accounting rules for fixed assets taking into consideration the forms of acquisition. In this section we focus on the management of fixed assets and our goal is to highlight the importance of the budget as the main management tool. We make a deeper approach about the investment budget, from its conception and follow-up up to its completion.

In section four, we talk about the depreciation of fixed assets, describing its causes, advantages and methods. We also present the depreciation rates that should be applied to fixed assets according to their classification and specificity.

In section five we explain the impact of depreciation in financial results, where we analyze the reflection of the depreciation in the different financial statements, then making a comparison between two different models de valuation.

Lastly we present the findings of the dissertation. Then, we make a reference of the contributions of our work for the academic and business knowledge, we also present some suggestions for future works.

1. REVIEW OF LITERATURE

1.1. Fixed asset recognition and measurement criteria

The Angolan General Chart of Accounts (GCA) states that the recognition is the process of incorporating in the balance sheet and in the profits and losses statement an element that satisfies the definition of one of classes and the conditions for its recognition. According to Matos (2011) an asset is recognized in the balance sheet when it is probable that the future economic benefits flow to the company and the asset has a cost or value that can be measured reliably.

Iudicibus et al. (2010) emphasize that measurement is the process of determining the monetary amounts by which the elements of financial statements should be recognized and recorded in the profits and losses statement. This involves the selection of a particular valuation basis.

Fixed assets are valued at historical cost or fair value:

- The historical cost is the amount of cash or cash equivalents paid or the fair value taken into account at the moment of their acquisition (Matos, 2011);

- Fair value is the amount for which a fixed asset could be bought, sold or exchanged in a current transaction between willing parties, or transferred to an equivalent party, other than in a liquidation sale (IAS 16:6).

An item of fixed assets to be classified for recognition as an *asset* should be measured at its cost, (IAS 16, IAS 38). The IAS 16 states that the cost of an item of property, plant and equipment comprises:

a) Its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;

b) Any costs directly attributable to put the asset on site and ready to operate as intended by management;

c) The initial estimate of costs of dismantling and removing the item and restoring the site on which it is located.

An intangible fixed asset should be recognized if, and only if it is probable that the expected future economic benefits that are attributable to it flow to the entity and its cost can be measured reliably (IAS 38)[3].

The cost of an item of property, plant and equipment should be recognized as an asset if, and only if, it is probable future economic benefits associated with the item will flow to the entity; and the cost of the item can be measured reliably (IAS 16).

According to Morais and Lourenço (2005 apud Lopes da Cunha, 2009), the criteria for the recognition of tangible fixed assets, should be applied:

a) on the date the costs incurred with the tangible elements occur, including expenses, to acquire or construct fixed assets to add or replace a part of property, and to add a service to fixed asset;

b) to the subsequent expenditures related to the acquisition or construction, namely, those of daily repairs or maintenance, that should be measured as costs of the period; the replacement of parts of tangible fixed assets elements that can be capitalized if they satisfy the criterion of recognizing after writing off the book value of the parts replaced; and the periodical inspections that also can be capitalized, after writing off the respective book value.

1.1.1. Designation of property as a fixed asset

Fixed assets are items of property that are tangibles or intangibles in nature, have economic useful life longer than one year, maintain their identities throughout their useful lives, either as separate entities or as identifiable components of larger conglomerations of property, are not repair parts or supply items and have significant value[4].

According to Marion (2009) fixed assets are all the assets relatively permanent in nature, used in the operation of the business of a company and are not intended for sale, Borges et al. (2010) argue that fixed assets are used as means of production, source of incomes or as working conditions.

[3] IAS 38 - *Intangible Assets:* outlines the accounting requirements for intangible assets, which are non-monetary assets which are without physical substance and identifiable (either being separable or arising from contractual or other legal rights).

[4] *Fixed asset accounting and management procedures manual*, section 2, Asset Valuation, February 4, 2004, REVISION 3, City of Houston; http://www.houstontx.gov/finance.

Marion (2009) and Vigário (2006) describe that it is necessary three characteristics to classify an item as *fixed asset*:

a) *Permanence*: the nature relatively permanent (long life), during a period exceeding one year;
b) *Property*: it must be owned or controlled by the entity and must be used in its operating activity;
c) *Indispensability*: it is not intended to be sold.

1.1.2. Fixed assets definition

The definitions for fixed assets may be different in some points but there are essential aspects that should always be taken into consideration. Lee and Lee (2006) define the fixed assets as long term properties owned by a firm that are used by the firm in the production of its incomes. The IAS 16 defines a fixed asset as a tangible or intangible item of property, plant or equipment held by a firm for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and which are expected to be used during more than one reporting period, also known as financial year[5].

A fixed asset is an asset, either movable or immovable, under the control of the firm and from which the firm reasonably expects to derive economic benefits over a period extending beyond one financial year[6]. Magro and Magro (2008) define the *fixed assets* as items held by a company for use in the production or supply of goods or services, for rental to others, or for administrative purposes on a continuing basis in the reporting entity's activities.

Fixed assets are those assets owned by a firm that contributes to the company's income but are not consumed in the income generating process during a period longer than one economic period and are not held for cash conversion purposes. The condition of classifying a fixed asset depends mainly on period of time the item is expected to be used by the company, this should be more than one financial year. The *"acquisition value"* component in many cases does not have great relevance, a company can acquire a high value item which can be consumed immediately, and cannot therefore be considered as an asset but rather as a cost.

[5] www.iasplus.com/en/standards/ias/ias16, accessed on: 07th January 2014.
[6] Revised Fixed Assets Policy & Procedures Manual, 2008, available in: Revised Fixed Assets Policy & Procedures Manual, accessed on: 03rd May 2014.

1.1.3. Fixed assets classification

Fixed assets classification includes lands, buildings, plant, equipments, vehicles and office furniture, but would exclude minor items that are generally regarded as expendable, even though their useful lives may extend beyond one year, e.g. pens, files and note pads[7].

According to Borges et al. (2010) the fixed assets are subdivided by two big groups:

- *Technical:* it consists of assets that make possible the starting and the development of the company activity. They represent the invested funds with a permanent nature linked to operating activity. They are tangible such as the lands, buildings, equipments, machinery and ongoing constructions, etc; or with intangible nature like the installation expenses, licenses, copyrights, trademarks, software, etc. Some of the intangible fixed assets represent expenses or rights that, by its high value and, long term effect in the company activity cannot be recognized as cost of one financial year, such as installation expenses, goodwill, research and development expenses, etc.

- *Of incomes*: it encompasses the investments of capital on inorganic activities and which main purpose aims to provide a certain income, example of such assets are: equity participation of other companies, shares, bonds and other financial assets, property investments, long term government securities, etc.

The Angolan GCA classifies the fixed assets as tangibles, intangibles and ongoing investments and they are grouped in class 1 - *Fixed Assets and investments*, encompassing the accounts 11, 12, 13, 14, as well as the account 18 of *accumulated depreciation*; disclosed as follow:

Account 11 - Tangible Fixed Assets: are included in this account all tangible fixed assets, movable or immovable used by the company in its operating activity, also including the improvements and major repairs aimed to the value addition.

The records in this account shall comply the following classification:

Revised Fixed Assets Policy & Procedures Manual, 2008, op. cit.

Sub-account 11.1 - Lands and natural resources: it records lands and natural resources (plantations, mines, quarry, etc) assigned to the company's operating activity. It is also included in this account the land grabbing, digging and drainage costs related to them.

Sub-account 11.2 - Buildings and Other constructions: this account is used to records administrative and social buildings, fixed installations, and other constructions such as piers, docks, access bridges, walls, flooring, pavements, built railways, built runways, etc.

Sub-account 11.3 - Basic Equipment: this account records machinery, plant equipments and other set of tools with which the company carries through its operating activity (production, transformation, mining and services).

Sub-account 11.4 - Vehicles and lifting equipments: this account is assigned to record all equipments used by the company for transportation and lifting of personnel, goods, products, heavy structures lifting, such as vehicles, trucks, cranes, forklifts, etc.

Sub-account 11.5 - Office equipments: on this account are recorded all office equipments and others office furniture.

Sub-account 11.6 - Tare and Containers: this account is used to record all items for storing, holding or packing the goods or products, whether for internal or returnable packages with suitability for continued use.

Sub-account 11.9 - Others Tangible Fixed Assets: on this account are recorded other properties acquired by the company that can be classified as fixed assets due to its characteristics and nature.

Account 12: Intangible fixed assets; It includes intangible fixed assets that the company uses on its operating activity, and also the costs of providing rights, goodwill, research and development expenses, trademarks, patents and others.

Account 13: financial investments; The financial investments are the financial applications of a permanent nature not meant to be sold during the normal activity of the company, that comprises the shares, equity participation of other companies, bonds and other financial instruments, property investments, long term government securities, etc.

Account 14 - Ongoing Investments; It is classified as ongoing investments the fixed assets which are under construction, production or in the purchasing process such as ongoing constructions, fixed asset purchase under process and fixed assets improvements and advances on fixed assets account which price is previously fixed.

There are some special points that should always be kept in mind when classifying the fixed assets and one of the most important aspects is related to the company's operating activity. According to Magro and Magro (2008) and Silva (2008) the classification of items which by their nature fall in fixed assets, is recorded in one of the sub-accounts of the tangible fixed assets, through the function that they will play on operating activity of the firm, thus:

- For example, if the firm's operating activity regards to the transportation activity, the vehicles allocated in this activity should be classified as basic equipment and not as equipment of transportation. If the firm operates in the business of administrative services, the equipment such as computers, scanners, printers and others should be classified as basic equipment and not as administrative equipments. In other hand, if a firm is focused on the building and selling properties, such properties should be classified as inventories and if the operating activity of a firm is the sale of vehicles, these should also be considered as inventories.

- Lands and buildings are classified as separable assets and should be treated separately for accounting purposes, even when purchased together, (IAS 16). The Angolan Tax Legislation determines that when it is not possible to identify the value of the land, it is attributed 20% of the total joint acquisition. According to Vigário (2006) most of the spare parts and servicing equipment are usually recorded as inventory and its value is recognized as an expense when consumed. The main spare parts and reserve equipments are classified as fixed assets when the company expects to use them for a period not less than a year (Borges et al., 2010; GCA).

1.1.4. Fixed assets management

The management can be understood as a process of coordination and integration of resources, with a view to achieving the objectives set out, through the performance of the activities of planning, organization, direction and control (Santos, 2008). Caiado (2012) defines the management as a set of policies associated with the development of a business, it needs information so that the objectives are achieved. Fixed assets management is a task

that requires a follow-up of all stages of the process of their acquisition until being ready to be used by the firm. The whole process of acquisition must be properly recorded, for this the process of acquiring and valuing for fixed assets requires a control that must be defined in the procedures of the company in order to minimize their cost and maximize their utility by the company.

Fixed asset management is a complex matter, involving governing laws, operating rules and regulations, administrative law rulings, recommended practices and designated procedures[8]. It is a task that involves several actions sometimes of complicated nature. Firms must define rules, procedures, and above all, they need qualified staff.

The valuation and management policy for fixed assets is particularly relevant and decisive in determining the global value of the companies[9]. The tangibles, intangibles and investments items of property that the company uses in its operating activity, involve many significant responsibilities so that the decision-making on the policies of managing these items should lay directly on the management objectives and should be supported in an integrated system that facilitates such decisions. Management and control over the recording, reporting and safeguarding of fixed assets are also necessary[10].

The difficulty of valuing and measuring the fixed assets goes through the attribution and allocation of their real value, in a reliable way, in order to know their true performance in the financial results. The difficulty of accounting for fixed assets is a fundamental fault in the accounting system of the companies in reporting the real value of the company, thus not providing reliable content for users of financial information.

1.2. The cost

The cost of an item or service represents the monetary expression of all the expenses incurred for its purchase (Sá and Sá, 2009), it is the disbursement of cash, or cash equivalent, or the commitment to pay in kind in the future, with the purpose to generate revenue (Warren et al., 2008). According to Maher (2001) the cost represents a sacrifice of resources; the price of each item measures the sacrifice that we need to do to buy it, regardless of whether we need to do it now or in the future. The cost of an item is

[8] Texas State Auditor's Office, Methodology Manual, rev. 5/94. *www.preciousheart.net.*
[9] Gestão do imobilizado, http://www.lusodata.pt.
[10] Revised Fixed Assets Policy & Procedures Manual, 2008, op. cit.

determined by its price, Bernard and Colli (1997) define the cost as the amount expressed in currency of all expenses necessary for the acquisition or production of a good or service.

In the economic standpoint the two concepts are associated with the processing and incorporation of the materials to achieve the final product or service, thus; cost is described as the value incorporated and spent in production, which implies the resource consumption and an expense is the remuneration of productive factors[11].

In accounting, a cost is not synonymous of expense. Because it is just a cost, the value associated with the consumption of a resource, for example, a cost is relating to the productive process of the business, and an expense (expenditure) is incurred when there is an assumption of the obligation to pay a cost.

There are costs that are not considered as expenditure, such as the costs incurred with the firms self-use items, for example in the construction of a building for the company. Likewise, there are expenses that do not translate directly into costs, such as those related with fixed assets or investment.

The Angolan GCA defines the costs (expenses) as decreases in economic benefits during the accounting period in the form of "outflows" or reduction of assets or incurrence of liabilities that result in decreases in equity, which are not related to the distributions to shareholders.

The definition of cost includes both the costs resulting from the normal activity of a firm (ordinary expenses) and the losses[12]. The Angolan GCA classifies the costs in Class 7 - *costs and losses by nature*, and are allocated in this class all costs incurred by the company during the period of activity, classified according to their nature, as can be seen detailed below:

Class 7 – Costs and Losses by nature

71. Cost of goods sold or raw materials used

[11] In production, research, retail, and accounting, a **cost** is the value of money that has been used up to produce something, and hence is not available for use anymore. In business, the cost may be one of acquisition, in which case the amount of money expended to acquire it is counted as cost. In this case, money is the input that is gone in order to acquire the thing. This acquisition cost may be the sum of the cost of production as incurred by the original producer, and further costs of transaction as incurred by the acquirer over and above the price paid to the producer. Usually, the price also includes a mark-up for profit over the cost of production. (http://en.wikipedia.org).

[12] ISAB - Conceptual Frameworks, Standards Advisory Council meeting, February 2005, http://www.ifrs.org.

72. Personal costs
73. Depreciation
75. Others operating costs or losses
76. General Financial costs or losses
77. Financial costs and losses in subsidiaries and associated companies
78. Others non operating costs and losses
79. Extra ordinaries costs and losses

The article 25 of the industrial tax code (CII), determines which costs or losses are accepted fiscally:

a) The basic activity charges, accessory or complementary, regarding to the production or acquisition of any property or services, such as relating to raw materials used, labour, energy and other general expenses of manufacturing, maintenance and repairs;
b) Distribution and sales charges, covering those of transportation, advertising and placement of goods;
c) Financial charges, including interest on borrowed capital committed to the company, discounts, charges, transfers exchange rate trend, expenses on credit operations, recovery of debts and emission of shares and debentures and repayment premiums;
d) Administrative Burdens, notably with compensation, quotas, subsidies and contributions to corporate bodies and economic associations, family allowances, per diems or daily allowances, current consumables, transport and communications, rent, litigation, pension, social security and insurance, with the exception of life in favor of the partners;
e) Charges for analysis, rationalization, research, consulting and technical expertise of its staff;
f) Fiscal and quasi-fiscal charges that are subject the taxpayer without prejudice the provisions of article 40;
g) Depreciation and amortization of fixed assets subject to depreciation or amortization, but with observance of the provisions of articles 29 to 35;
h) Provisions;
i) Indemnities and losses resulting from events whose risk is not insurable;
j) Charges emerging from the civil defense of the territory.

The costs are the key elements in determining the results of a company, the accounting information must be disclosed reliably and timely, reflecting the true performance of the firms. For that, it is recommended to keep always in mind the accounting principle of specialization or accrual accounting that reads "*the incomes and costs should be recognized when earned or incurred regardless of their receipt or payment and must include in the financial statements of the periods they relate* (GCA; Magro and Magro, 2008), this involves accounting for the effect of an economic activity or transaction on an entity when the activity has occurred, rather than when the cash receipt or the payment takes place (Marshall and Macmanus; 1998).

1.2.1. The cost of a fixed asset

According to IAS 16, the cost of a property, plant and equipment should be recognized *as cost* if, and only if it is probable that future economic benefits associated with the item are probable and can be reliably measured (IAS 16). The Angolan GCA states that fixed assets measurement and valuation criterion is based on the historical cost principle, despite having some limitations compared to the market value based on the concept of utility and not of functionality. Whether acquired or self-constructed, a tangible fixed asset should initially be measured at its cost and only costs that are directly attributable to bring the asset into working condition for its intended use (Vigário, 2006).

The acquisition cost of a fixed asset includes its purchase price and all expenses incurred to put it in use or functioning conditions (Borges et al., 2010; Silva and Ferreira, 2006), in the other hand, the cost of a fixed asset produced for the proper company includes all expenditures incurred from the date of its inception to the date of its completion. Generally Accepted Accounting Principles (GAAP) in the United States require the valuation of fixed assets at historical cost adjusted for any estimated gain and loss in value from improvements and the aging, respectively, of these assets (Damodaran, 2012).

Should be considered all expenses incurred in the acquisition or construction of a fixed asset. It is understood as *acquisition value*, the value of the purchase, construction or manufacturing, plus all expenses necessary to put the item in working conditions (Gonçalves, 2013).

1.2.2. Cost centers

Rocha (2006) explains that the Cost Control within the company relies on its division into centers of responsibility, they are organizational units sufficiently individualized, staffed by a person responsible for ensuring the management and direction. According to Seabra Franco (2012) the cost centers are centers of responsibility whose manager has the power of decision on the resources available that result in costs, being the objective of the responsible their minimization. It is a decentralized unit by which the Department Manager or responsible has the responsibility for the costs incurred and the authority to make decisions that affect them (Warren et al., 2008). The cost center is a responsibility center where the manager controls only the amount and/or the cost of resources consumed (Rocha and Rubio, 1999; Siegel and Shim, 2006).

The performance of a cost center is usually evaluated through the comparison of budgeted to accounted costs (Siegel and Shim, 2006). The costs incurred in a *cost center* may be aggregated into a cost pool and allocated to other business units (BU)[13].

One of the important roles of cost centers is also to generate incomes for the company. The costs produced in a specific cost center should be transferred to the respective business units (BU) for which they are intended. There are also costs produced in a cost center that are back charged to company's projects, clients, subcontracted companies or employees, adding an additional fee that constitutes income for the firm.

The most appropriate procedure is to transfer, at the end of each period (monthly), all costs produced in a cost center to the respective BU for which they are intended. For example, a company can consider as a cost centers the following areas: the civil works department, the batching plant, the clinic, the restaurant, the vehicle fleet, the residence (company houses), the travel department. The costs incurred in these areas should, at the end of each month, transferred to the BU in which the person, the service rendered or the equipment that supports them is allocated.

[13] www.accountingtools.com/definition-cost-center, accessed on: 14th March 2014.

Table 1 – Example of Residence Cost Center Costs Ventilation

OD - Residence Costs Ventilation						
Purpose:	***Residence Park Cost Center : Costs Ventilation***					
Item	**General Account**	**Cost Code**	**Description**		**Debit**	**Credit**
1	**752199**	**11190006150**	**Residence Park Cost Center - Sonamet Houses**			**356.500,00**
2	752192	11191556150	Civil work		10.850,00	
3	752192	11193006150	Bactching Plant		2.170,00	
4	752192	11196006150	Sonamet Clinic		4.960,00	
5	752192	11200003910	Yard - clients services reimbursbles.		17.360,00	
6	752192	11200446150	Yard - production department		15.810,00	
7	752192	11200556150	Yard – General		100.130,00	
8	752192	11201006150	Maintenace department		15.190,00	
9	752192	11202006150	IT Department		6.510,00	
10	752192	11207006150	Logistic Department		20.770,00	
11	752192	11208836150	General Management		27.900,00	
12	752192	11208846150	Finance Department		17.670,00	
13	752192	11208856150	Human Ressources Department		30.070,00	
14	752192	11208866150	Commercial Department		18.600,00	
15	752192	11208876150	Quality Department		2.170,00	
16	**142150**	**12150006150**	**Head Quarter Building**		**6.200,00**	
17	752192	16240003910	FMC - Clients services reimbursables		5.580,00	
18	752192	16242003910	DSME - Clients services reimbursables		5.580,00	
19	752192	16243003910	APL - Clients services reimbursables		5.580,00	
20	752192	16250003910	Vecto Grey - Clients services reimbursables		43.400,00	
					356.500,00	**356.500,00**

Source: Sonamet File, March 2012

The table 1 shows a cost transfer model of all costs incurred in a cost center, in this case the *Residence Cost Center*. This cost center bears costs from different areas or departments of the company. Thus, the houses of the company are occupied by personnel allocated in different areas or departments, such as employees, clients, subcontracted companies or investments in progress. Costs relating to the use of company residences, for example, the depreciation, house rents, repairs, house wares, water, electricity, guarding, housekeeping, DSTV license and others, are at first allocated in the cost center *Residence Park* and at the end of each month these costs are ventilated to the BU in which their users are allocated.

We would like to stress our point of view regarding the cost center meaning, some definitions describe a cost center as each department of an organization. As it is known, an organization, a firm or company is composed by different areas that contribute for its daily operating activities with the purpose of generating a result, in this case a profit, as intended. For each area, it is appropriate to denominate as a *Business Unit*, because all departments are involved in the firm's activity, in this case in its business, all of them contribute to generate costs and incomes of the firm which finally determine the result of the company.

A *cost center* is a business unit, that is to say, a specific area or department which is only responsible for costs and in some cases for incomes produced on it, that are periodically distributed (ventilated) to the Business Units on which the person, the job done or the service rendered is related.

2. FIXED ASSETS PURCHASE PROCESS

The purchase of fixed assets is a part of fixed assets management process which also includes budget, procurement, transportation, taxes and finally the allocation[14]. Angolan companies purchase almost the totality of their fixed assets abroad and the purchase process must be managed thoroughly in order to minimize the acquisition costs.

Rules and procedures for the acquisition and valuation of fixed assets must be defined by the managers, assuming that the Capital Expenditure (CAPEX) shall meet the companies' needs so that they can revert into results that satisfy their objectives.

The acquisition process for fixed assets should always start from the investment budget which is related to the capital expenditure predefined and approved by the head management of the company. After the required documentation being approved by all levels of approvals and ready to be managed, only then the purchase can be accomplished. The documentation required for the process of the acquisition of fixed assets is:

- The request for capital expenditure (RCE),

- The internal Requisition (IR), and

- The purchase Order (PO).

The functionality of each of these documents is explained in flowchart presented further below.

The investments properties can be purchased by two different forms:

a) Direct purchases in the local market;

b) Purchase in foreign market (by import).

In the first case, all purchases of fixed assets or investment properties are made by firms within the national territory, and the fixed assets are supplied by the local suppliers or by the Government in some cases, especially in the case of lands. Lands acquired shall be valued at market price due to the speculation existing in the informal market. Buildings, equipments, machinery, vehicles, etc., purchased within the country should be valued at purchase price adding any cost incurred in the acquisition.

[14] Texas State Auditor's Office, op. cit.

The second case is related to the import process, this process must obey the legal procedures defined by the Angolan government. First of all, it must be focused on the aspects listed in the Angolan Customs Tariff and the requirements defined by the Angolan Ministry of Commerce.

2.1. Angolan government role on investment support

Angola is a country of the west coast of Africa, bordered to the north and east by the Republic Democratic of Congo, to the east by Zambia, to the south by Namibia and to the west by the Atlantic Ocean.

Angola has been an economic potential country worthy of reference, deserving a particular attention to oil and mining sectors, of which the diamonds and oil assume the primacy of total production and revenues generated from their export, once they represent 99% of the oil and mining exploration of the country.

Angola as an attractive market with around 20.9 million consumers, the country is strategically located in the Atlantic coast of West Africa, where it acts as a gateway to Southern Africa, Central and East by both road and rail networks.

Forming about 12% of the river system in Africa, the country has very rich hydro-graphic resources, with good arable lands and vast mineral resources potential. The country is currently "going through" economic growth and stability, the government is being strongly committed to finance the improvement and construction of basic infrastructures. The Angolan government has prepared a series of measures to encourage actions aimed to encourage investments in Angola. In these actions fits the most notable law n º 11/03, adopted in 2003 and considered one of the most remarkable laws in terms the legislation issued directly related to enterprise activities in areas of great importance[15]. "Private investment plays a crucial role in the development of national economy" reads the paragraph to the preface law no 11/03, 12th May, which deals with the ''Basic law of private investment'' which fundamental objective is to ''reformulate all the present legislation, therefore adopting a legal back ground that allows the existence of national and foreign private investment''.

[15] Law nº 11/03, Private Investment Law.

The Angolan Government through the National Agency for Private Investment (ANIP), the only authorized entity responsible for the policy of private investment (domestic and FDI[16]), is completely pledged in protecting private investors who want to invest in Angola.

2.1.1. Investment subsidies policy

A subsidy is an amount granted outright in favor of a public or private person, in order to mitigate or compensate an expenditure or to encourage an action (Bernard and Colli, 1997). According to Angolan GCA and Barroca (2011) subsidies are supports in a form of transfer of resources to an entity in exchange of accomplishment of certain conditions, in past or in future, related to the operating activity of that entity.

The Angolan GCA recommends that the subsidies should only be recognized until there is reasonable assurance that:

- the company will comply with the associated conditions;
- the subsidies will be really received;
- however, the receipt of the grant, by itself does not prove that the conditions of the grant have been or will be met;
- the revenue from subsidies must be recognized during the periods necessary for the balance with the related costs which they intended to compensate, on a systematic basis.

Assunção et al. (2010) argue that the investment subsidies are grants related to fixed assets whose primary condition is that the entity to which they are intended to, should purchase, build or acquire anyway fixed assets.

The Angolan government offers a series of benefits to private investors, in these include tax and customs benefits in business areas deemed as *priority areas*, development zones and in certain cases, special economic areas. Investors benefit from various exemptions from customs and taxes.

[16] FDI - Foreign Direct Investment is a controlling ownership in a business enterprise in one country by an entity based in another country.

Indeed, ANIP is implementing its vision of a move towards a strong market economy by actively promoting national and foreign private investment in the following areas, considered as priority sectors[17]:

- agricultural production and cattle-raising;
- transport industry;
- fishing industry and derivatives;
- civil construction;
- health and education;
- infrastructure development and management;
- telecommunications;
- energy and water; and
- heavy equipment, cargo and passengers equipments.

2.2. Fixed assets purchased abroad (import process)

According to Dias (2009) the import process comprises in a purchase made outside the country, it is related to the entry of goods in a *customs territory*[18], consigned to him coming from another customs territory.

The import which can be performed by any person or entity is characterized by the entry into a country of goods intended for use or consumption, or of fixed assets (Oliveira et al., 2006). According to Kotler (2000 apud Oliveira et al. 2006) the import is performed as an organizational buying process, which consists in the decision-making process to establish "the need to purchase products and services and then identify, evaluate and choose among brands and alternative suppliers".

With regard to investments in Angola, it can be noticed that almost 90% of fixed assets are purchased through the import process. Hence the importance for investors and company managers have extensive knowledge regarding the import process of goods into the

[17] ABRANTES, Maria Luisa, ANIP - How to invest in Angola: the one stop government entity for foreign investment issues, www.anip-angola-us.org.

[18] Customs Territory - are portions of areas called tax areas under which the jurisdiction of Customs is exercised on a regular basis or permanent. The movement of goods within the customs territory obeys certain precepts and procedures extensive legal and applicable to all regions of the customs territory in a uniform way, including any areas under territorial seas, its marine resources, seabed, subsoil and their natural resources and processing zones export located in accordance with the national standards or internationally accepted.

country because this process involves additional expenditures that should be added to the total value of goods and consequently have a great relevance in determining the results.

According to Rogerio Berto, the import activity needs to be preceded by a step of assessing the needs of the operation, access to suppliers, outsourcing, logistics, etc. and a survey of costs involved in the process[19]. The act of importing must be very carefully managed and shall only be performed if it is the best alternative for the company[20].

2.2.1. Additional costs on imports

The estimate of costs for the import process is a very complex matter, because the international trade involves some external factors not controlled by the firm. To determine the amount to be expended in a purchase of an item to be imported, it should be considered that the total cost of acquisition is not reflected only in price of the product because there are several *costs (expenses) that* are part of the total cost (Oliveira et al., 2006).

The importation cost includes all expenditures applied in the acquisition of goods originating from other countries (Sá and Sá, 2009). According to Magro and Magro (2008) it is part of the cost of acquisition, the purchase price and all expenditures necessary to put the items in conditions of use.

To set the value to be spent on the purchase of an imported product, it must be considered that the total cost of acquisition not only refers to the price of the product or service because there are several components that are part of the purchase process of goods through the importation.

According to Rosembloom (2002 apud Oliveira et al. 2005), the transport is the component that is responsible for the largest percentage of the total cost of logistics. Ballou (2010), complements that the transport may be responsible for one-third to two-thirds of total logistics costs. The rates of shipping lines are based on distance and volume of shipment. According to Ballou (2010) and Pozo (2010) the transport represents the most important figure of logistics costs in most of the firms.

In the case of a fixed asset to be purchased abroad all expenditures of money should reflect into the cost of the item to be acquired. The process involves some additional costs that can vary in each particular case, from the administrative management until the placement of

[19] André Rogerio Berto, Como estimar custos na actividade de importação. www.spell.org.br.
[20] Ibidem.

the item in working conditions. Thus, all capital expenditures require an efficient follow up in order to get a correct valuation for the items acquired.

Regarding to the imports of goods into the country the following rules and procedures established by Angolan government must be applied:

a) Imports must be made by individuals or legal persons properly licensed by the Ministry of Commerce.

b) All importers must have a Taxpayer Card, issued by the National Tax Directorate (DNI) in the Ministry of Finance. The Taxpayer Card number shall be the Importer Code and must be filled in the form of customs clearance (DU)[21]. A computerized system for processing the clearances rejects the statements that omit the code.

c) The maximum value for issuing the simplified DU (procedure used in the import of goods brought by travelers), is the equivalent in Kwanzas / USD 2,500.00 and not exceeding 100 kg (100 kilograms) in weight.

d) Importers and / or exporters may voluntarily request the opening of Pre-Shipment Inspection (IPE) of the goods being imported or exported to Angola. That IPE is called optional. All importers who carry out the optional IPE, may benefit from the green channel system, a system that enables swift expeditious clearance of goods, the National Directorate of Customs can exempt the physical checking of the goods which are in Full Container Loaded (FCL), particularly in cases that are in presence of perishable products or urgent parts.

Customs duties are regulated by the Tariff of Import and Export Duties under the Harmonized System (HS) 2013[22]. Rights and customs impositions for Definitive Importation in Angola are detailed in the table below:

[21] DU -The single document (Documento Único), which corresponds to the General procedure of order, constitutes the formula of customs clearance of all goods entering or leaving the customs territory, regardless of the customs procedure applicable to them.

[22] Law n.º 5/13, New customs tariff of import and export duties.

Table 2 - Customs Duties

Kind of Service	Rate	Comment
Customs services	2%, 5%, 10%, 15%, 20% and 30%	according to its custom classification position
Stamp tax	0.5%	
Customs General Fees	2%	of the customs value
Consumption tax	2%, 5%, 10%, 20% or 30%	varies with the kind of goods
Personal fees	Until 64.000,00 kz it is charged 14 UCF.	
	From 64.001,00 kz until 1.900.000, 00, it is charged 36 UCF	
	At values above 1.900.001,00 it is charged 0.1% or 40 UCF	
Travel and Transportation Allowance	0,53 kz per kilogram	For goods shipped by sea
	18.02 kz per kilogram	For goods shipped by air, land or rail,

Source: Angolan Customs Tariff

Due to its importance, the control of the expenditures on transport should deserve by the accountants more attention on recording all events that can serve as a basis for guiding investment analysis (Sá and Sá, 2009).

2.2.2. Outside costs

As described previously the import process involves some additional expenditures that are reflected on the total cost of a fixed asset, such costs in few cases are not incurred when an item is bought locally. The investment management costs (IMC) and other costs incurred externally, like the costs associated with the packing, inspection, transportation must be included in the total value of fixed asset acquired in which the expenditures are related to.

In some cases, the acquisition of some fixed assets outside the country needs the displacement of qualified personnel for market research, surveys and other studies. These expenses related to the purchase management of a fixed asset abroad involving the displacement of some personnel can be classified as Investment Management Costs (IMC), in which include expenses on transportation, accommodation, food, communication, medical appointments, salaries and allowances spent during the period.

In addition to IMC can also be included the costs of packing, and transportation from the supplier or manufacturer to shipper and the pre-shipment inspection.

According to Rosembloom (2002 apud Oliveira et al. 2005), the packaging of the product is important to protect the product from damage, contamination and loss. One of the main reasons to incur the extra expense of packing is to reduce the occurrence of damages and losses due to theft, deterioration and avoid damage during handling (Ballou, 2010).

2.2.3. Shipping cost (Free On Board and Cost Insurance and Freight)

In the process of valuation of fixed assets must be taken into account two figures which are very important determinants of the total value of imported goods, these figures are: Free On Board (FOB) e Cost Insurance and Freight (CIF).They make part of the Incoterms[23] and their meaning is related to the payment of the freight of transport of shipped goods. These acronyms are used to distinguish among buyer and supplier who pays the freight costs, i.e. who bear the costs and risks of transport (Ramberg, 2011).

> The INCOTERMS are the main responsible for the cost estimation, they obey international trade terms and establish minimum rights and obligations of the seller and the buyer as the freight, insurance, handling at terminals, customs clearances and obtain documents from an international contract of sale, i.e. the majority of logistics costs (LOPEZ, 2000 apud Oliveira et al., 2005).

In the commercial transactions of purchase and sale, the clause FOB attributes to the exporter the responsibility of handing over the goods on board, at the established price, being the expenses resulting from the transport, freight and insurance covered by the buyer, as well as all risks up to the port of destination.

The clause CIF establishes that the seller as the obligation of handing over the goods to the buyer until the named port of discharge, being its responsibility the payment of all expenses related to freight and insurance[24]. The seller bears also the insurance against the buyer's risk of loss of or damage to the goods during the carriage (Ramberg, 2011). Thus, it is observed that:

a) when the buyer receives goods in freight "FOB", the expenses of transportation (freight and insurance) run on their behalf and;

[23] Incoterms - International Terms of Commerce, that are standards defined for commercial international exchanges.

[24] Transfer of Risk in the Contract of Sale involving Carriage of Goods, in: *ww.jus.uio.no/pace/transfer*

b) when the buyer receives the goods in freight "CIF", the expenses of transportation (freight and insurance) are paid by the seller.

According to Radelet and Sachs (1998) shipping costs as measured by the CIF/FOB ratios are likely to differ across countries for several reasons:

- First, and most obviously, countries that are located further from major markets are likely to face higher shipping costs than proximate countries.
- Second, overland transport costs tend to be considerably higher than sea freight costs. Thus, for a given distance from main markets, countries with a higher proportion of transit by land will tend to have higher overall shipping costs.
- Third, there are extra costs to inter-modal transport (e.g. in which freight must be shipped both by land and sea), because of the extra costs of transferring between transport modes.
- Fourth, shipping costs differ because of differences in the quality of ports administration and/or ports infrastructure. Countries with better functioning ports authorities, less red tape for traders to work through, and more transparent and less corrupt customs clearance are likely to have lower overall shipping costs. Variations in basic port and handling fees can differ widely across countries. Similarly, countries with adequate port capacity, stronger ports infrastructure, and more sophisticated packaging and loading technologies are likely to have lower shipping costs.

Landlocked countries tend to face enormous cost disadvantages. They must pay the high costs of overland transport from the neighboring ports (Radelet and Sachs, 1998).

Radelet and Sachs (1998) explain that the CIF/FOB band, which is the basic measure of shipping costs (SC) is defined as SC = (CIF/FOB) - 1. They measure shipping costs for each country from the point of view of the country's imports, because that is how the data are generally available, though obviously shipping costs apply both in the direction of imports and exports. Notice that SC will depend not only on the charges for shipping a standardized type of freight (e.g. a twenty foot equivalent container) but also on the composition of trade.

2.2.4. Inside costs (Customs, Inspection and Local Transportation)

The cost of fixed assets acquired through import must also comprise the costs incurred locally until their receipt on site. These *inside costs* include the customs clearance costs, local inspections, local transportation, loading, unloading, and other fees incurred locally.

Customs charges are indicated in the customs tariff and can be previously estimated. The local transportation to final destination can also vary the cost of goods, depending on the distance, weight, road conditions, etc. from the port of discharge or airport to the final destination.

The local transportation has a great reflection on costs of the goods acquired abroad; it can be observed in an example where in the same conditions of acquisition the same equipment is imported by a company located in Lobito and by another company located in Huambo city, in Huambo province.

For the company located in Lobito city, just beside the Port of Lobito, the company can pay around 300,00 USD for the transportation of a 40 feet container from the port to its yard. Whereas, for the same package a company located in Huambo (350 km of distance from the Port of Lobito) pays approximately 3.000,00 USD.

2.2.4.1. Equipment installation and testing costs

The cost of installation and testing of new equipments acquired by a firm makes part of the CAPEX, and all expenditures related to the personnel contracted for the purpose should be allocated in the cost of fixed asset. In many cases, equipment suppliers honor their guarantees if the equipment is assembled, adjusted and started-up by their own personnel or by technicians authorized by them.

In many estimating methods, this component is calculated separately from the main fixed asset because its impact varies considerably according to the nature of each fixed asset.

Costs for installation and testing of new equipment purchased by a firm should be part of the cost of acquisition, because they are related to capital expenditures. The most common charges for equipment installation are related to piping installation, instrumentation and control, electrical installation.

2.2.5. Cost distribution model

As it is known, the acquisition cost of imported goods involves a several figures that sometimes make the distribution thereof a little difficult. According to Bernard and Colli (1997) the improvements of the cost calculations and their widespread use have a fundamental role in the management of industrial and commercial companies.

These calculations allow that the fixed assets are accounted by their real value. This basis of calculations for goods purchased by the company must be based on the elements involved in the procurement process, and in the case of fixed assets built or manufactured by the company should be allocated to them all the expenses incurred in their construction or manufacturing.

Regarding to the import process, all expenditures associated with the purchase of fixed assets must be added in the acquisition cost of the assets. But there is a peculiarity that should be taken into account in the allocation of the cost of fixed assets acquired through import, in the case of the purchase of various goods in which also include some fixed assets. Hence the need for equitable distribution of all charges related to the import of the items in order to know the value of each of them. Sometimes a company pays an overall amount for a set of goods and cannot identify from the invoice how much of the freight, customs and other charges attributable to each item.

A practical model improved for this purpose is the Cost Distribution Model (CDM), which is elaborated with the purpose of calculating the importation cost for each item.

Table 3 - Cost Distribution Model (CDM)

SUPPLIER:	Acergy France SA	**PROCº Nº:**	**527175885**
BILL OF LANDING (B/L) Nº:	527175885	**SHIP /PLANE:**	SAF KWANZA
CONTAINERS Nº	**1**	**ORIGIN:**	ANTWERP
CONTAINER LICENSE PLATE:	**TOLU 45412540**	**ETD:**	20-12-09
INVOICES Nº:	413-A1	**ETA:**	26-Jan-10
		WAREHOUSE	
GOOD:	**Miscellanious**	**ENTRY:**	19-Fev-10
		WAREHOUSE	
QUANTITY:	**5**	**ISSUE:**	

EXPENSES REGISTER

DESCRIPTION	AMOUNT (KZ)	EXCHANGE	AMOUNT (EUROS)	AMOUNT (USD)	% IMPORT COEF.	OBS
FOB	**31.551.026,85**	75,174	**306.265,79**	**419.706,64**	**96,74%**	
FREIGHT	**521.163,13**	75,174	**5.058,93**	**6.932,76**	**1,60%**	
INSURANCE	**118.667,98**	75,174	**1.151,91**	**1.578,58**	**0,36%**	
CIF	**32.190.857,96**	75,174	**312.476,63**	**428.217,97**	**98,70%**	
DESCRIPTION	**AMOUNT (KZ)**	**EXCHANGE**	**AMOUNT (EURO)**	**C/AMONUT (USD)**		**OBS**
Licensing		75,174		**0,00**	**0,00%**	
Inspetion		75,174		**0,00**	**0,00%**	
Customs Duties		75,174		**0,00**	**0,00%**	
General Fees	**197.638**	75,174		**2.629,07**	**0,61%**	
Stamp Duty	**49.409**	75,174		**657,26**	**0,15%**	
Broker Fees	**49.410**	75,174		**657,28**	**0,15%**	
Dispatch Printed	**150**	75,174		**2,00**	**0,00%**	
Statistical Fill	**79**	75,174		**1,05**	**0,00%**	
Port Fee - EP14, EP 17	**72.213**	75,174		**960,62**	**0,22%**	
Sealing of documents	**901**	75,174		**11,99**	**0,00%**	
Displacement	**600**	75,174		**7,98**	**0,00%**	
Cargo Assistance	**553**	75,174		**7,36**	**0,00%**	
Sanitary Certicate	**553**	75,174		**7,36**	**0,00%**	
Traffic Services	**3.000**	75,174		**39,91**	**0,01%**	
O Model	**2.370**	75,174		**31,53**	**0,01%**	
Finance Entry	**79**	75,174		**1,05**	**0,00%**	
Coupon Fee	**553**	75,174		**7,36**	**0,00%**	
Transit Fee	**12.000**	75,174		**159,63**	**0,04%**	
A. Maersk Fees	**14.500**	75,174		**192,89**	**0,04%**	
Stamp and Printed dispatch	**1.580**	75,174		**21,02**	**0,00%**	
Transportations	**3.583**	75,174		**47,67**	**0,01%**	
Oceânica intervention	**15.580**	75,174		**207,25**	**0,05%**	
Bank Charges		75,174		**0,00**	**0,00%**	
Other Charges		75,174		**0,00**	**0,00%**	
IMPORT COST	**32.615.609,66**	75,174		**433.868,22**	**100,00%**	
			IMPORT COEFICIENT:	**1,03**		

Source - Sonamet Company

The table 3 shows in detail all expenses incurred in the import process of goods into Angola. This model facilitates a correct distribution of costs of goods purchased abroad and consequently allows a correct accounting. The additional costs to CIF costs are totaled and

therefore divided by the FOB cost in order to determine the Coefficient of Import (CI). The CI is a figure that enables the precise calculation of the value of each item acquired taking into account the additional costs of each shipment. As it is know, in many cases it is not imported only a single item, the goods are imported in one shipment and packed together in containers, boxes or bundles. In the case of a fixed assets acquired together with other goods this model facilitates the assignment of the value of each item. To determine the value of a single item, its purchase price (from the PO), is multiplied by the import coefficient calculated, thus obtaining its total acquisition value (acquisition cost). In the above case, the resulting Coefficient of Import (CI) is 1.033742, taking into account the FOB value of $ 419,706.64 and the total Import Cost (IC) of $ 433,868.22. Having regard the local transport from the port to the final destination, the cost of transporting, loading and unloading costs, we also have to consider the variable μ which has a great impact on the overall cost of goods acquired through import.

In this case, the Coefficient of Import (CI) can be calculated using the following formula:

$$CI = ((CIF + IC) + \mu) / FOB$$

Source: The author

Where:

CIF: Cost Insurance and Freight

FOB: Free On Board

IC : Import Costs

μ : Local Additional Costs on Imported Goods

2.3. Fixed assets purchased locally

Fixed assets purchased locally should be recorded at their cost of acquisition, adding any other charges incurred in the acquisition process. In the local purchase process, the cost of a fixed asset is generally known due to the easy relationship and communication with suppliers, regarding to the quotation process and selection of suppliers. The price is previously indicated in the Local Purchase Order[25], if there are some additional costs such as transportation, loading and unloading, installation, assembly or other charges, these must be added in the cost of the item acquired.

[25] A Local Purchase Order (LPO) is a commercial document issued by a buyer to a seller, indicating the products, quantities and agreed prices for products or services that the seller will provide to the buyer within the national or local boundaries.

3. FIXED ASSETS MANAGEMENT AND VALUATION

The acquisition value of a fixed asset should reflect its real value, it means encompassing all CAPEX incurred in the purchase process, from the beginning until the placement in conditions of use. Thus, the book value of fixed assets largely depends on the purchasing process.

The tangible fixed assets are recorded by the acquisition cost, including all expenses imputable to the purchase, without accumulated depreciations and losses for impaired assets, (IAS 16). The cost of a fixed asset built or manufactured by the company includes the costs of materials and the direct labour used for the purpose.

All fixed assets are valued at the historical cost when expressed in the trading currency and updated at the exchange of the closing date when converted to the local currency (IAS16). In accordance with the GAAP of historical cost that reads, the accounting statements must be based on the acquisition or production cost, either the nominal currency or current currency. Thus, respecting the accounting principle of historic cost that says "the accounting records should be based on cost of acquisition or production, either the nominal currency or constant currency" (GAAP). The Angolan GCA describes that should be used the following criteria to acknowledgement and specific valuation basis for the tangible fixed assets to:

- Indicate the basis of valuation used for determining the gross amount booked;
- Indicate the value from which the assets are capitalized;
- Indicate the depreciation methods used;
- Indicate the useful life by category and depreciation rate used.

The IAS 16 determines that the elements of the cost of a tangible fixed asset must comprise:

a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;

b) any costs directly attributable to put the fixed asset on site and in good conditions to be able to operate as intended by the management;

c) the initial estimate costs of dismantling and removing the item and restoring the site where the item is located.

Therefore it considers the costs directly attributable as:

a) the costs of employee benefits as defined in IAS 19 (Employee Benefits) arising directly from the construction or acquisition of an item of property, plant and equipment;
b) the costs of site preparation;
c) the initial costs of delivery and handling;
d) the installation and assembly costs;
e) the costs of testing whether the asset is functioning properly;
f) professional fees.

3.1. Accounting rules for fixed assets

The accounting rule for fixed assets is a task that requires a special attention regarding to the sources of valuation. It should not be based only on the information received, it is very important to know how the firm acquires a given fixed asset, and how to manage the details of such acquisition in order to carry out a proper valuation.

For example if the firm acquires a power generator through a subsidy, the accounting department must firstly obtain the information about the form of acquisition for a proper accounting. According to Vigário (2006) and, Costa and Alves (2008) firms can acquire fixed assets through different formss, such as:

a) cash payment;
b) purchase on credit;
c) leasing;
d) own construction or manufacture;
e) subsidy;
f) donation.

Each form of acquisition relates to a different method of accounting. The rule of accounting for property, plant and equipment acquired by the firm consists in debiting an account of class 1 (fixed assets and investments), in which the fixed asset should be allocated, by its nature, and crediting a net assets account of class 4 (Magro and Magro, 2008).

If the fixed asset is acquired on credit, the credit amount should be recorded in sub-account 37.1 "*other payable accounts – fixed assets purchase*", this account is recorded by credit, by debiting the respective fixed asset account, and is recorded by debit when the payment is made and crediting a net asset account (GCA).

If the acquisition is through donation the account of class 1 related to the fixed asset is debited and it is credited the account of class 5 "Reserve of donations", (Costa and Alves, 2008). Costa and Alves (2008) explain that "in case of an acquisition through an exchange it is credited the account of the item intended to be exchanged and debiting an account of class 1, related to the fixed asset that the firm wants to acquire".

In the cost of fixed assets constructed or manufactured by the firm should be included all expenditures with raw material, direct labour, depreciation, and other costs by debiting the account *construction in progress* while the fixed asset still under construction or manufacturing. After the completion of the work, the account "*construction in progress*" should be credited against an account of "tangible fixed assets" related to the fixed asset constructed or manufactured.

Fixed assets under leasing process comply with the accounting principle of *substance over form* that says; *the accounting must meet the substance of transactions and financial reality and not merely their legal form* (Gonçalves and Manuel, 2009; Magro and Magro, 2008; Vigário, 2006). The IAS 17 defines the financial lease as all leasing contract that transfers substantially all the risks and rewards resulting from the possession of an asset even if its ownership title is not transferred to the user (Costa and Alves, 2008).

It means that at the date of the conclusion of the contract the fixed asset should be treated as an asset of the company, in this case, it is debited the account of class 1, related to the fixed asset and it is credited the account 37.1 "*other receivable and payable amounts, purchase of fixed assets, tangible property*".

According to Vigário (2006) at the moment of the end of the contract, the fixed asset value which normally coincides with the value of the acquisition reported at the time of conclusion of the contract must be debited to the respective sub-account of the account 11 - "*tangible fixed assets*" and crediting the account 37.1.

- For the payment of financial amortizations of the debt included in monthly or annual installments, should be debited the account 37.1 and crediting the account 43 "*Bank Deposit"*.
- For the monthly or annual depreciations should be debited the respective sub-account of the account 73 "*Depreciations*", crediting the respective subaccount of the account 18 "*Accumulated depreciation*".
- For the interests charged associated with debt in the case of repurchase option, should be debited the respective account of sub-account 76.1- *financial costs and losses, interests*, by crediting the account 43: *Bank Deposit*.

According to Vigário (2006) fixed assets under lease, although they are legally the property of the leasing company, should also be included in the balance sheet of the lessee company (company that uses the fixed asset).

And the rates of reintegration should be applied to these fixed assets in accordance with the branch of activity in which they are being used, and recorded in the accounts of accumulated depreciation of the lessee company (Magro and Magro, 2008).

3.2. The budget

The budget is one of the most important management tools, plays an important role in management decisions because it is the main supporting document that helps the management to determine the amount that the firm should invest and raise revenues in the different activities during a determined period, but, according to Padoveze (2005) a budget should involve all sectors of a company. Caiado (2012) argue that the budget is a report of expected results and expressed in a quantified manner. According to Bernard and Colli (1997) the budget is a forecasting and limited financial plan, sustained by a decision that makes it enforceable and gives it a coercive force, of expenses and revenues to be realized in a determined period, by an individual or a collectivity. It is a management's quantitative expression of plans for a forthcoming period. According to Stedry (1999 apud Padoveze, 2005) the budget is a quantitative expression of a plan of action that helps the coordination and implementation of a plan.

The budget is a management tool that supports the manager to achieve the objectives previously defined for the organization (Rodrigues and Reis, 2011); it means that the budget consists in doing options in advance and compromising to respect them. The

options can only be made clearly whether the costs and incomes to be entered in the budget are correctly evaluated (Bernard and Colli, 1997).

According to Bernard and Colli (1997) the amount of a budget depends on the precision and accuracy of assessments that have presided over the choices made. A budget outlines a course for the company describing its plans in financial terms, as a road map, the budget can help the company to operate during the year and reduce negative results, (Warren et al.,2008).

Caiado (2010) argues that the budget allows the numerical quantification of scheduled activity of costs and incomes that result from it.

Acccording to Horngren et al. (2005 apud Kaarbøe et al., 2012) the budget is described as an integral part of management control systems that aims at promoting coordination and communication among subunits within the company, provides a framework for judging performance and finally motivating managers and other employees

Usually the budget is a yearly plan and can also be designed and organized for shorter periods, depending on the management objectives. The master budget is the overall financial plan for the period, which reflects the organization's goals and objectives. The master budget includes operating, investing and financial budgets. Operating budgets show the company's planned sales or services rendered and operating expenses. Financial budgets reflect financing plans such as borrowing, leasing, and cash management.

The investment budget reflects the plans of acquisition of fixed assets by the company. Generally Investment decisions require large amounts of financial resources and sometimes with a term extension rather sharply. These reasons determine to the management care with such studies with the aim of defining the most appropriate alternative to the needs of the company. In summary, the budgetary control is a system of controlling costs and resources which includes comparing actual performance with the budgeted performance and subsequently acting upon the actual results to minimize the deviations and achieve maximum returns. In essence, budgetary control is purported to ensure that the activities carried out are providing the desired results. Rodrigues and Reis (2011) state that if the programs and plans of activity underlying the budgets are realistic and ambitious the budgetary method is a factor of progress and balanced development of the organization.

3.2.1. Costs estimate for investment budget

Before preparing the budget for investment activities intended to be made in a period (usually one year), the personnel involved in this process must take into account all the figures that satisfy the total cost of fixed assets. At first, the main cost of fixed assets should be known through quotations previously made. Additional expenses should be calculated on the basis of estimates, based on studies, analyzes and existing tariffs, etc.

It must be taken into account all figures that determine the cost of fixed asset until the item is put into working condition. For different types of fixed assets the valuation model is based on the conditions in which they are acquired; whether supplied locally, acquired through the process of importing, constructed, manufactured or built by the firm.

According to Magro and Magro (2008) in many cases the cost or the value must be estimated if the estimates are reasonable, because its use is an essential stage of the preparation of financial statements and does not undermine its reliability. The accounting principle of prudence requires that a cost should be accounted by its exact value, or by the best estimate that can be done, (GCA). However, during the elaboration of the investment budget this principle has always to be taken into consideration. Then, the comparison of the real costs (accounted) with the estimated costs (forecasted) provides a feedback regarding the accuracy of the cost estimates, (Maher, 2001). We can see below one example of cost estimate for the acquisition of one beam cutting machine;

Table 4 – Beam Cutting Machine Cost Estimate (BU 2168)

Lobito 2010 - Beam cutting workshop - budget rev2 **Last update: 26th March 2010**

Transport costs:	12%
Customs + port duties costs:	5%
euro/us$ rate	1,50
Installation cost usd:	38,00 manhour rate, internal cost

Item	Description	Status	Cost (eur)	Trspt (eur)	Cust.+port. (usd)	Install cost. (usd)	€	us$	TOTAL eq us$	Comment
1	**Concrete slabs**						**1 000 €**	**$64 433**	**$66 000**	
1,1	Engineering	Estimate	1 000 €	€ 0	$0	$0	1 000 €	$0	$1 500	
1,2	Area preparation 30m x 11m	Estimate	local	local	local	$6 353	0 €	$6 353	$6 400	50$ / m3
1,3	Concrete slab 30m x 11m	Estimate	local	local	local	$58 080	0 €	$58 080	$58 100	800$/m3
2	**Equipment**						**635 779 €**	**$67 300**	**$1 021 000**	
2,1	Beam cutting machine	Quoted	542 660 €	€ 65 119	$40 700	$11 400	607 779 €	$52 100	$963 800	HGG
2,2	Beam cutting machine commissioning	Quoted	28 000 €	€ 0	$0	$0	28 000 €	$0	$42 000	
2,3	2 gantry cranes 5t/10m each	Estimated	0 €	€ 0	$0	$0	0 €	$0	$0	upgrade: 150000€ PO, 38300$ install
2,5	Rails and accessories	Estimated	0 €	€ 0	$0	$0	0 €	$0	$0	upgrade: 10000€ PO, 3400$ install
2,5	Shelter 6m x 4m	Estimated	0 €	€ 0	$0	$15 200	0 €	$15 200	$15 200	Lobito made
3	**Electricity**						**6 720 €**	**$1 970**	**$12 100**	
3,1	Main panel	Estimate	5 000 €	€ 600	$375	$760	5 600 €	$1 135	$9 600	
3,2	Electric cables	Estimate	1 000 €	€ 120	$75	$760	1 120 €	$835	$2 600	
4	**Air, water**						**6 720 €**	**$105**	**$10 200**	
4,1	Oxygen inversion outlet station	Quoted	5 000 €	€ 600	$30	$0	5 600 €	$30	$8 500	
4,2	Piping	Estimate	1 000 €	€ 120	$75	$0	1 120 €	$75	$1 800	

Total:	$1 110 000
Contingency:	3%
Grand total:	**$1 144 000**
BUDGET	**$1 150 000**

Source – Sonamet company file

3.2.2. The Investment budget

The investment budget is a fundamental tool for the management of a company with regard to the management of fixed assets. The head management should always prepare the forecast for capital expenditure to be spent during an economic period.

According to Warren et al. (2008) the budget of investment activities summarizes the plans for acquisition of fixed assets. This partial budget piece does not only turn on the short-term plans (Padovaze, 2005). The investments needed to support the projects of investment in new products, new factories or new distribution channels are expenses to be carried out in the period but that probably will be for products and activities to be carried out in the future.

Padovaze (2005) explains that the investment budget comprises investment of operational plans already launched in the past and running on budget period, as well as those detected and required for the current period. In the preparation of the investment budget it is very common projecting the plans for several periods (warren et al., 2008).

As it is known, for all activities it is mandatory to establish goals in order that the outlined objectives are achieved successfully. The investment activities are the most important taken by a firm, it must be given to them a greater attention in its commitment and an efficient follow-up in allocating all expenditures incurred in order to have a correct valuation of fixed assets to be acquired by the company.

Further below we have a model of the budget for investment activities prepared by Sonamet Company S.A. for the year 2010 forecasting the capital expenditure to be realized for thiss period.

Table 5 - Sonamet Investment Budget - 2010

		INVESTMENT APPROVED and ONGOING 2009 + APPROVED 2010									INVESTMENT INCLUDED IN TENDERS AND CONTRACTS									Updated on:	25-Set-10				
		KUSD		Budget Presented at Historical Exchang								BP Programme			Pazflor			CABGOC			1 EURO=	$1,50			
	PRIORITY	Investment Sonamet	Current Physical Progress	Previous Budget up to 2009	Budget 2010	Budget 2011	Budget 2012	STATUS TO DATE Approved Historic For Ex	Committed Real For Ex	Forecast Real / Fcst For Ex	Description in Contract	HMC m$	Modec m$	Cameron m$	APL m$	DSME m$	FMC m$	South Nemba m$	Awarded/ committed m$	FINANCING Budgeted	Clients Participation	Balance			
2150	09	Sonamet HQ & Guest House	51%	31.350				31.350	22.901	33.190									-	####		31.350			
2150	1	HQ& Guest House Furnitures	0%		2.000			2.000	-	2.000									-	2.000		2.000			
2166	09	Training School	100%	8.797				8.797	10.759	10.759	Training		####	450	100	3.650			7.000	8.797	7.000	1.797			
2230	1	Yard Equipments 2010	95%	374	2.440			2.814	2.776	2.814	Heavy Load Equipment		####						3.000	2.814	3.000	(186)			
	1	Gantry Crane 10T/ 12m Muller	95%	287				287	287	287															
	1	Maniscopic MLT 742	95%	88				88	88	88															
	1	Taylor forklift rough terrain 16T	95%		474			474	474	474															
	1	Gantry Crane 10T/ 12m PipeShop	95%		308			308	308	308															
	1	TIG Welding Machines	95%		85			85	85	85															
	1	Caterpillar Loader 980C	95%		324			324	324	324															
	1	Beam Cutting Machine	95%		1.150			1.150	1.150	1.150															
	1	PMT- travel	62%		100			100	62	100															
2233	2	33% Fleet Renewal + 50	54%		2.300			2.300	1.237	1.500									-	2.300	-	2.300			
2231	3	Yard Facilities Improvement	Approved		5.350	-		5.350	2.737	5.412	Equipt. (Lifting/ Mis		-	3.000		1.000	1.000		5.000	5.350	5.000	350			
	1	Construction of Safety Building	0%		250			250		250	Misc. Equipment			200											
	1	Yard roads development	0%		1.000			1.000		-	Misc. Equipment														
	1	Yard 3 Fencing Wall	80%		300			300	535	800															
	3	Concrete Slab around PR3 & 4	0%		2.000			2.000	1.100	2.000	Misc. Equipment			1.000		1.000	250								
	3	Piping/ Plateshop Concrete Slab	0%		1.000			1.000		1.000	Misc. Equipment			1.000											
	1	Yard 1 Shore Protection	0%		800			800	610	800	Misc. Equipment														
	1	New Orbital Machine	0%					-	150	150	Misc. Equipment														
	1	Gaz Handling/ Storage Area	0%					-	12	12	Misc. Equipment														
	1	Additional Offices for Clients (12)	80%					-	150	150	Misc. Equipment														
	1	Construction of QC Building	0%					-	180	250	Misc. Equipment			800											
2170	2	Painting Shop (Study)	Forecast 2011					-		250										-	-	-			
FP01	2	Back Up Bridge (Study)	Forecast 2011					-		250										-	-	-			
2227	09	Sonamet IT System Upgrade	68%	1.500				1.500	1.123	1.500										1.500	-	1.500			
2168	09	Power Station	Int Proc placed		6.500			6.500	3.182	6.500									-	6.500	-	6.500			
2168	1	Electrical Network (5000V)	25%					-	485	1.600									-	-	-	-			
FP02	3	Sonamet Housing Compound	0%		2.000			2.000		2.000										2.000	-	2.000			
		SUB-TOTAL		42.021	20.590	-	-	####	45.200	67.775	SUB-TOTAL	-	5.800	3.450	100	4.650	1.000	-	15.000	62.611	15.000	47.611			
2209	2	Manitowoc 18000	PO Pending		6.000			6.000	-	6.000	Manitowoc 18000	6.000							6.000	6.000	6.000	-			
2210	09	Material Storage Facilities	Overall 10%	3.000				3.000	2.022	3.000	Material Storage		####						3.000	3.000	3.000	-			
	1	Open Pipe Storage Area Yard 3	Approved	1.250				1.250	902	1.250	Open Storage Area		1.250						1.250	1.250	-	1.250			
	1	New Warehouse	Approved	1.750				1.750	1.120	1.750	New Warehouse		1.750						1.750	1.750	-	1.750			
2208	09	Jacket Bracing Area	C.W. 62%	4.600				4.600	3.561	4.600	Jacket Bracing Area							###	4.393	4.600	4.393	207			
	1	Bracing Line	C.W. 50%	3.525				3.525										3.500	3.500	3.525	3.500	25			
	1	Muller Machine	C.W. 100%	1.075				1.075										893	893	1.075	893	182			
FP03	09	Vessangol	0%		-			-	-	-										-	-	-			
		SUB-TOTAL		7.600	6.000	-	-	13.600	5.583	13.600	SUB-TOTAL	6.000	3.000	-	-	-	-	4.393	13.393	13.600	13.393	207			
1462	09	Reconstruction PR 1	0%		1.000			1.000		2.000	Manifold Investment			1.000					1.000	1.000	1.000	-			
2235	09	Reconstruction Duplex 1	15%	1.360				1.360	860	1.100	Manifold Investment			1.100					1.100	1.360	1.100	260			
1462	09	Reconstruction Water Tank	0%							500									-	-	-	-			
		SUB-TOTAL		1.360	1.000	-	-	2.360	860	3.600	SUB-TOTAL	-	-	2.100	-	-	-	-	2.100	2.360	2.100	260			
		TOTAL - YEAR		50.981	27.590	-	-	78.571	51.643	84.975	TOTAL	6.000	8.800	5.550	100	4.650	1.000	4.393	30.493	30.960	63.104	467			

The total amount allocated to each group of predefined fixed assets comprises the same Budget Code in order to fit all the expenditures related to the acquisition or construction of a fixed asset. In a budget code can be allocated more than one item to be acquired, for example, the acquisition of a Manitowoc can be allocated to a single budget code, in the other hand the acquisition of various equipments such as IT equipments, generators, means of transports, yard facilities, households, they can be allocated in a single Budget Code as a group of items but describing in details each one with its sub-code. As example we have below the representation of the budget code 2226 - yard equipments 2010:

Table 6 – Business Unit 2226 Budget Codes

Sonamet Investment (kUSD)	BC	Budget
		2010
BU 2226 - Yard Equipments 2010	**2226**	**3.385**
X-Ray Machines and Prot. Pannels	A	150
Bus for Personnel Transport	B	200
Vertical Elevator	C	200
Haulotte Personnal Elevator	D	100
Concrete Dumper AUSA	E	100
Skip Truck Volvo	F	200
Welding Sets	G	300
Manuscopic 12t	H	300
Hydraulic Hammer IHC S 35	I	**855**
Survey New technology equipment	J	980

Source: Sonamet company

We can notice that each fixed asset comprising the business unit 2226 is discriminated by its budget codes (from A to J) and each one with its budgeted amount. Financial managers must elaborate the detail of the composition of the total amount described in the budget in order to get a more accurate budgeted amount and to better distribute the additional expenses incurred in the acquisition of each fixed asset for a proper valuation.

Table 7 - Sub – code B for budget code 2226

Budget in KUSD	Yard Equipments 2010	BU	2226
	Bus for Personnel Transport	Budget Code	B
	Purchase Orders (Invoice Price)		**180**
	Transport		12
	Duties & Clearing		5
	Installation & Commissioning		2
	Others		**1**
	Total cost of Acquisition		**200**

Source – Sonamet Company

The acquisition cost refers to the price quoted from the supplier and is issued on the PO. The transport cost normally is previously forecasted according to the mean of transport used, and can be determined as FOB or CIF. Duties and Clearing expenses can also be forecasted according to the customs tariff as also all others customs charges discriminated in section 2.

3.2.3. Investment budget management and control

According to Caiado (1997), the budget management encompasses the planning and control functions, Patra (2008) argues that the budget management helps to analyze the performance of an organization through appraisal and suggests the follow-up action to improve the situation. Rodrigues and Reis (2011) state that the budget control is a management tool of great importance and its content is based especially to allow:

- a comparison between the accounted and the forecasted amounts;

- analyzing and controlling the deviations registered;

- taking corrective actions;

- issuing the monthly report related to the investment status (IMSR).

The management of the investment budget should be supported by management tools such as planning, controlling, follow-up and monitoring. For greater efficiency, for big companies, must be the cost control area or management control responsible for the budget management and its follow - up.

According to Rocha and Rubio (1999) budgetary control constitutes a basic element in the process of financial control, understood as a management control system based on the evaluation of managers and responsibility centers through the results obtained.

In this context, the budget for investment activities must be managed and controlled carefully so that the forecasted amounts must be to a certain extent, very close to the realized amounts. It means that the expenditures incurred in the acquisition of fixed assets by a firm should deserve special attention regarding to their allocation for a proper accounting.

According to Harrin (2006) and Taylor (2006), a more practical and effective model for the control and the management of any budget should include the following figures:

- *Budget 0*: it represents the forecasted amount for the period;
- *Budget to Date*: it registers the budgeted amount from the starting period up to the period under analyze;
- *Forecast* (budgeted amount): it represents the forecasted amount for each period, such as month, trimester and quarter;
- *Accounted* vs. *Forecast* or *Actual Cost of Work Performed* (ACWP): total costs actually incurred and recorded in accomplishing work performed during a given period;
- *Deviation to Date*: it records the difference between the budgeted amount and the accounted amount;
- *Estimate To Complete* (ETC): it is the estimated of the amount of money required to finish the project from the point of progress analysis. Its calculation is based on the date of the comparison to the end of the project;
- *Estimate At Completion* (EAC): it is the estimated final cost of the project; and the,
- *Deviation*: it is the total deviation for the period under analysis.

Table 8 - Sonamet Residence Cost Center - Budget Control and Follow Up

Fev-10

COST CONTROL REPORT *All figures in Kusd* *1 eur = 1,44990 usd*	**Budget** **Budget 0** (a)	**Budget** **To Date** **(b)**	**Accounted / Realized** **ACWP** (c)	**Deviation To Date** (d) = (c) - (b)	**CURRENT FORECAST**		**Budget - 2 years plan**	
					ETC (e)	EAC (d)=(b)+(c)	2011	2012
Personnel Costs	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Running Costs	**1.698**	**252**	**252**	**0**	**1.446**	**1.698**	**1.938**	**2.063**
Water	50	0	0	0	50	50	50	55
Electricity	45	4	4	0	41	45	45	45
Gas	6	0	0	0	6	6	7	7
Fuel, Gasoil	7	0	0	0	7	7	6	6
Guarding	708	95	95	0	613	708	840	900
Cleaning	672	122	122	0	550	672	780	840
Licences (DSTV)	145	22	22	0	123	145	144	144
Telecom expenses	6	1	1	0	5	6	6	6
Other external services	59	8	8	0	51	59	60	60
Equipment	**4.293**	**542**	**542**	**0**	**3.751**	**4.293**	**4.771**	**5.259**
Houses – Depreciation	130	25	25	0	105	130	103	291
House – Rents	3.708	448	448	0	3.260	3.708	4.212	4.512
Maintenance and Repairs	320	55	55	0	265	320	320	320
Tools and Small equipments	120	14	14	0	106	120	120	120
Transport Services	15	0	0	0	15	15	16	16
Other expenses	**48**	**1**	**1**	**0**	**47**	**48**	**48**	**48**
Insurances	20	1	1	0	19	20	20	20
Contigencies	28	0	0	0	28	28	28	28
Total costs	**6.039**	**795**	**795**	**0**	**5.244**	**6.039**	**6.757**	**7.370**
Recorveries	**5.955**	**658**	**658**	**0**	**5.297**	**5.955**	**6.747**	**7.133**
Cost center result	**-84**	**-137**	**-137**	**0**	**53**	**-84**	**-10**	**-237**

Source – Sonamet Company

3.3. Capital expenditure

Expenses or expenditures are the financial compensation that the company has to pay immediately or in the long term by the acquisition of goods or services. In accounting, *an expense* has a very specific meaning; it is an outflow of cash or other valuable assets from a person or company to another person or company. This outflow of cash is generally one side of a trade for products or services that have equal or better current or future value to the buyer than to the seller. Technically, an expense is an event in which an asset is used up or a liability is incurred, in terms of the accounting equation, expenses reduce the owners' equity.

The Financial Accounting Standards Board (FASB) defines expenses as *outflows* or other *using up of assets* or *incurrence of liabilities*, or combination of both, from delivering or producing goods, rendering services, or carrying out other activity that constitutes the entity's major or central operations (Marshall and Macmanus, 1998). Expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrence of liabilities that result in decreases in equity, other than those relating to distributions to equity participants[26]. According to Damodaran (2012), the expenses incurred by a firm can be categorized into three groups:

- Operating expenses are expenses that generate benefits for the firm only in the current period. For instance, the fuel used by an airline in the course of its flights is an operating expense, as is the labour cost for an automobile company associated with producing vehicles.

- Financial expenses are expenses associated with non-equity capital raised by a firm. Thus, the interest paid on a bank loan would be a financial expense.

- Capital expenses or capital expenditures (CAPEX) are expenses that generate benefits over multiple periods, related to the acquisition of capital assets or fixed assets. For example, the expense associated with acquisition of machinery or outfitting a new factory for an automobile

[26] IFRS Framework , www.ifrs.com

manufacturer is a capital expense, since it will generate several years of revenues.

The capital expenditure is the money spent by a firm for acquiring or upgrading fixed assets. Capital expenditure can be understood as expenditure incurred on the purchase, alteration or improvement of fixed assets. For example, the purchase of a car to be used to deliver goods is a capital expenditure. Included in capital expenditure are such costs as: delivery of fixed assets; installation of fixed assets; improvement (*but not repair*) of fixed assets; legal costs of buying property; demolition costs; architect fees.

The operating income for a firm, measured correctly, should be equal to its revenues less its operating expenses (Damodaran, 2012). Neither financial nor capital expenses should be included in the operating expenses in the year that they occur, though capital expenses may be depreciated or amortized over the period that the firm obtains benefits from the expenses (Damodaran, 2012). The net income of a firm should be its revenues less both its operating and financial expenses. No capital expenses should be deducted to arrive at net income (Damodaran, 2012).

3.3.1. Request for capital expenditure

The Request for Capital Expenditure (RCE) is an important document which is used to make a decision to spend money for the acquisition of fixed assets. It is also used to provide information as to the expected timing and amount of cash inflows and out-flows for investing activities.

Although accounting personnel are usually responsible for coordinating and compiling much of the information in the CAPEX Request, departments responsible have the duty for the preparation of the appropriation request. Other departments such as IT, marketing, technical, production or engineering staff, can also be involved in its preparation.

Decisions on major CAPEX Requests will be taken at senior management levels or by Directors of the company as large-scale capital projects have far-reaching implications on the future profitability of the company. The decision-makers involved in the final decision will not have a detailed knowledge of all aspects of a project and they must, therefore, rely on the facts, estimates and appraisal contained in the CAPEX Request and Business Case document. CAPEX Request should be prepared for:

1. All capital expenditures;

2. Major expense items such as non-routine repairs;

3. Additional funding when original estimates have been exceeded;

4. Retirement requests for assets no longer required.

The CAPEX Request should refer to the Business Case document. It should also show linkages to the strategy, goals and objectives of the organization. As described by Thorne and Piekarski (1995), further details on the request form should contain:

1. Description of the project, job or fixed asset – includes the name and the location of the project a description of what is involved and the economic purpose of the expenditure;

2. Timing - includes the construction period (acquisition delay), estimated startup date, estimated useful life and term of any lease or loan;

3. Amount of each type of expenditure, required is reported for depreciable and non depreciable capital expenditure, initial costs that can be expensed, loans granted, changes in working capital and the discounted present value of leases or other long-term commitments;

4. Total appropriation;

5. Key assumptions used;

6. Overall profitability of the project.

Thorne and Piekarski (1995) argue that the RCE do not only helps management by giving a concise summary of the important facts related to a project but also facilitates post installation appraisals by providing more detailed and uniform information on the original evaluation basis.

Table 9 – Request for Capital Expenditure Form (Beam Cutting Machine)

FOR BUDGET								
	Corporate Entity: SONAMET		**Proposed Budget Ref. No.: 6298-2230**				**RCE Ref. No.: SON-10-019**	
	Title: Investments 2010		**Description:** Beam cutting workshop					
	Class: a. Profit Earning ☒ b. Capacity Maintenance ☐ c. Safety / Environmental ☐ d. Support Facilities ☐							
	Amount (in USD) : 1 150 000 USD						**Exchange Rate = 1,50**	
	Depreciation Period: 8 years		**Residual Value:** 0 USD				0 %	
	Schedule of Expenditure:	Prev. Years	Q1	Q2	Q3	Q4	Fut. Years	Total
	Local Currency							
	Amount (USD)			1 150000				**1 150 000**
	Justification of Investment: increasing the beam cutting operations productivity of the yard							
	Pay-back Period: 2 years		IRR: 51 %				NPV: 2 400 000 USD	
	CAPEX Budget Holder*:	Name:		Signature:			Date **:**	
	CAPEX Cost Controller:	Name :		Signature:			Date **:**	
	Entity Management Approval*:	Name:		Signature:			Date **:**	
	Corporate Approval*:	Name:		Signature:			Date **:**	

Board Approved Budget: 820 000 USD	**Date: 13/10/2009**

FOR COMMITMENT								
	Description (if different from above):							
	Amount: 1 150 000 USD						**Exchange Rate = 1,50**	
	Previously Released: 0 USD		**Balance**:			USD		**Check:**
	Amortisation Period: Years		**Residual Value:** %					
	Schedule of Expenditure:	Prev. Years	Q1	Q2	Q3	Q4	Fut. Years	Total
	Local Currency							
	Amount (USD)			1 150000				**1 150 000**
	Justification of Investment: increasing the beam cutting operations productivity of the yard							
	Pay-back Period: 2 years		IRR: 51 %					
	CAPEX Budget Holder:	Name:		ABR	Signature:		Date **:**	
	CAPEX Cost Controller:	Name :		JCO	Signature:		Date **:**	
	CAPEX Finance Manager:	Name:		MGM	Signature:		Date **:**	
	Entity General Management*:	Name:		JBA	Signature:		Date **:**	
	Shareholder Approval (2)*:	Name:			Signature:		Date **:**	

Source – Sonamet Company

3.4. Self – Constructed fixed assets

The cost of a self-constructed fixed asset is determined using the same principles as an acquired asset. IAS 16 provides guidance that if an entity makes similar assets for sale in the normal course of business, the cost of fixed asset for internal use is usually the same as the cost of constructing an fixed asset for sale (in other words, any internal incomes are eliminated). The cost of a fixed asset constructed or produced by the company includes all expenditure on labour, raw materials, and supplies needed for its construction or production (Magro and Magro, 2008).

According to Marshall and MacManus (1998) if a piece of equipment made by a firm's own employees, all the material, labour and overhead costs (were the machine being made for an outside customer) should be capitalized as equipment costs. Similarly, the costs of abnormal amounts of wasted material, labour, or other resources incurred in a self-constructed fixed asset are not included in its cost.

The capital expenditures for a self- constructed or manufactured fixed asset are usually divided into the following categories: direct costs and indirect costs as detailed in the table below:

Table 10 – Example of Capital Expenditures

Direct Costs	Indirect Costs
1. Pre-project study and analysis expenses 2. Raw materials 3. Man hours 4. Main equipment depreciation 5. Equipment installation 6. Piping (installed) 7. Instrumentation and control 8. Electrical installation 9. Construction (including services) 10. Auxiliary services 11. Land and land improvement 12. Starting-up costs 13. Interest during construction	1. Engineering and Supervision 2. Indirect Man-hours 3. Indirect Materials 4. Equipment depreciations

Source – Zugarramurdi et al.

According to Zugarramurdi et al. (1995) each of these components can be estimated separately and itsr magnitude will vary considerably according to the nature of the project.

Manufacturing Costs are those costs that are directly involved in manufacturing of products. Examples of manufacturing costs include raw materials costs and charges related with workers. According to Caiado (1997), manufacturing cost is divided into three broad categories:

1st direct materials cost;

2nd direct labour cost;

3rd manufacturing overhead cost.

The IAS 23 (*Borrowing Costs)* requires the inclusion of interests as part of the cost of self-construction of "qualified" assets.

3.4.1. Direct material cost

The manufacture of products or goods requires material as the prime element. The cost of the material which incorporates a product is classified as direct material cost (Warren et. al., 2008). In general, these materials are classified into two categories; *direct materials* and *indirect materials*.

Direct materials cost is the cost of direct materials which can be easily identified with the unit of production. For example, the cost of glass is a direct materials cost in light bulb manufacturing. Direct materials are also called productive materials, raw materials, raw stock, stores and only materials without any descriptive title.

3.4.2. Direct labour cost (Man hours)

The direct labour consists of the remunerations and charges of manufacturing personnel working directly in the production (Caiado, 1997). Siegel and Shim (2006), argue that direct labour is the work directly involved in making the product.

A man-hour or person-hour is the amount of work performed by the average worker in one hour. Man-hours do not take account of the breaks that people generally require from work, e.g. for rest, eating, and other bodily functions, they only count pure labour.

Calculating the number of man hours is the first step in determining the employee costs for a certain period and it is useful in determining project costs, so that you can quote a fair, but profitable, price for a job. According to Caiado (1997) the time sheet is a fundamental tool that allows calculating more accurately the hours worked on a project.

During the construction of a fixed asset the man - hours may be charged in the BU of the project. The hours for workers engaged in the construction projects can be directly attributed to the project, in the case of benefits of workers indirectly involved in the project, the number of hours should indicate the code of the job (BU).

The labour costs should not be directly accounted as personnel costs because they are part of the costs of construction, manufacture or production of fixed assets. For accounting purpose of personnel costs should be debited the account 72 *Personnel Costs*, if by chance the company records costs related with the construction of a fixed asset while the fixed asset still be in progress as personnel costs, these costs should be credited from the account 72 "*personnel costs*" and debited to the account of the fixed assets in progress.

Table 11 - Man-hours forecast for

COMMENTS

Workload

2010 - 2.081.000 of productive ManHours
including Investment and non-productive manhours

	Real 2008	Budget 2009	Real 2009	Budget 2010	2010 vs 2009	Budget 2011	Budget 2012
Project Manhours	1.112.243	2.269.000	1.779.620	1.786.736	0,4%	1.289.000	1.797.000
Investments Manhours	109.405	215.000	242.273	230.161	-5,0%	139.000	84.000
Non Productive Manhours	123.441	96.000	81.331	72.288	-11,1%	60.000	60.000
TOTAL Manhours	**1.345.089**	**2.580.000**	**2.103.224**	**2.089.185**	**-0,7%**	**1.488.000**	**1.941.000**
Yard r standard ($/hr)	**33,00**	**33,00**	**33,00**	**35,00**	**6,1%**	**35,00**	**35,00**

Management Fees

13.0% on inside and 10.0% outside external income
Sonamet part is subject to WHT

General and Administration Overheads

Sonamet : 6,75% on Fabrication Income

Sonacergy : 2,13% on Fabrication Income

Fixed rates 1 EUR = 1,49615 USD

Taxes Stamp tax: 1% upon revenue
Training taxe : 0.5% upon revenue

Source - Sonamet Company

3.4.3. Manufacturing overhead

Manufacturing overhead is any manufacturing cost that is neither direct materials cost nor direct labour cost. According to Caiado (1997) manufacturing overhead includes all charges that provide support to manufacturing, such as:

1. Indirect labour cost: The indirect labour cost is the cost associated with workers, such as supervisors and material handling team, who are not directly involved in the production.

2. Indirect materials cost: Indirect materials cost is the cost of associated with consumables, such as lubricants, grease, and water, which are not used as raw materials.

3. Other indirect manufacturing cost: includes machine depreciation, land rent, property insurance, electricity, freight and transportation or any expenses that keep the factory operating.

The cost of the equipments and machinery used during the construction or manufacturing of a fixed asset must also be included. Their value is calculated through the depreciation of the equipments according to their use.

3.5. Ongoing investments (Fixed assets in progress)

A fixed asset is classified as *ongoing fixed asset* when it is still under construction, installation or during the acquisition process when is not yet in a condition to operate (Borges et al., 2010).

This classification includes all costs incurred while the fixed asset still in progress and advances made to suppliers for fixed asset purchase which price is fixed in advance (Vigário, 2006; GCA). This classification also includes investments approved for facilities not yet available for use that are transferred to tangible assets as soon as they are ready to be used. According to Angolan GCA are considered ongoing investments all applications and resources of fixed assets that are not yet operating, such as:

- assets in use during the implementation phase of the company;
- construction in progress;
- import in transit for items of fixed assets;
- advances to suppliers on account of fixed assets which price is previously fixed;
- raw - materials for the construction of fixed assets.

The expenses attributable to fixed assets in progress are transferred by debiting a subaccount of the account 14 - construction in progress, related with the fixed assets in progress, crediting the accounts 45 " *Cash*", 43 "*Bank Deposit*", or 37.1 " *Others Payables and Receivables Amounts- Purchase of Fixed Assets*", (Vigário, 2006).At the end, when the job is accomplished the balance of the account "*fixed asset in progress*" is transferred to the definitive account of "Fixed Assets". According to Magro and Magro (2008) when fixed assets still in progress the following costs are added to the production cost:

- The exchange differences arising from costs related to the production of the item;
- The financial burden from financing activities related to the production of the asset.

According to (Vigário, 2006) fixed assets are no longer considered as ongoing;

- When the work is completed or performed (also for item submitted in major repairs or improvements).
- When they are able to carry out the activity for which they were acquired (relatively to new purchases of fixed assets, ongoing constructions, by the fact that previously they were not considered able to perform their economic role).
- When the final invoice is received (regarding to advances to suppliers of fixed assets whose price is fixed in advance).

Vigario (2006) argues that:

> Are classified as *ongoing fixed assets* not only major repairs and improvements in progress, whose expenses increase the capacity or improve the initial quality of a fixed asset, but also the acquisition of fixed assets, while they are not able to carry out their economic role in the company, they are not yet finished to assemble, install or build as well as advances to fixed asset suppliers which price is fixed in advance.

3.5.1. Ongoing investment costs booking (Costs ventilation)

One of the methods of accounting for fixed assets in progress applied for Sonamet Company consists in transferring to an *account of transfers* of class 7 (cost account) all current expenses associated with the fixed asset. At the end of each month the *transfer account* is credited by debiting the respective *ongoing fixed asset account* according to the BU assigned to each fixed asset.

Table 12 – Ongoing Investment Costs Transfer

COSTS TRANSFER TO ONGOING INVESTMENTS FOR PERIOD OF 2012							
S/N	General Account	Description	Business Unit	Work Package	Analytical Code	DEBIT	CREDIT
0	752999	HQ Building	2150	0	9330		370.953,06
1	752999	Power Gen/Elect. Up.	2168	0	9330		285.309,67
2	752999	PR4	2207	0	9330		6.059,51
3	752999	Manitowocs	2209	0	9330		512.723,54
4	752999	Material Storage Area	2210	0	9330		71.889,54
5	752999	Yard Equipments 2011	2226	0	9330		514.417,02
6	752999	IT Upgrade	2227	0	9330		47.038,58
19		**PAGINA 2**					
20	142150	HQ Building	2150			370.953,06	
21	142168	Power Gen/Elect. Up.	2168			186.583,92	
22	142168	PG/EU – Generator	2168			7.398,40	
23	142168	PG/EU - Equip. Auxiliary	2168			40.500,41	
24	142168	PG/EU – Building	2168			372,02	
25	142168	PG/EU - Elect. In the power station	2168			50.454,92	
26	142207	PR4	2207			6.059,51	
27	142209	Manitowocs 18000	2209			512.723,54	
28	142210	Material Storage Area	2210			71.889,54	
29	142226	Equipments 2011	2226			1.217,12	
30	142226	Equipments 2011 – BUS	2226			34.987,64	
31	142226	Equipments 2011 - Skip Truck	2226			32.931,32	
32	142226	Equipments 2011 - Welding Sets	2226			380.539,89	
33	142226	Equipments 2011 – Hammer	2226			64.741,05	
34	142227	IT Upgrade	2227			47.038,58	
		TOTAL				**1.808.390,92**	**1.808.390,92**

Source – Sonamet Company

When the expenditures are intended for fixed assets, the costs should be allocated in the purchase value or construction during the period in which they are ongoing, if the construction is done separately, when each isolated component is completed the interest must be stopped to input on it (Vigário, 2006). In the cost of acquisition or construction of a fixed asset must also be increased the exchange differences from the costs associated with its acquisition or construction (GCA). Then, while a fixed asset is being assembled the costs produced in a C*ost Center* related to the personal involved in assembly should be transferred to the account of the fixed asset. These costs can be the transport costs, accommodation costs, food costs, medical treatments costs, travel costs, etc.

3.6. Investment monthly status report

The Investment monthly status report (IMSR) is a tool used for the control and management of investment budget. This tool provides a series of detailed information about the budgeted, forecasted and accounted amounts of a specific BU. It can be considered as a share of the overall budget analyzed by Business Units.

This follow up should be carried out each month in order to provide updated information about the status of the budget. It also allows having the status of all expenses allocated in a given BU while the fixed assets are in progress, projecting future achievements and analyzing the deviations in order to take the corrective actions, if necessary.

Table 13 - SONAMET IMSR BU 2230 - YARD EQUIPMENT 2012

Dec - 2010

COST CONTROL REPORT	**BUDGET**	**UP TO DATE**		**CURRENT FORECAST**		**DEVIATION**
All figures in Kusd		Realized / Accounted		ETC	EAC	vs budget
1 eur = 1,47010 usd	(a)	(b)	%	(c)	(d)=(b)+(c)	(e)=(d)-(a)
SUBSIDY	**3 000**	**0**		**3 000**	**3 000**	**0**
PROPORTIONAL TAXES	0	18	0	-18	0	0
FINANCIAL RESULT	0	0	0	0	0	0
PROPORTIONAL COSTS	**0**	**18**	**0**	**-18**	**0**	**0**
IMC	100	58	0,58	42	100	0
OTHER EXTERNAL SERVICES	0	0	0	0	0	0
SORROUNDED COSTS AND MISSIONS	0	3	0	-3	0	0
MISCELLANOUS ADMIN. COSTS	0	0	0	0	0	0
TAXES	0	1	0	-1	0	0
ADMINISTRATION & IMC COSTS	**100**	**62**	**0,58**	**38**	**100**	**0**
TIG	85	33	0,39	52	85	0
Gantry Crane Pipe Shop	308	12	0,04	296	308	0
Caterpillar	324	0	0,00	324	324	0
Maniscopic	88	0	0,00	88	88	0
Gantry Crane Muller	287	26	0,09	261	287	0
Taylor Forklift	474	0	0,00	474	474	0
Beam Cutting Machine	1150	650	0,57	500	1150	0
CAPEX RELATED PROCUREMENT	**2 716**	**721**	**1**	**1 995**	**2 716**	**0**
Transit Non Capex Related	0	0	0,00	0	0	0
PROCUREMENT COSTS	**2 716**	**721**	**1**	**1 995**	**2 716**	**0**
Subcontract 01	0	0	0,00	0	0	0
Subcontract 02	0	0	0,00	0	0	0
Subcontract 03	0	0	0,00	0	0	0
SUBCONTRACTING COSTS	**0**	**0**	**0**	**0**	**0**	**0**
Productive Labour (Man hours)	0	0	0,00	0	0	0
Site Running Costs	0	0	0,00	0	0	0
Sundry Notes	0	0	0,00	0	0	0
CONTINGENCIES	0	-23	0,00	23	0	0
SONAMET OWN FABRICATION COSTS	**0**	**-23**	**0**	**23**	**0**	**0**
TOTAL EXPENSES	**2 816**	**778**	**2**	**2 038**	**2 816**	**0**
TOTAL -BU 2230	**184**	**-778**	**-2**	**962**	**184**	**0**

Source: Sonamet company

3.7. Fixed assets purchase flowchart

A flowchart is a type of diagram which can be understood as a schematic representation of a process, often done by graphical form illustrating the transition decompiled of information among the elements that compose. A flowchart chart shows the operational sequence of the development of a process, which features: the work being performed, the time needed for its realization, the distance traveled by the documents, who is doing the work and how it flows between the participants in this process. According to Turney and Watne (2007) a document flow chart is a graphic presentation of the flow of documents to one department to another showing the source, flow, and final disposition of various copies of all documents.

The expression *flowchart* designates a graphical representation of a particular process or workflow, usually performed using the standard geometric figures and arrows joining these geometric figures. Through this graphical representation can understand quickly and easily the transition of information and documents between the elements involved in the process in question (Turney and Watne, 2007). The existence of flowcharts for each of the processes is crucial for the simplification and rationalization of work, allowing the understanding and further optimization of the processes developed in each department or area of the organization (Wikipedia).

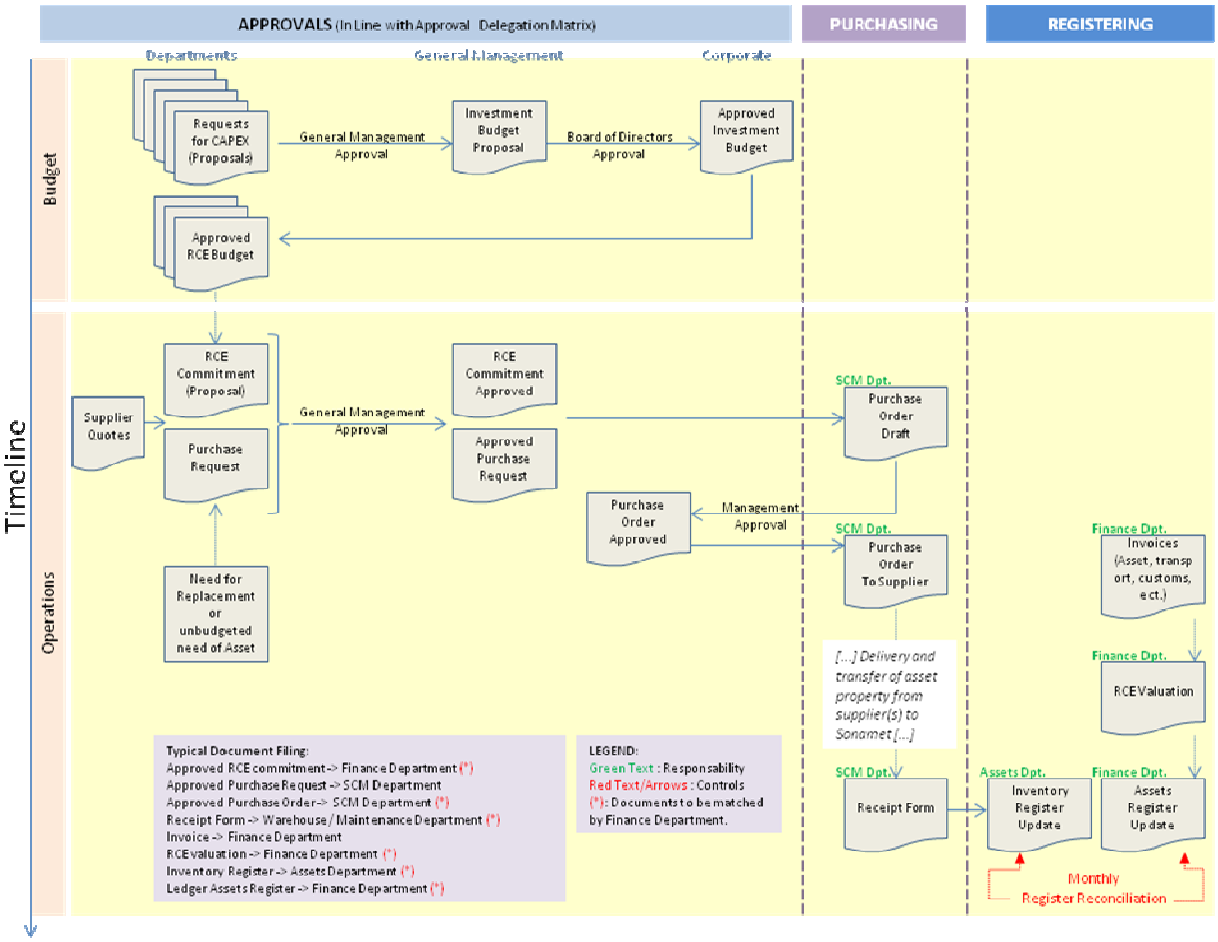
The flowchart can also be defined as the graph that represents the route or path taken by certain element (eg, a document), through the various departments of the organization as well as the treatment that each will giving with the purpose of describing a process or a system, for example, how the work is performed (Switzer, 2007).

The Fixed Asset Purchase Flowchart is a document which not only helps to understand the steps required to acquire a fixed asset but also helps to identify the decisions involved more accurately. The Flowchart of fixed assets management is a process which can help identify inputs, processes, and outputs[27]. The rules for its preparation are defined and improved by ISO[28].

[27] Accountability modules, op. cit.

[28] ISO – international organization for standardization, the ISO 5807 defines symbols to be used in information processing documentation and gives guidance on conventions tor their use in data flowcharts, program flowcharts, system flowcharts, program network charts, system resources charts. Applicable in conjunction with ISO 2382/1

Table 14 - Sonamet Fixed Assets Purchase Flowchart



3.8. Capital expenditure valuation (Fixed asset valuation)

Any asset can be valued, but some assets are easier to value than others and the details of valuation will vary from case to case (Damodaran, 2012). Sá and Sá, (2009) argue that the amounts of assets and liabilities result from their costs, this is, the price paid for their acquisition. The valuation of fixed assets is made in accordance with the accounting principles and rules that consider the acquisition value as the value attributed to the asset through the purchase price (or market value) added of all expenses incurred by the company to put it into use. The criterion of valuation varies according to the particularities of each asset (Sá and Sá, 2009), varies also by the form the fixed asset is acquired. Valuation models of fixed assets should be in accordance with the methods of distribution of capital expenditure for a particular case of acquisition, thus there may be a greater degree of certainty. According to Damodaran (2012) there is undeniably uncertainty associated with valuation; often that uncertainty comes from the asset being

valued, though the valuation model may add to that uncertainty. Thus, the valuation of a crane purchased by import process requires different methods, a different follow up and a different format than the valuation of a building constructed by the company.

Table 15 - Valuation of Capital Expenditure

AFCE General

AFCE Ref Nb :	SON-CAP-11-181	**Classificatic**	Lobito Yard Equipment 2010
Description :	**BEAM CUTTING MACHINE**	**Date :**	07-09-2011
Budget Year :	2010	**Raised by :**	MKI
Budget Ref Nb :	2230	**Object Code :**	Sonamet Investment

CAPITAL EXPENDITURE FINAL VALUATION

	Ledger	BU	Description *(must uniquely identify each item)*	Ledger Date	Amount	Currency	Historical USD Rate	Historical Cost (USD)
1	113110	1223003770	Vidage Investiment Ago 10 - Beam Cutting Machine	8-2010	170.353,99	EUR	1,31	222.465,28
2	113110	1223003770	Inv. Vidage INV Dec 2010 Services - IMC	12-2010	13.936,08	EUR	1,30	18.171,26
3	113110	1223003770	Inv. FV/2011-10 Vidage Investment - Beam Cutting Machine	1-2011	16.794,86	EUR	1,31	22.034,84
4	113110	1223003770	Vidage Invest.FEB2011 - Beam Cutting Machine	2-2011	10.045,65	EUR	1,37	13.760,53
5	113110	1223003770	Vidage Inv. INVT Part Serv March 11 - Beam Cutting Machine	3-2011	394.784,32	EUR	1,37	542.710,00
6	113110	1223003770	Vidage Invest.Part/FR Abr11 - Beam Cutting Machine	4-2011	12.291,00	EUR	1,41	17.310,64
7	113110	1223003770	Bureau Veritas-Pip nº11-400197-1 Inspection	4-2011	5.606,57	USD	1,00	5.606,57
8	113110	1223003770	Vidage Invest. May11 - Beam Cutting Machine	5-2011	13.918,69	EUR	1,46	20.381,84
9	113110	1223003770	A.J.B.Monteiro - Customs Clearance	5-2011	3.479.968,06	AKZ	93,27	37.309,09
10	113110	1223003770	Vidage Inv Serv Jun11 - IMC	6-2011	-683,85	EUR	1,41	-966,90
11	113110	1223003770	B.Veritas-PIP Nº11-400265-4 Inspection	6-2011	17,66	USD	1,00	17,66
12	113110	1223003770	B.Veritas-PIP nº2011-400521-3 Inspection	7-2011	185,13	USD	1,00	185,13
13	113110	1223003770	A.Monteiro - Customs Clearance	8-2011	38.124,98	AKZ	93,32	408,56
14								
			TOTAL COST				**899.394,50**	**USD**

CAPITAL EXPENDITURE ANALYSIS

	Description	Budget Approved	Final Cost	Delta	Brief Comment
1	BEAM CUTTING MACHINE	1.150.000,00	899.394,50	-250.605,50	
2					
3					
4					
	TOTALS	**1.150.000,00**	**899.394,50**	**- 250.605,50**	**USD**

Comments and Explanations :

CAPITAL EXPENDITURE DEPRECIATION

(Uniquely identify each investment)

	Ledger	BU	Description	Inventory Code	Depreciation Period (months)	Value USD	Start Date	End Date	Monthly USD
1	181311	1120100430 0	BEAM CUTTING MACHINE	**UG0876**	96	899.394,50	Set-2011	Out-2019	9.368,69
2									
3									
4									
			TOTALS			**899.394,50**			**9.368,69**

CLOSING OF AFCE SUPPORT DOCUMENTATION

(Check all documents are attached and transmitted to Accounting Dept.)

RCE Copy :	Yes	Copy of Invoices :	Yes
IR Copy :	Yes	Other Doc. Copies :	Yes
PO Copy :	No		

Cost Controller	Account Manager	Plant Manager	Yard Manager	Finance Manager	General Manager
Name:	Name:	Name:	Name:	Name:	Name:
Date :	Date :	Date :	Date :	Date :	Date :
Signature	Signature	Signature	Signature	Signature	Signature

AFCE General

AFCE Ref Nb :	SON-CAP-11-181	**Classificatio**	Lobito Yard Equipment 2010
Description :	**BEAM CUTTING MACHINE**	**Date :**	07-09-2011
Budget Year :	2010	**Raised by :**	MKI
Budget Ref Nb :	2230	**Object Code :**	Sonamet Investment

CAPITAL EXPENDITURE FINAL VALUATION

	Ledger	BU	Description *(must uniquely identify each item)*	Ledger Date	Amount	Currency	Historical USD Rate	Historical Cost (USD)
1	113110	1223003770	Vidage Investiment Ago 10 - Beam Cutting Machine	8-2010	170.353,99	EUR	1,31	222.465,28
2	113110	1223003770	Inv. Vidage INV Dec 2010 Services - IMC	12-2010	13.936,08	EUR	1,30	18.171,26
3	113110	1223003770	Inv. FV/2011-10 Vidage Investment - Beam Cutting Machine	1-2011	16.794,86	EUR	1,31	22.034,84
4	113110	1223003770	Vidage Invest.FEB2011 - Beam Cutting Machine	2-2011	10.045,65	EUR	1,37	13.760,53
5	113110	1223003770	Vidage Inv. INVT Part Serv March 11 - Beam Cutting Machine	3-2011	394.784,32	EUR	1,37	542.710,00
6	113110	1223003770	Vidage Invest.Part/FR Abr11 - Beam Cutting Machine	4-2011	12.291,00	EUR	1,41	17.310,64
7	113110	1223003770	Bureau Veritas-Pip nº11-400197-1 Inspection	4-2011	5.606,57	USD	1,00	5.606,57
8	113110	1223003770	Vidage Invest. May11 - Beam Cutting Machine	5-2011	13.918,69	EUR	1,46	20.381,84
9	113110	1223003770	A.J.B.Monteiro - Customs Clearance	5-2011	3.479.968,06	AKZ	93,27	37.309,09
10	113110	1223003770	Vidage Inv Serv Jun11 - IMC	6-2011	-683,85	EUR	1,41	-966,90
11	113110	1223003770	B.Veritas-PIP Nº11-400265-4 Inspection	6-2011	17,66	USD	1,00	17,66
12	113110	1223003770	B.Veritas-PIP nº2011-400521-3 Inspection	7-2011	185,13	USD	1,00	185,13
13	113110	1223003770	A.Monteiro - Customs Clearance	8-2011	38.124,98	AKZ	93,32	408,56
14								
			TOTAL COST				**899.394,50**	**USD**

CAPITAL EXPENDITURE ANALYSIS

	Description	Budget Approved	Final Cost	Delta	Brief Comment
1	BEAM CUTTING MACHINE	1.150.000,00	899.394,50	-250.605,50	
2					
3					
4					
	TOTALS	**1.150.000,00**	**899.394,50**	**- 250.605,50**	**USD**

Comments and Explanations :

CAPITAL EXPENDITURE DEPRECIATION

(Uniquely identify each investment)

	Ledger	BU	Description	Inventory Code	Depreciation Period (months)	Value USD	Start Date	End Date	Monthly USD
1	181311	11201004300	BEAM CUTTING MACHINE	**UG0876**	96	899.394,50	Set-2011	Out-2019	9.368,69
2									
3									
4									
			TOTALS			**899.394,50**			**9.368,69**

CLOSING OF AFCE SUPPORT DOCUMENTATION

(Check all documents are attached and transmitted to Accounting Dept.)

RCE Copy :	Yes	Copy of Invoices :	Yes
IR Copy :	Yes	Other Doc. Copies :	Yes
PO Copy :	No		

Cost Controller	Account Manager	Plant Manager	Yard Manager	Finance Manager	General Manager
Name:	Name:	Name:	Name:	Name:	Name:
Date :	Date :	Date :	Date :	Date :	Date :
Signature	Signature	Signature	Signature	Signature	Signature

Source - Sonamet Company

4. FIXED ASSETS DEPRECIATION

Fixed assets are not consumed in a single financial year, but during the number of years foreseen for their economic lives (Borges et al., 2010). Excepting lands and artworks, the items of fixed assets have a limited life (Marion, 2009 and Iudicibus, 2010). According to Almat (1996), it means that with the use or over time they wear out, thus, it does not make any sense to allocate the total cost of fixed asset in the period in which the acquisition is made (Borges et al., 2010).

When a fixed asset is being used by the firm its utility decreases until the fixed asset reaches a theoretical nil value. That is to say, the fixed assets when are being used during the years they will be depreciated or they will lose their value (Borges et al., 2010). According to Almat (1995) the *depreciation* is the accounting recognition of wear that the fixed assets suffer. Rocha and Rubio (1999) define the depreciation as the estimated cost associated with the consumption of factors during the production process, resulting from the application of periodical criteria that are considered relevant. The depreciable amount of a fixed asset should be appropriate in a systematic basis over its economic useful life.

> While the fixed assets are being used in normal activities of the firm, their value decreases and this decrease generates a *Cost* commonly known as *Depreciation Expense*, which consists in booking the loss in value of a fixed asset by allocating periodically its cost, in different exercises, during its useful life (Borges et al., 2010).

The depreciation must always be recorded by the historical cost or by the fair value of fixed assets, and represents the *REAL COST* of a fixed asset. According to Magro and Magro (2008), the depreciation is the registration of the loss of value of a fixed asset, in other words, splitting the costs of an item, for the exercises in which is operating. Marion (2009), says that the fixed assets, over the time and by their use, they will suffer a physical or technological deterioration. Thus, the fixed assets will lose their functional efficiency. This loss is accumulated roughly in the account *accumulated depreciation* that subtracts the fixed asset account. The depreciation in accounting is the process of spreading the cost of an asset over its estimated useful life (Marshall and Macmanus, 1998)

Vigário (2006) explains that the fixed assets depreciate gradually and equitable exercise to exercise, during and in the limit of years of respective period of their expected useful

lives. Therefore, their acquisition value should be recognized as a cost fairly gradual and equitable exercise to exercise, taking into account the depreciation rate applicable to the asset.

It would be important to reveal some essential figures related to fixed assets depreciation:

Acquisition value;

It is the purchase, construction or manufacturing value, plus any additional expenses, necessary to put the fixed asset in conditions to be used. According to Magro and Magro (2008) it is the cost at which a fixed asset is acquired, including the costs (expenses) incurred in connection with its acquisition (e.g. transport expenses, custom duties, post services, installation etc.)

Book Value;

Vigário (2006) points out that fixed assets should be recorded initially at the acquisition or production cost. Book value, or net book value, does not necessarily represent an asset's value. Instead, it represents the undepreciated cost of the asset as it appears on the firm's books and balance sheet (Marshall and Macmanus, 1998). The Net Book Value is the acquisition cost less accumulated depreciation (accumulated depreciation is all depreciation expense taken on the asset to date), accumulated depletion, or accumulated amortization, and less any accumulated impairment. The Net Book Value can be represented in a simple formula:

Acquisition cost – accumulated depreciation = net book value

Useful life;

The useful life, according to Almat (1996) and Iudicibus (2010) is the period of time which an entity expects using a fixed asset or the number of units of production or similar units that an entity expects to derive from the asset[29]. The useful life period may vary from firm to firm due to the use given to the fixed asset, with its quality and care for its maintenance (Vigário, 2006). The useful life is determined by the Angolan Tax Legislation, which defines the limits that an asset is expected to be used. The useful life

[29] For tax purposes the useful life of an asset is the period deduced from the respective rate of depreciation or amortization applicable to the asset (that is; n = 100 / rate).

is important to determine the rates assessed on the depreciated value of the asset each year.

Depreciable amount;

The depreciable amount of a depreciable fixed asset is its cost (historical or other replaceable cost) less its estimated residual value, (Sá and Sá, 2009; IAS 38). The depreciable value of an asset should be allocated on a systematic basis over its useful life, and is determined after deducting its residual value. In practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable value.

Depreciation period;

The depreciation period must begin when the fixed asset is available for use, i.e. when it is on site and in necessary conditions to operate as intended by the management, and ends in the final of its useful life. According to Vigário (2006) fixed assets may only be depreciated or amortized from the date they start operating.

Accumulated Depreciation;

The amount of a long-term asset's cost that has been allocated to depreciation Expense since the time that the asset was acquired. Accumulated Depreciation represents the portion of the cost of fixed asset that is estimated to have been used in the process of operating the business (Marshall and Macmanus, 1998).

Residual value;

The residual value of an asset is the estimated amount that an entity would currently obtain from its sale after deducting the estimated costs of disposal (Costa and Alves, 2008), if the asset were already of the age and in the condition expected at the end of its useful life (Magro and Magro, 2008). The residual value must be determined before the use of the property, once defined, is deducted from the acquisition value and the difference will be the depreciable amount of fixed asset (Vigário, 2006). The residual value of a fixed asset is however, the value that the property will be worth at the end of its useful life, after being fully depreciated (Sá and Sá, 2009). Under the cost model, residual value is understood as the estimated amount the entity could currently expect to receive for the asset if it were already at the age and condition expected at the end of its useful economic life. In other words, residual value is not discounted or adjusted for

changes in price levels or future inflation, (IAS 16). At first, the concept of residual value is associated with the realizable value of fixed asset after its use (GCA).

Fixed Asset Additions;

Fixed asset additions are the capital expenditures made to replace worn out assets to maintain the property's value. According to Amaral and Francischini (2013) an addition is not the replacement of an asset that the company has already acquired before; additions comprise the entries of new fixed assets as well as the improvements and expansions of existing ones and. Thus a new building recently acquired by the company is an addition, is also an addition the expansion of an existing building.

Withdrawals;

An asset should be removed from the statement of financial position on disposal or when it is withdrawn from use and no future economic benefits are expected from its disposal (IAS 16). Losses resulting from the removal of an element of tangible fixed assets are determined as the difference between the amount for which it is registered (gross net of depreciation) and should be recognized as losses in the Income Statement [27.] The obsolete fixed assets are those which cannot continue to perform their economic role in the firm and they must be written off from the fixed assets accounts or they can be sold if they are in conditions to be negotiated (Vigário, 2006).

Revaluation;

Under IAS 16, revaluation is the adjustment of the value of fixed assets by adding the carrying amount as well as their accumulated depreciation. According to Gonçalves (2013) it is the update of the acquisition value of fixed assets for the purpose of mitigating the inflation rate. According to Vigário (2006) tangible fixed assets and investments in real estate can only be updated through legal revaluations or by an independent expert.

Depreciation rate;

The depreciation rate corresponds to the value of the depreciation quota expressed in percentage (Vigário, 2006).

The annual rates of depreciation and amortization established by law, in force in the Republic of Angola are defined in published by presidential decree nº. 207/15 of 26th

October, named Table of annual rates of reintegration and amortization. This Decree separates the rates of depreciation and amortization on two key tables:

a) Tables of general rates, where can be seen the rates of depreciation and amortization in general.

b) Tables of specific rates, which contains the rates of depreciation and amortization applicable to each type fixed asset according to the economic activity of the entity.

Table 16 – Generic Depreciation and Amortization Rates

GENERIC RATES	
DIVISION 1	
Tangible Fixed Asset	
Designation	**Rate %**
Property	
Buildings and Other Constructions	
Living Buildings	2
Commercial and Administrative	4
Industrial and commercial and administrative dependencies	4
Hydraulic Works, including wells of water	10
Stone paving works, cement, concrete, etc,	10
Bridges and Aqueducts:	
Concrete or masonry	3,33
Wooden bridges	20
Metal Bridges	8,33
Water Reservoirs	
Fencing and Urban Arrangements:	
Urban Arrangements	25
Fencing	25
Walls	6,67
Plant and Instalations	
Of water, electrical, compressed air, refrigeration	10
Telephone system (indoor facilities)	16,67
Lifts, escalators loads	10
Aerial cables and brackets	6,67
Of water capitation (uptake) and distribution (private installations)	12,5
Of laoading , unloadig and braoding (private installations)	7,14
Private PABX	16,66

Liquid fuels distribution (private installations)	10
Radio and TV (Private installations)	10
Private Cafeterias and kitchens	10
Reservoir for liquid fuels	6,66
Storefronts and fixed shelving	10
Not specified	10
Engines, equipment and tools	
Electronic equipment	33,33
Stereo sound reproduction equipment	16,66
Laboratory and precision equipment	14,28
Compressor, generator	25
Equipment private workshops:	
Of carpentry	10
Locksmith and mechanical equipment	12,5
Tools	25
Cranes	10
Transport or Rolling Equipment	
Aircraft	5
Iron Boats	7,14
Wooden Boats	10
Bicycles, motorcycles	25
Tractors and trailers	25
Wagons	4
Railways (narmal)	4
Railways (Decauville system) and related equipment	10
Motor vehicles:	
Funeral vehicles	20
Mixed light vehicles	20
Heavy passengers vehicles	16,67
Heavy and Trailers for goods	16,67
Intangible Fixed Asset	
Multi-annual initial and non-initial Expenses (prospecting studies, expenses of Constitution, expenses with share capital increases, legal transformation of societies, bond issue, advertising campaigns, prospection, studies, etc.)	20
Patents	20
Goodwill	5
Brands	20

Source : Angolan Tax Legislation

In accordance with Article 34 of the Industrial Tax Code, the calculation of the costs of reintegration and depreciation must be made as a rule, by the method of straight line. Other methods can be used when the nature of depreciation or accounting tradition of the company justifies them, and whether the National Directorate of Taxes does not oppose the criterion used by the taxpayer (Magro and Magro, 2008). The basis for the calculation of depreciation are generally the same whether for determining the tax depreciation or for the determination of accounting depreciation. The tax legislation adopt the concept of acquisition cost and production cost, in the same way that is understood by accounting doctrine, which makes the valuation applicable to fixed assets the same for the calculation of accounting depreciation.

4.1. Causes of depreciation

According to Magro and Magro (2008) and Rocha and Rubio (1999), there are three types of wear that contribute to the depreciation of fixed assets;

a) *Spontaneous*: when they suffer the action of time;

b) *Functional*: when they are subjected to the use;

c) *Technical* or *economic obsolescence*: when they reduce their productivity in relation to other one more sophisticated and more operational[30].

According to Anil Kumar, the depreciation may be of two types: internal or external:

1. Internal Depreciation: that occurs by certain inherent normal causes. The causes of internal depreciation are:

    a) Wear and tear;

    An asset declines on account of continued use, for example in the case of building, plant and machinery such declines depend on upon quantum of use of an asset. If a factory works in double-shift instead of single shift, the depreciation on plant and machinery will be doubled. It is obvious that such loss is unavoidable. An asset may be kept in proper working conditions

[30] Obsolescence - certain equipment is obsolete when it loses its competitiveness, because it is being superseded by other equipment that produces the same or similar product, with so many advantages or lower costs (Marion, 2009).

through repairs and maintenance for long time but this cannot be done so permanently. At a moment that asset will become unfit for repairs and it will no longer be suitable for use.

b) Depletion;

Some assets decline in value in proportional manner to the quantum of production, e. g. mines, quarry, etc. and the total deposit reduces gradually and after some time it will be exhausted, then its value will be nil.

2. External Depreciation: is caused by some external reasons. The causes of external depreciation are:

a) Obsolescence;

Some assets, though in proper working order, may become obsolete. For example old machines become obsolete with the invention of more economical and sophisticated ones, whose productive capacity is generally higher and cost of production is lesser. In order to survive in competitive market the manufacturer must install new machines replacing the old ones.

b) Passage of time;

Some assets diminish in value because of the passage of time, even though they are not used e. g. computer programs, patent rights, copy rights, etc.

c) Accidents;

Assets may be destroyed by abnormal reasons such as fire, earth quake, flood, etc. In such case the destroyed assets may be written-off as loss and be replaced by new ones[31].

4.2. The importance of recognizing the depreciation as cost of the period

The depreciation is considered as cost in the period in which the fixed assets are being used in operating activity of the firm (Sá and Sá, 2009), because during the period the fixed asset is used undergoes wear and consequently, loses its value. This loss of value results from the use of the fixed asset in the firm's activity, making therefore a cost

[31] Anil Kumar GUPTA, *Depreciation, Causes of Depreciation, Need for Provision of Depreciation*, (www.ezinearticles.com).

borne by the firm which should be measured. This loss is simply economic and not financial, in other words, there is no effectively disbursement of financial resources in the period.

The fact that the reported costs do not correspond with disbursements of money, so the firm retains funds that will enable the replacement of old fixed assets by new ones (Almat, 1996; Borges, 2010). Assaf Neto (1980) states that the expenditure of the acquisition of a fixed asset is incurred completely at the time of purchase; it means that the monetary disbursement occurs in one time and the recovery of the amount invested proceeds in several subsequent periods, being the depreciated value allocated to an *asset account*.

The depreciation should be understood as the systematic allocation of the extinct costs (expenses) of the depreciable amount of a fixed asset from its useful life (Costa and Alves, 2008). In theoretical terms the depreciable amount is the difference between the cost of the asset and its estimated residual value, which, in turn, refers to the amount that the firm expects to obtain from the disposal of such asset at the end of its useful life, deducted of the expenses related to such operation (Costa and Alves, 2008).

The advantage of the depreciation of fixed assets is based on the fact that the acquisition expenditures are not considered as costs at the period when the acquisition is made, but as expenses. The cost (in this case, the acquisition value of the asset) is recorded in the future periods in which the asset will be used by the firm during its useful life.

Cavalcante describes three advantages resulting from depreciation:

1st Savings for the purchase of a new capital asset: in first view, is related to the firm which saves during a period an amount from the value of fixed asset with the intention of buying a one in the moment to replace it.

2nd loss in value of a capital asset: capital assets lose their value over the time. The gradual loss of value of an investment property is a cost to the firm and is recognized in the form of depreciation.

3rd Dilution of the cost of a capital asset: the firm typically acquires a fixed asset to use it for several coming years. Rather than considering it as a cost in the first year of the investment, it is more correct considering it in the years that the fixed asset will be

used effectively. So the firm avoids reducing artificially the profit of the year in which the purchase is made[32].

Considering the depreciation as a cost, the firm saves a portion of the profit in order to obtain funds that will allow, in economies not inflated, replace the fixed asset when it reaches the end of its useful life (Almat, 1996). In summary the depreciation has two main objectives:

- Recognize that the majority of fixed assets wears and that, therefore, reduce the profit by the value of this wear.

- Constitute a fund arising from the depreciation which will replace the old fixed assets by new ones.

4.3. Depreciation fiscal effect

The amortization expression is used for intangible fixed assets and the depreciation expression is used for tangible fixed assets (Iudicibus, 2010; Borges, 2010). According to Sá and Sá (2009) the depreciation should be understood fiscally as *a reintegration of capital*, than as a physical wear of the asset itself.

The system of tax depreciation and amortization is fixed by decree No. 755/72, as well as the conditions and the limits of its acceptance as a tax cost. Accordingly, we have by virtue of the influence of taxation on accounting there are always differences between tax depreciation and accounting depreciation, unless, companies evade the economic criteria in favor of tax criteria. The Angolan Tax Legislation defines the limits of the useful lives and the depreciation and amortization rates for fixed assets, however it is very important to consider the following factors in determining the economic useful life:

- the expected use of the asset by the firm evaluated with the estimated production capacity;

- the expected physical wear which depends on the operational factors such as number of shifts that require their use;

[32] Francisco Cavalcante, *Efeito da depreciação sobre o fluxo de caixa e sobre o lucro*, www.cavalcanteassociados.com.br

- the technological obsolescence arising from changes or improvements in production;

- legal or similar limits on the use of the asset, such as the expiry dates of leases, etc, (Vasques et al., 2013).

According to Assaf Neto (1980) the depreciation being recognized as operating cost, the amount depreciated is considered as deductible cost from taxable profit of the firm. Similarly, the depreciation it is not considered as deductible cost when is calculated out of the period in which the fixed assets were affectively used. The depreciation is not aimed to increase the profit, aims to recover a sum of money to replace the funds invested (Assaf Neto, 1980). The depreciation being considered as a cost, allows a tax savings through a reduction in the tax base. Thus, each method of depreciation adopted by the firm in some way influences the taxable amount.

4.4. Depreciations methods

Most plant and equipment assets wear out or become obsolete over the years. Similarly although lands are not depreciated because they do not wear out, unless they are dwarf land exploitation and in this case only in the portion of the value corresponding to the parcel that is subject to exploitation (Vigário, 2006). Improvements to land, such as paving or fences are depreciated because these improvements wear out or become obsolete over time. The portion of the fixed asset "used up" each year is referred to as *depreciation* and for each fixed asset is usually calculated separately and it is based on four factors:

a) The fixed asset's cost;

b) The fixed asset's estimated useful life;

c) The fixed asset's residual value (its book value after being fully depreciated); and;

d) The method of depreciation selected[33].

For depreciation purposes, the cost (*historical cost, original cost* or *acquisition cost*) is more than just the invoice price. It includes any cost incurred to acquire, transport and prepare the fixed asset for its intended use, such as sales tax, commissions, title fees,

[33] Anil KUMAR, op. cit.

transportation, and installation. Depreciation methods may very broadly be categorized into *straight line* (where the loss in fixed asset value is assumed to be the same every year over its lifetime) and *accelerated* (where the asset loses more value in the earlier years and less in the later years). Under GAAP, a plant or equipment asset can be depreciated using one of four basic methods:

1. *The straight-line (SL) method* - The asset is depreciated by dividing the depreciable base (acquisitions cost – residual value) by the number of years in the estimated useful life to determine each year's depreciation expense. Thus, under SL, each year's depreciation expense is the same.

2. *The units of production* (UOP) or *units of output method* - The asset is depreciated each year according to the number of units produced, total hours used, total miles driven, or other measure of production. Thus, under UOP, the amount of annual depreciation fluctuates by output or use.

3. *The accelerated methods* - There are two methods of accelerated depreciation. They are called accelerated because they provide more annual depreciation expense in the earlier years of the asset's life and less depreciation expense in the later years.

The two accelerated methods are:

- the *declining balance* (DB) method and,
- the *sum-of-the-years'-digits* (SYD) method.

Regardless of the depreciation method selected or annual depreciation taken, the total depreciation over the life of the fixed asset is the same. During an accounting period, accounting units are not allowed to change the methods of valuation, depreciation or accounting procedures.

4.5. Depreciation booking process

Depreciation expense is generally recorded just before a firm prepares its financial statements, although some firms prepare the financial statements monthly and therefore record depreciation expense monthly, most firms prepare their financial statements annually.

Whilst depreciation expense is recorded at the end of the year or month, the accounts related to depreciation are debited or credited regardless of the method used; only the amount of depreciation will be different.

The typical balance sheet shows property and equipment separately under the heading "Plant, property and equipment," so the typical firm has the accumulated depreciation accounts separated by subaccounts accordingly to their nature[34]. Firms must have an extra accounting table of all fixed assets properly recorded, containing all the updated information in order to calculate with greater reliability the depreciation. According to Vigário (2006) fixed assets should be described in the table of depreciation for homogeneous groups which reintegration begins in the same year, excluding buildings and other structures and vehicles (which must be described one by one) and the main figures that should be included in this table are:

2. The fixed asset's name;
3. The general account related to each asset;
4. Engine number, serial number;
5. Useful life of the asset;
6. Acquisition date;
7. Acquisition value;
8. Depreciation rate;
9. Periodical depreciation;
10. Accumulated depreciation;
11. Net value;
12. The depreciable value;
13. The residual value; and, other important information, such as The department code or name where the asset is being used, The plant code or equipment code, the Manufacturer's name, etc.

The table of fixed assets depreciation must regularly be updated with the periodical depreciations, additions of new items, disposals, capitalizations and revaluations.

[34] Depreciation under GAAP, www.aipb.org

													December			2010
RCE no						Cost	Date		Acquisition		Updated	Useful	Net value	Depreciations				
L1	*L2*	*L3*	*Code*	Account	Descrption	Code	in	Out	Value	Additions	Acquisition Value	Life	cut-off	Current month	prev. years	this year	Year to Date	Cost code
PL	378	0	PL-0378-00	113110	Tank Cimento	11201004300	01-Out-09	01-Set-16	109.634,02	-	109.634,02	7	88.751,30	1.305,17	5.220,68	15.662,04	20.882,72	113110-11201004300
PL	379	0	PL-0379-00	113110	Enrouleur Pneumatic 4" Type HRP750	11201004300	01-Nov-08	01-Out-13	39.157,47	-	39.157,47	5	22.189,35	652,62	9.136,68	7.831,44	16.968,12	113110-11201004300
PL	379	1	PL-0379-01	113110	Enrouleur Pneumatic 4" Type HRP750	11201004300	01-Nov-08	01-Out-13	39.157,47	-	39.157,47	5	22.189,35	652,62	9.136,68	7.831,44	16.968,12	113110-11201004300
PL	380	0	PL-0380-00	114200	Fire Truck (Additional)	11201004300	01-Jan-09	01-Dez-14	30.414,04	-	30.414,04	5	12.165,64	506,90	12.165,60	6.082,80	18.248,40	114200-11201004300
PL	381	0	PL-0381-00	114300	FORD RANGER LD-41-33-CY	11140004300	01-Jun-10	01-Mai-13	29.500,00	-	29.500,00	3	23.763,92	819,44	0,00	5.736,08	5.736,08	114300-11140004300
PL	382	0	PL-0382-00	114300	FORD RANGER LD-41-70-CY	11140004300	01-Jun-10	01-Mai-13	29.500,00	-	29.500,00	3	23.763,92	819,44	0,00	5.736,08	5.736,08	114300-11140004300
PL	383	0	PL-0383-00	114300	FORD RANGER LD-78-94-CT	11140004300	01-Jun-10	01-Mai-13	41.500,00	-	41.500,00	3	33.430,54	1.152,78	0,00	8.069,46	8.069,46	114300-11140004300
PL	384	0	PL-0384-00	114300	Hyundai Santa F?LD-55-92-CS	11140004300	01-Jun-10	01-Mai-13	42.000,00	-	42.000,00	3	33.833,31	1.166,67	0,00	8.166,69	8.166,69	114300-11140004300
PL	385	0	PL-0385-00	114300	Ford Ranger (LD-80-49-CZ) C/D 4X4	11140004300	01-Jul-10	01-Jun-13	29.500,00	-	29.500,00	3	23.763,92	819,44	0,00	5.736,08	5.736,08	114300-11140004300
PL	386	0	PL-0386-00	114300	COMP3008_2300 Ambulance	11196004300	01-Jan-09	01-Dez-12	82.382,48	-	82.382,48	4	20.595,62	1.716,30	41.191,24	20.595,62	61.786,86	114300-11196004300
PL	387	0	PL-0387-00	114300	Hyundai H100 LD-01-27-CA	11140004300	01-Out-09	01-Set-12	20.950,00	-	20.950,00	3	5.237,50	581,94	8.729,17	6.983,33	15.712,50	114300-11140004300
PL	388	0	PL-0388-00	114300	Mitsubishi L200 LD-82-41-CA	11140004300	01-Jul-09	01-Jun-12	32.500,00	-	32.500,00	3	16.250,00	902,78	5.416,67	10.833,33	16.250,00	114300-11140004300
AC	30	0	AC-0030-00	119100	House Furnitures Lob's7,29,42,43&45	11190004300	01-Out-10	01-Set-13	52.558,47	-	52.558,47	3	48.178,60	1.459,96	0,00	4.379,87	4.379,87	119100-11190004300
OF	17	0	OF-0017-00	115120	Office Furniture	11208817130	01-Out-10	01-Set-13	35.136,14	-	35.136,14	3	32.208,13	976,00	0,00	2.928,01	2.928,01	115120-11208817130
AC	31	0	AC-0031-00	119100	COMP3009 4090 Materlis Mob Lob44	11190004300	01-Out-10	01-Set-13	49.638,75	-	49.638,75	3	45.502,19	1.378,85	0,00	4.136,56	4.136,56	119100-11190004300
YD	24	0	YD-0024-00	112310	Contentor Frigorifico	11200004300	01-Out-10	01-Set-20	38.132,52	-	38.132,52	10	37.179,21	317,77	0,00	953,31	953,31	112310-11200004300
YD	25	0	YD-0025-00	112310	Modulo Pr, fabricado	11200004300	01-Out-10	01-Set-18	328.386,11	-	328.386,11	4	307.861,98	6.841,38	0,00	20.524,13	20.524,13	112310-11200004300
YD	26	0	YD-0026-00	112310	Contentores c/6 WC	11200004300	01-Out-10	01-Set-14	146.360,68	-	146.360,68	4	137.213,14	3.049,18	0,00	9.147,54	9.147,54	112310-11200004300
PL	411	0	PL-0411-00	114300	SUZUKI LD-50-68-DF	11140004300	01-Nov-10	31-Out-13	18.750,00	-	18.750,00	3	17.708,33	520,83	0,00	1.041,67	1.041,67	114300-11140004300
PL	412	0	PL-0412-00	114300	Hyundai Getz LD-61-40-DI	11140004300	01-Fev-10	31-Jan-13	18.450,00	-	18.450,00	3	12.812,50	512,50	0,00	5.637,50	5.637,50	114300-11140004300
									-	-	-		0	-	-	0,00	0,00	-
									1.213.608	0	1.213.608	80	964.598	26.153	90.997	158.013	249.010	

Table 17 – Sonamet Depreciation Control and Follow-up

4.6. Investment subsidy depreciation

Investment subsidies correspond to a participation in the cost of fixed assets of companies, representing an economic benefit, so should be recognized as income. A grant represents an income for the firm, in the case of subsidies related to fixed assets, the profit must be recognized during the period estimated that the fixed asset will be used by the firm (IAS 20).

According to Haţegan et al. (2009), government grants are recognized as income in *profit or loss* on a systematic basis over the periods in which the entity recognizes expenses for the related costs for which the grants are intended to compensate. In the e case of grants related to the fixed assets they should be recognized as deferred income, they should not be credited directly to equity (IFRS 22; Costa and Alves, 2008). According to Célia Barroca (2011) subsidies to investment are disclosed in account *incomes to share in future periods* and stated consistently and proportionally to the depreciations of the assets they are intended for.

For accounting purpose, grants related to depreciable assets are usually recognized as deferred income in an income account *incomes to be shared over future periods*. The depreciable amount of the period is debited in the account of *the income to be shared over future periods* by crediting an income account (class 6) during the useful life of the asset. Grants related to non-depreciable fixed assets may also require the fulfillment of certain obligations and will then be recognized as income over the periods which comprise the cost to satisfy such obligations (GCA).

Some companies record the subsidies for investments in the balance sheet under incomes to be shared by future periods and acknowledged in the income statement in a consistent and proportional manner with the depreciations of the assets which the acquisition is subsidized.

Heerema Industries - SONAMET YARD INVESTMENT Subvention " PR4 "

General Account	BU	Description	Analytical Account	Acquisition Value	Acquisition Date	Useful Life	Yearly Depreciation	Monthly Depreciation	2010 Depreciation	Acc. Deprec Dec 10	Net Value Dec 2010
113120	1201	Painel PR4	11201001240	133.075,13	01-Fev-10	4,0	33.268,78	2.772,40	30.496,38	30.496,38	102.578,75
112140	1200	PR4	11200001240	5.068.736,49	01-Jun-10	20,0	253.436,82	21.119,74	147.838,15	147.838,15	4.920.898,34
Total Amount				***5.201.811,62***			***286.705,61***	***23.892,13***	***178.334,53***	***178.334,53***	***5.023.477,09***

SUMMARY	Total Received	Progress	Total Spent	Total to Spend	Depreciated	Recognised Profit BS
Investments	5.201.811,62	3,43%	178.334,53	5.023.477,09	178.334,53	178.334,53
	5.201.811,62		**178.334,53**	**5.023.477,09**	**178.334,53**	**178.334,53**

General Account		
Db	376350	
Cr	634006	Profit

Table 18 - Investment subsidy depreciation

5. FIXED ASSETS REAL COST IMPACT

5.1. Financial statements

Financial reporting is done for firms, or entities, rather than industries or the economy as a whole and is aimed primarily at meeting the needs of external users of accounting information who would not otherwise have access to the firm's record (Marshall and Macmanus, 1998).

The financial statements are a schematic representation of financial transactions during a given period in a firm. According to (Marshall and Macmanus, 1998) financial statements are the product of financial accounting process. They are of great importance because they provide to their users information regarding the financial position, performance and changes in financial position of an entity (Baptista and Alves, 2001; Marshall and Macmanus, 1998). They present also the results of the entity's operations for some period of time, the cash flow activities for the same period of time, and other information about the entity's financial resources, obligations, owners' interests, and operations (Marshall and Macmanus, 1998, 3). As stated by both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), this information is primarily provided in the income statement (Thomas and Gup, 2010).

According to the American institute of certified public accounts (AICPC), financial statements are prepared for the purpose of presenting a periodical review of reports on the progress by the management and deal with the status of investment in a business any result achieved during the period under review (Patra, 2008).

According to Angolan GCA, the changes in financial position of an entity are useful:

- to evaluate their capacity investment, financing and operating for a period;

- to determine the ability of an entity to generate cash, cash equivalents and the needs to use these flows in the future.

> "The primary focus of financial reporting is information about an enterprise's performance provided by measures of earnings and its components. Investors, creditors, and others who are concerned with assessing the prospects for enterprise net cash inflows are especially interested in that information".[35]

[35] IASB MEETING, SEPTEMBER 2007, Conceptual Framework for Financial Reporting, *www.ifrs.org*

The International Financial Reporting Standard 1 (IFRS1) defines that it is mandatory to prepare four financial statements: the balance sheet, the income statement, the statement of changes in equity and the cash flow statement. According to Cornett, Adair and Nofsinger, the four basic financial statements are:

1. The *balance sheet* reports a firm's assets, liabilities, and equity at a particular point in time.

2. The *income statement* shows the total revenues that a firm earns and the total expenses the firm incurs to generate those revenues over a specific period of time, generally one year.

3. The *statement of cash flows* shows the firm's cash flows over a given period of time. This statement reports the amounts of cash that the firm generated and distributed during a particular time period.

4. The *statement of retained earnings* provides additional details about changes in retained earnings during a reporting period. This financial statement reconciles the net income earned during a given period and any cash dividends paid within that period on one side with the change in retained earnings between the beginning and ending of the period on the other side.

The Angolan GCA determines that it is mandatory to elaborate three financial reports such as the balance sheet, the income statement and the cash flow report. These different types of reports provide relevant information about the economic - financial situation of the firm.

Table 19 - Financial Statements

Information	**Essential basis for information**
Financial Position	Balance Sheet
Performance	Income Statement
Cahnges in Financial Position	Statement of Cash Flow

Source: Angolan General Chart of Accounts

The financial statements are accounting tools that reflect the financial position of the firm, showing quantitatively the respective strengths and weaknesses. They allow clear comparisons regarding the past with the predefined objectives, to detect any deviation between the estimated and the actual performance. And serve as a basis for projections about its future performance.

A proper accounting of fixed assets and the record of their *REAL COST*, in this case the depreciation has a very significant impact in the financial reporting. The valuation of fixed assets policy can help in many cases the financial managers in decision making about the realization of investments in fixed assets.

5.1.1. The objectives of the financial statements

One of the objectives and general purpose of the financial statements is to provide information about the performance of the entity (Thomas and Gup, 2010), disclosing the financial position of the business on a particular day (Patra, 2008).

According to Damodaran (2012) financial statements remain the primary source of information for most investors and analysts. There are differences, however, in how accounting and financial analysis approach answering a number of key questions about the firm. Marshal and McManus (1998) argue that financial statements are designed to meet the needs of users by providing information that is relevant to making rational investment and credit decision, and other informed judgment. Users of financial statements include management, investors, creditors, employees and government agencies (GCA).

5.1.2. Balance sheet impact

Coelho, Siquiera and Lins (2008, 90) define the Balance Sheet (BS) as a financial statement that shows in summary the equity of the firm at a given period, its main function is to show the financial position of a firm.

According to the Angolan GCA, the BS is a financial statement intended to show, quantitatively and qualitatively, at a certain date, the financial position of a firm. Magro and Magro (2008) argue that the BS is the expression of the relationship between the assets, liabilities and shareholders' equity of an entity.

The income statement is a dynamic element that shows all movements of costs and incomes of the period, while the BS is a static document that reflects the financial situation "*sensu*

lato" of the firm at any given moment (Ferreira, 2007). According to Lee and Lee (2006) the BS comes from a basic accounting equality:

Total assets = total liabilities + total equity

This equation implies that firm's assets must equal the total of its liabilities and states what the firm owns (assets) equals what it owes (liabilities; claims to creditors, plus equity; claims to shareholders).

Fixed assets in the BS are part of the firm's assets and they are classified in class 1 which corresponds to "*fixed assets and investments"* (GCA).

The asset of an entity is divided into *current assets*, that are assets and rights which remain in possession of the firm for a period of time less than one year and *non-current* asset also known as *fixed asset* those which the firm expects to use in its operating activity for a period not less than one year. According to Marshal and McManus (1998) fixed assets owned by the entity are reported in the BS at their original cost, it means, at their initial registration value, on the date of incorporation, less (for depreciable assets) the corresponding accumulated depreciation, amortization or accumulated exhaustion (depletion)[36]

. The table 20 shows the balance sheet of the Sonamet Company S.A. at the end of 2010;

[36] Corresponds to the loss of value resulting from the exploitation of mineral resources or forestry or of goods applied in. Is the recognition of the cost of natural resources during the period in which such resources are exhausted or extracted. The mineral extraction or forestry equipment can optionally be depreciated, using to this end, the criteria and rates of depreciation. However, should normally be exhausted with the object of exploitation.

Table 20 – Sonamet Balance Sheet end 2010

Sonamet
Balance Sheet as at 31st December, 2010

		Years	
	Notes	**2.010**	**2.009**
ASSETS			
Non - Current Assets			
Tangible Fixed Assets	4	126.377.384	83.175.052
Intangible Fixed Assets	5	2.684.620	2.978.339
Other non-current assets	9	1.814.911	6.612.888
Total of non-current assets		**130.876.915**	**92.766.279**
Current Assets			
Stocks	8	14.584.833	14.019.870
Receivables	9	106.506.644	72.826.802
Cash	10	6.803.464	18.566.793
Other Current Assets	11	4.783.975	10.562.637
Total of Current Assets		**132.678.915**	**115.976.102**
TOTAL ASSETS		**263.555.830**	**208.742.381**
EQUITY CAPITAL			
Equity Capital	12	11.817.600	11.817.600
Reserves	13	3.262.327	2.593.053
Retained Earnings	14		1.053.511
Net Results		58.942.301	22.225.303
Total Equity Capital		**74.022.228**	**37.689.467**
Non - current Liabilities			
Loans M/L Term	15	14.805.670	28.071.136
Funs Pension	17		
Provisions for Other Risks and Charges	18		
Otrher non-current liabilities	19	31.964.562	18.424.604
Total of Non-current Liabilities		**46.770.232**	**46.495.740**
CURRENT LIABILITIES			
Account Payable	19	69.000.200	38.672.644
Current Part of Loans M/L Term	15	24.825.442	14.800.000
Other Current Liabilities	21	48.937.728	71.084.530
Total of Current Liabilities		**142.763.370**	**124.557.174**
TOTAL EQUITY CAPITAL AND LIABILITIES		**263.555.830**	**208.742.381**

According to Lee and Lee (2006) the BS provides a static description of the firm's financial position in a fixed time; it details the firm's assets and liabilities, and shows how all assets are

financed, either by borrowing (debt) or owners' investment (equity). The IAS 16 states that "*fixed assets must be disclosed on balance sheet by the acquisition cost or revalued amounts (fair value), net of accumulated depreciation and / or impairment losses*[37]".

A firm's BS shows its book value (or historical cost) based on Generally Accepted Accounting Principles (GAAP). Under GAAP, assets appear in the BS at what the firm paid for them, regardless of what assets might be worth today if the firm were to sell them. Inflation and market forces make many assets worth more now than they were when the firm bought them. So in most cases, book values differ widely from the market values for the same assets, the amount that the assets would fetch if the firm actually sold them. For the firm's current assets, those that mature within a year the book value and market value of any particular asset will remain very close.

The variation in the account of Fixed Assets over a given period to another depends on the movement occurred during this period such as, increases, abandonments, disposals, withdrawals or transfers.

Table 21 - Bank activity during the financial year in gross amount

Bank activity during the financial year in gross amount					
Items	**Initial Balance**	**Increases**	**Abandonnments/ Disposals**	**Transfers**	**Final Balance**
Lands and natural ressourses	33.664,00	0,00	0,00	0,00	33.664,00
Buildings and other constructions	52.585.372,00	0,00	0,00	14.366.009,00	66.951.381,00
Basic equipment	26.236.298,00	0,00	0,00	4.253.105,00	30.489.403,00
Vehicles	5.220.412,00	0,00	0,00	3.096.260,00	8.316.672,00
Office furniture and fittungs	1.528.650,00	0,00	0,00	158.544,00	1.687.194,00
Other tangible fixed assets		0,00	0,00	0,00	0,00
Containers	701.977,00	0,00	0,00	126.360,00	828.337,00
Fixed assets in progerss	39.041.750,00	53.489.287,00	0,00	21.979.701,00	70.551.336,00
Advances payments for tangible fixed assets	112.080,00	12.912,00	0,00	20.577,00	104.415,00
Total	**125.460.203,00**	**53.502.199,00**	**0,00**	**44.000.556,00**	**178.962.402,00**

Source - Sonamet annual reports and accounts 2010

[37] Impairment losses are covered in IAS 36 *Impairment of Assets*, which is the topic of the fifth article in this eight-part series. In brief, an impairment loss is recognized when the recoverable amount of an asset is lower than its carrying value.

The closing BS of tangible fixed assets account is 178,962,402.00, taking into account the movements occurred during the period. The company's BS registered the value of 126,377,385, resulting from the deduction of depreciation on gross amount of the period. As we can see, in the table below the total amount of depreciation during the period is 52,585,015 .00.

Table 22 - Composition of the tangible fixed assets account

Composition of the tangible fixed assets account at the end of 2010

Items	Gross Amount	Accumulated Depreciations	Net Amount Dec 2010	Net Amount Dec. 2009
Lands and natural ressourses	33.664,00	0,00	33.664,00	33.664,00
Buildings and other constructions	66.951.381,00	28.721.330,00	38.230.051,00	30.041.941,00
Basic equipment	30.489.403,00	17.604.693,00	12.884.710,00	11.483.880,00
Vehicles	8.316.672,00	4.291.907,00	4.024.764,00	1.960.106,00
Office furniture and fittungs	1.687.194,00	1.324.396,00	362.797,00	365.757,00
Other tangible fixed assets	828.337,00	642.689,00	185.648,00	135.875,00
Containers	0,00	0,00	0,00	0,00
Fixed assets in progerss	70.551.336,00	0,00	70.551.336,00	39.041.750,00
Advances payments for tangible fixed assets	104.415,00	0,00	104.415,00	112.080,00
Total	**178.962.402,00**	**52.585.015,00**	**126.377.385,00**	**83.175.053,00**

Source - Sonamet annual reports and accounts 2010

5.1.3. Cash flow impact

The cash flow statement is an accounting statement in order to demonstrate how the money was generated and used during the period under review, (GCA). IAS 7 defines the cash flow as "*inflows (receipts, inputs) and outflows (payments, outputs) in cash and cash equivalent*". According to Gonçalves Silva (2008) the cash flow is an "added value" that there is not always a correlation between the calculated results and cash flows, for example the fact that the company generates incomes does not necessarily mean it has the money to pay particular dividends, loans or invest. The cash flow information is of great utility because enables users of financial statements:

- first, to know the sources of cash that the company had access during a certain period of time, and;

- secondly, to check the destination given to the money.

The cash flow is a better financial statement to distinct the performance of a firm in finance and accounting points of view. The income statement shows the accounting information; however, the most important for a firm is the cash and not the accounting profit. This statement reports the amounts of cash that the firm generated and distributed during a particular time period. On structuring the cash flow statement is adopted a classification by activities to allow the users of the financial information to evaluate its impact.

Cash flows must be classified according to the type of activity that originated them. The IAS 7 states that the statement of cash flows shall report cash flows during the period and classified by operating, investing and financing activity. The cash flows for operating activities describes the net cash flows generated by operating activities, which give us information about the firm's capacity to generate enough payment resources to maintain its operating capacity.

The cash flow information for financing activities allows estimating the needs of means of payment and new capital inflows, as well as provide information to lenders about the firm's capacity of reimburse (Gonçalves da Silva, 2008). According to Zdanowicz (2000 apud Alexandre Quintana, 2000) "it is called by projected cash flow the set of cash inflows and cash outflows over a projected period", serving to represent the financial condition of a company, taking into consideration the sources of funds and the application in the assets. Assaf Neto (1997) states that, "*cash flow is crucial for firms, becoming an indispensable signaling of financial direction of business*" because the lack of cash can cause a serious disruption in their operations. Zdanowicz (2005) says that the cash flow "*is one of the most efficient tools for financial planning and control*", becoming, a basic and essential element for managers, it is of great importance to assess the financial position of the firm in the long term. In this context, Assaf Neto (1997) highlights the cash flow as a tool to enable the planning and control of financial resources of a firm, in the level of management, it is essential in the whole process of making financial decisions.

5.1.3.1. Cash flow of investment activities

Investments are any application of resources in assets whose sources are represented by liabilities or net worth. Cash flows arising from investing activities comprise acquisitions and disposals of long-term assets and other investments not included in cash equivalents (IAS 7). As regards the management of fixed assets, the cash flow for investing activities is essential in providing financial report, reporting the exact monetary values that were used in the acquisition or construction of fixed assets for the firm, as well as cash inflows related to the

sale or financing in the form of grants of fixed assets. Investment cash flows indicate such capital activities as the acquisition or sale of, equipment, or the company's realized gains or losses in its bond or stock holdings (Sagner, 2002). The separate disclosure of cash flows arising from investment activities is important because the cash flows represent the extent by which the expenditures were made in respect of resources to generate income and future cash flows (GCA). According to Angolan GCA some examples of cash flows arising from investing activities are:

Table 23 - Investment Activities

Receipts From:	Payments Related to:
- Tangible Fixed Assets - Intangible Fixed Assets - Financial Investments - Subsidies to Investment - Interest and Similar Income - Dividends or Profit Received	- Tangible Fixed Assets - Intangible Fixed Assets - Financial Investments - Cash Payment for Fixed Assets Acquisition

Source: Angolan General Chart of Accounts

According to Gonçalves da Silva (2008) the information relating to cash flow for investing activities is important, since it represents the extent of expenditures made to obtain resources that are intended to generate incomes, which are intended to generate earnings and future cash flows.

In order that the information contained in cash flow statement of investing activities is in fact the reflex of all capital expenditures and capital revenues during the period under review, it is necessary that all transactions relating to investment activities are correctly accounted as capital or revenue expenditures. Thus, should be considered all additional charges on the purchase of a fixed asset classified as CAPEX, so that they shall have a true reflex on statements of cash flow of investing activities. The separation of the group of financial costs *not disbursable* related to depreciation and provisions can be useful for the purpose of the cash-flow analysis.

> *"The **Real Cost** of fixed assets, in this case the **depreciation** and **amortization**, does not reflect any impact on cash flow statement although considered as costs of the period, because they do not imply effectively cash outflows, are simply considered as not payable costs".*

We can notice in the table further below the cash flow for investing activities of Company Sonamet generated during the year 2010;

Table : 24 - Sonamet Investment Cash Flow

December - 2010

PROJECT	BU	Budget	EAC	M-1	Dev. /M-1	Previous years	Jan-10	Feb-10	Mar-10	Apr-10	Mai-10	Jun-10	Jul-10	Aug-10	Sept-10	Oct-10	Nov-10	Dec-10	**YEAR 2010**	**Dev. /M-1**
Exchange rate (usd/eur)							1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560	1,26560		
CASH FLOW (KUSD)																				
CASH IN (+)			41.820	41.820	0	18.217	0	1.390	1.100	1.445	4.505	1.350	1.136	2.223	600	1.053	0	182	14.984	0
Sonamet Lobito Headquarter	2150		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lobito Welding School	2166		7.000	7.000	0	5.610	0	840	0	45	405	0	0	0	0	100	0	0	1.390	0
Upgrade Power Generation	2168		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pile Rack 4	2207		5.124	5.124	0	5.015	0	0	0	0	0	0	36	73	0	0	0	0	109	0
South Nemba - Bracing line	2208		4.426	4.426	0	3.691	0	0	0	0	0	0	0	0	0	553	0	182	735	0
Manitowoc 18000	2209		10.870	10.870	0	2.250	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material Storage Area	2210		1.750	1.750	0	450	0	0	0	0	0	500	500	300	0	0	0	0	1.300	0
Yard Equipments 2009	2213		1.200	1.200	0	0	0	0	0	0	200	200	200	200	200	200	0	0	1.200	0
Yard Facilities 2009	2214		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IT Upgrade	2227		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yard Equipments 2010	2230		3.000	3.000	0	0	0	550	0	1.200	0	0	0	1.250	0	0	0	0	3.000	0
Yard Facilities Improvement	2231		5.000	5.000	0	100	0	0	0	200	2.900	400	400	400	400	200	0	0	4.900	0
Open Storage Area	2232		1.250	1.250	0	0	0	0	0	0	1.000	250	0	0	0	0	0	0	1.250	0
Company Cars Renewal	2233		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yard commodities	2234		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DUPLEX 1	2235		2.200	2.200	0	1.100	0	0	1.100	0	0	0	0	0	0	0	0	0	1.100	0
Network Upgrade	2168		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH OUT (+)			60.946	60.492	453	0	5.185	2.963	1.051	1.823	2.466	2.605	2.117	3.444	2.909	6.313	6.812	6.180	43.868	-284
Sonamet Lobito Headquarter	2150		20.419	20.887	-468	0	1.382	1.479	841	1.147	1.206	1.161	1.771	1.583	1.559	1.834	2.596	2.478	19.037	-520
Lobito Welding School	2166		3.175	3.064	112	0	8	1.152	66	237	636	216	0	757	0	32	32	32	3.168	104
Upgrade Power Generation	2168		7.687	7.350	336	0	2.177	0	0	2	1	1	0	2	0	774	1.097	1.456	5.510	-193
Pile Rack 4	2207		942	948	-6	0	0	113	3	3	10	35	-5	771	11	0	0	0	942	-6

South Nemba - Bracing line	2208		2.193	2.293	-100	0	100	64	106	102	81	38	38	134	5	769	450	204	2.091	97
Manitowoc 18000	2209		9.414	9.414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material Storage Area	2210		1.056	1.049	7	0	29	0	0	0	0	0	0	0	0	366	340	291	1.027	-22
Yard Equipments 2009	2213		663	661	2	0	0	116	1	14	-11	48	14	10	2	341	128	0	663	2
Yard Facilities 2009	2214		142	109	33	0	0	39	34	4	0	0	33	0	33	0	0	0	142	33
IT Upgrade	2227		1.552	1.724	-172	0	30	0	0	13	0	0	12	0	775	412	154	104	1.502	46
Yard Equipments 2010	2230		2.020	2.360	-340	0	175	0	0	1	46	1	-1	61	7	437	581	150	1.459	-340
Yard Facilities Improvement	2231		4.684	4.651	34	0	528	0	0	0	0	28	5	-3	26	775	700	575	2.635	-295
Open Storage Area	2232		1.501	1.500	0	0	250	0	0	0	0	0	0	0	0	100	100	250	701	0
Company Cars Renewal	2233		2.600	2.600	0	0	300	0	0	244	496	0	174	72	42	350	322	300	2.300	0
Yard commodities	2234		1.137	878	259	0	0	0	0	56	0	806	0	16	123	26	58	52	1.137	259
DUPLEX 1	2235		992	1.004	-12	0	0	0	0	0	0	271	76	40	325	10	124	146	992	-12
Network Upgrade	2168		768	0	768	0	204	0	0	0	0	0	0	0	0	87	130	142	564	564
CASH FLOW			-19.126	-18.672	-453	18.217	-5.185	-1.573	49	-378	2.039	-1.255	-981	-1.221	-2.309	-5.261	-6.812	-5.998	-28.884	284

In the cash flow statement above are reported all cash inflows and outflows related to investing activities for the year 2010.

According to Sagner (1998):

> "the cash flow is the financial statement that provides the most lucid presentation of a company's health does not report EPS[38], net worth, or ROE[39], this document is "cleaner" than the income statement because it allows insight into the quality of a company's earnings".

5.1.4. Income statement impact

Marshall and McManus (1998) say that the income statement (IS), or statement of earnings, or profit and loss statement, or statement of operations has the principal purpose of answering the question: did the entity operate at a profit for the period of time under consideration?

A company bears costs with the purpose of obtaining profits, costs and incomes contribute to the formation of the result (Borges e al., 2010). The IS reports the results for a period of time, in contrast to the balance sheet which focus on a single date. In this sense, the IS is more like a movie than a snapshot; it depicts the result of activities that have occurred in a period of time (Marshal and McManus, 1998).

Marshal and McManus (1998) state that the IS is an accounting document that provides a financial summary of the results of financial operations of the company for a certain specified period of time, which intends to describe the difference between the incomes and expenses of the same period of exercise. In short, it is a financial map that allows the assessment of company performance in a year compared to the previous year. The IS reflects the revenues and costs occurred over a given time period, month, quarter, semester or year, usually the IS covers a period of one year. Some big companies, however, can operate in a financial cycle of 12 months or fiscal year, which ends on another date different than December 31.

[38] The *Earnings Per Share* ratio (EPS ratio) measures the amount of a company's net income that is theoretically available for payment to the holders of its common stock.

[39] *Return On Equity* (ROE) or return on capital is the ratio of net income of a business during a year to its stockholders' equity during that year. It is a measure of profitability of stockholders' investments. It shows net income as percentage of shareholder equity.

The income statement reports results for a period of time, in contrast to to the balance sheet focus on a single date. In this sense the IS is like a movie than a snapshot; it depicts the results of activities that have occurred during a period of time (Marshal and Macmanus, 1998).

> "In a firm there are numerous transactions involving income and costs. Any type of company, regardless of its size, such as micro, small, medium or large, of any legal nature, society, association, foundation, cooperative, or syndicate, etc., needs to maintain bookkeeping and subsequent preparation of profit and loss", (Quintaneiro, 2007).

A cost is recognized in IS when there is a decrease in economic benefits. Revenues are the other elements that comprise the IS, and are recognized as revenue "the increases in economic benefits during the accounting period".

The calculation of the final result, results from the subtraction of costs in incomes. Therefore, when costs are higher, lower is the result obtained and this has a great impact in taxes payable. According to Gonçalves et al. (2013, 29) the taxable profit is the balance of the account *Results Before Taxes*, and consists in the difference between the income or earnings and the costs or losses corrected fiscally.

The profit tax is the amount of tax included in determining net income for the period (GCA). According to José Severino, "when the profit for a given company is higher, greater should be the tax payable"[40]. The depreciation is a figure with great impact in determining the result of a given period, being costs resulting from the use of fixed assets in the operating cycle of the firm, they contribute in the calculation of the operating result and consequently have a significant impact in the net result of the firm, often go unnoticed because they constitute costs not payable but they have a great relevance in financial statements. A proper valuation of fixed assets allows the company to record more accurately the costs related to the use of fixed assets, in this case their *depreciation*.

It is said *net income* when the company faces an increase in equity resulting from its positive performance during an economic period.

[40] José SEVERINO, AIA's president, Jornal ANGOP, 03rd August 2011; 16h08'

The net result of a fiscal year is a result of several types of results arising from the economic cycle calculated according to the nature of the items that constitute them, synthetically calculated in accordance to the costs (or losses) and profits (or earnings) , such as; *the operating results, the financial Results and the extraordinary Results.* The GCA suggests two variants, the income statement by nature, where the elements are described by their nature and Statement by functions, in which the funds are grouped according to the functions to which they relate.

Table 25 – Sonamet Income Statement 2010

Sonamet SA			
Income Statement at 31st December 2010			
			Amounts in US$
	Notes	**2010**	**2009**
Operating Income			
Sales		-	-
Service Rendered	23	198.641.045	162.738.596
Other Operating Income	24	5.996.790	1.301.654
total Operating Income		**204.637.835**	**164.042.950**
Operating Costs			
Variation of Production		-	-
Own Service	26	-3.807.056	-2.330.088
Costs Of Raw Materials Consumed	27	8.544.470	10.807.576
Personnel Costs	28	24.567.723	23.329.423
Depreciations	29	10.593.587	8.596.818
Other Operating Costs and Losses	30	142.583.792	100.339.369
Total Operating Costs		**142.583.792**	**140.743.100**
Operating Results		**62.054.043**	**23.299.851**
Financing Results	31	-1.702.849	485.618
Resuls of Associated Companies		-	-
Non - Operating Results	33	-809.979	-1.264.122
Results Before Taxes		**59.541.215**	**22.521.347**
Company Income Tax		-598.914	-296.044
Net Results	42	**58.942.301**	**22.225.303**

Source - Sonamet annual reports and accounts 2010

5.2. The EBITDA indicator

According to Damodaran (2012), one measure that is widely used in valuation is the Earnings Before Interest, Taxes, Depreciation and Amortization "EBITDA". It reflects the cash-generating performance of a business, but not the investment required to support that cash generation (Thomas and Gup, 2010). Rocha and Rubio (1999) argue that the EBITDA is a measure of operating performance that considers the operating revenues less operating costs and expenses except depreciation and amortization, interest and taxes. The free cash flow to the firm is a closely related concept but it takes into account the potential tax liability from the earnings as well as capital expenditures and working capital requirements (Damodaran, 2012). It is also referred to as operating cash flow, because it is an economic-financial indicator that seeks to assess the company's ability to self-finance new investment and to address the burden of debt, through its operating activities[2]. According to Thomas and Gup (2010) to calculate the EBITDA, it is necessary to add the operating profit depreciation and amortization included in operating expenses. This is because these accounts do not represent effective cash outflow of the period, as can be seen in the formula below:

EBITDA = Revenue - Expenses (excluding tax, interest, depreciation and amortization)

According to Hias and Jones (2010) the EBITDA is essentially the net income with interest, taxes, depreciation, and amortization added back to it, and can be used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions. The use of EBITDA gains importance, because it analyzes only the final result (profit or loss) often has been insufficient to assess their real performance in a given period, as is often influenced by factors that are difficult to be measured. EBITDA broadly represents operating cash flow of the company, ie, how much the company generates funds only in its operational activities, without taking into account the financial effects and taxes (Damodaran, 2012). According to Vasconcelos (2002 apud Hias and Jones, 2010) the EBITDA is a "mixed indicator of economic-financial performance and basis for valuation of companies, which emphasizes its importance". Does not correspond to the effective physical cash flow, already occurred in the period, because some sales may not be received and expenses may not be paid. It represents the potential for generating genuinely operations of cash that the operating asset of a company is able to produce,

before even considering the cost of any capital borrowed (Mota and Caloba, 2002 apud Hias and Jones, 2010). The EBITDA measure can serve many useful purposes, but if not handled with care it also has the potential to lead the analyst to incorrect conclusions (Thomas and Gup, 2010).

5.3. Comparison of financial results between two different models of valuation

The impact of an incorrect valuation of fixed assets on company's results is very relevant. The cost of the use of fixed assets has a significant impact in determining the result during the operating cycle. This can be seen in an example of comparison between two models of valuation for a *Manitowoc Crane 16000* acquired by a company. The example compares a scenario A, in which the valuation of the crane is made correctly, allocating all expenses incurred for its purchase in the global value of the fixed asset. In the second case, scenario A ', we came across a valuation model with the same fixed assets valued incorrectly, considering only the acquisition price of the fixed asset, and the additional expenses are considered as operating costs for the period.

Table 26 – CAPEX Valuation

Capital Expenditure	**CAPEX Valuation**	
	Scenario A	**Scenario A'**
Purchase Orders	4.747.000,00	4.747.000,00
IMC	16.500,00	-
Inspection	6.452,00	-
Freight (FOB)	1.000.000,00	-
Isurance	250.000,00	-
Duties & Clearing	144.000,00	-
Transport to Site	5.420,00	-
Instal. & Commis.	12.750,00	-
Testing	8.240,00	-
Acquisition Value	***6.190.362,00***	***4.747.000,00***

Source: The Author

Variation	-1.443.362,00
Residual Value	237.350,00

Depreciation

Scenario	**Acquisition Value**	**Rate**	**Useful Life**	**Yearly Amort.**
A	6.190.362,00	0,08	8,00	744.126,50
A'	4.747.000,00	0,08	8,00	563.706,25

The purchase price difference recorded between the two models is 1.443.362,00. Assigning the useful life of 8 years and considering a residual value of 237.350,00 we have an annual depreciation of 744.126,50 for scenario A and of 563.706,25 for scenario A'.

The impact of the depreciation has a reflection in firm's results. For the scenario A we obtained an EBITDA higher than the scenario A', in this case, 15.535.873, 50 and 14.272.931,00 respectively. Considering the industrial tax rate of 30% (in force in Angola), we obtain a net profit for the period of 10.875.111,45 for scenario A and 9.991.052,23 for scenario A'.

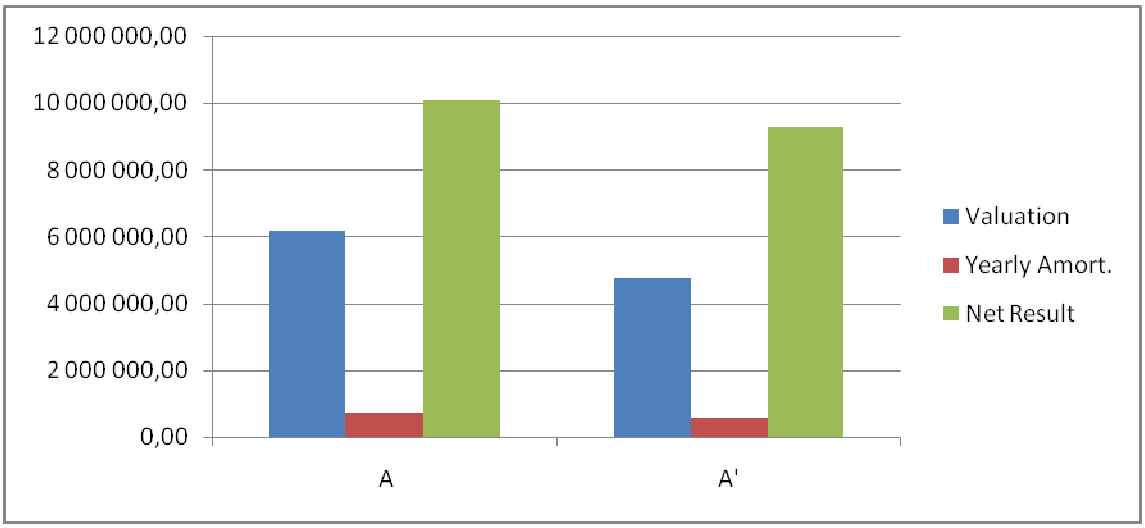
Table 27 - Example of Income Statement

Scenario	**Valuation**	**Yearly Amort.**	**Net Result**
A	6.190.362,00	744.126,50	10.098.317,78
A'	4.747.000,00	563.706,25	9.277.405,64

Scenario	A	A'
Sales or Sevices Rendered	50.000.000,00	50.000.000,00
CAPEX (Manitowoc Crane)	6.190.362,00	4.747.000,00
Operating Costs	33.720.000,00	33.720.000,00
		1.443.362,00
Total Disbursable Costs	*33.720.000,00*	*35.163.362,00*
Depreciation	744.126,50	563.706,25
Total Costs	**34.464.126,50**	**35.727.068,25**
EBITDA	**15.535.873,50**	**14.272.931,75**
Tax Rate	0,30	0,30
Tax	4.660.762,05	4.281.879,53
Net Result	**10.875.111,45**	**9.991.052,23**

Source : The Author

Chart 1 – Capex Impact Analysis



Source: The Author

Through the examples presented, we can conclude that a correct valuation of fixed assets that implies recognizing the acquisition cost and all Capex related to the item acquired, the costs of the period will increase, decreasing the net profit and a decrease in fixed assets account will be verified in balance sheet. Therefore a correct treatment of CAPEX results in a decrease of operating expenses, in this case, increasing the net profit and increasing also the fixed assets account in balance sheet.

CONCLUSIONS

A fixed asset represents an asset for the company, the money expended for its acquisition is the sacrifice that the company did to acquire it. At the moment of the acquisition, the fixed assets shall be classified as expenditures and the cost for the company will be the wear for its use, in this case its depreciation.

If the additional expenses related to the acquisition of a fixed asset are not included as part of the purchase cost of the asset acquired, the total operating costs of the company will be overloaded and its reflection will have a negative impact in financial results. Nevertheless, a reduction of industrial tax will occur because of the decrease of the tax base.

The concern to adapt a model of valuation of fixed assets according to reality is based to a certain extent on the form of acquisition they are subject, with the purpose of:

- understanding how the company acquires a given fixed asset;
- adjusting the allocation of costs incurred in the acquisition of fixed assets;
- ensuring that all cash outflows related to the acquisition or construction of a fixed asset are allocated in the value of the asset and not considered as a cost of the period;
- undertaking regular follow-up of all charges related to the acquisition or construction of fixed assets as well as its proper allocation;
- carrying out a proper accounting for the periodic depreciation and carry out detailed analysis of their impact on earnings of the period.

An analysis carried out in order to check the valuation models and recognition of the cost of fixed assets used by Angolan companies concluded that:

- most companies do not adopt a specific valuation model for different types of fixed assets
- most companies records the cost of their fixed assets, in this case the depreciation, based only on the purchase price of the item;

- the additional expenditures related to the acquisition or construction of a fixed asset in many cases are recognized as costs of the period, thus reducing the value of the property which in turn also implies an increase in costs for the period.

This paper aimed to focus on the method of accounting for fixed assets and on different methods of valuation and recognition for these kind of assets by how they are they are acquired by the company. The relevance of this paper is of great interest in Angolan business environment. It defines one of the major problems faced by Angolan companies in managing and accounting the fixed assets. The work also clarifies the differentiation of cost and capital expenditure in order to give greater reliability of financial statements.

It is remarkable the concern of the many Angolan companies in implementing a model that allows a correct accounting of fixed assets through the distinction of expenses that can be classified as capital expenditures, and thus carrying out the recognition of fixed assets at cost of acquisition or production.

As stated by IFRS 7:

> "all expenditures incurred in the acquisition or construction of a fixed asset, such as, transport, taxes, man hours, etc., as well as the costs of dismantling and removing a fixed asset and restoring the site where it is located are classified as part of fixed assets which are related".

The Angolan companies must carry out a thorough follow - up of the valuation process of their fixed assets. Since, almost all investments in fixed assets carried out by Angolan firms are acquired through import, involving numerous variables that reflect on the overall cost of goods.

We can conclude that if Angolan companies implement a model that allows a proper valuation and accounting of fixed assets making correctly the distinction of expenditures that can be classified as CAPEX the cost of these assets will be accurately recorded and the financial statements will present the true performance and real equity value.

Contribution to academic knowledge

The paper offers a contribution to the academic field of knowledge specifically in the analysis and comprehension of some variables of great interest related to fixed assets management. From perception of the concept of costs and expenses, price and value, which are aspects that deserve a good understanding that this study is able to provide. The concepts of depreciation, amortization and depletion as well as their effects on the financial results raise an undeniable interest, we believe that these and various other aspects presented in this paper will serve for a great academic contribution.

Contribution to business knowledge

One of the most interesting aspects of this work is to highlight a major problem faced by companies: "the fixed assets management". The work aims mainly to respond to the needs of managers on this issue, providing some budget planning models for investment activities. Managers can also find in this work some methods of control, follow-up and valuation that can be more efficient.

A correct determination of the depreciable amount can help managers in the analysis of financial results, being possible to compare them using the EBITDA indicator to evaluate the true performance of the company. Regarding to the valuation process, our work provides a formula developed for the purpose which can serve as a useful tool in the allocation of costs incurred in the import process. As recommended by AIA's president; "Angolan firms must improve their depreciation calculation methods in order pay fair taxes[41]".

Future work

In future research we would like to improve the understanding of fixed assets revaluation, in order to determine the equity's value of an entity. Considering that fixed assets are the assets of great importance in the capital structure of companies, with the depreciation process the equity's value decreases. In other hand, this value can increase with the revaluation process because the value of some fixed assets increase with the passage of time, and such increase implies an update of the company's equity value adjusting it with the market value.

[41] José SEVERINO, op cit.

We are sure that a specific study regarding the link between the depreciation and revaluation is extremely important, once the two aspects are closely related.

One other issue that could be improved is the criteria of recognition of the costs of the personnel involved in the production, construction or purchase of fixed assets. As it is known all personnel expenses incurred while a fixed asset is in progress must be included in its global value. But in many cases, when the payroll is accounted the salaries are classified as *personnel costs* and not as *CAPEX*, this situation can generate a *double-accounting* of costs.

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