Abderrahmane Mira University of Bejaia

Faculty of Economics, Management and Commerce

Department of Financial and Accounting Sciences

A disssertation

In order to obtain a Masters' degree in

Finance and Accounting Sciences

Speciality: Accounting, Control and Audit

The assessment of financial performance through financial statements of a company: Case study of ENTREPRISE PORTUAIRE DE BEJAIA (EPB)

Done by:

Mr ADAM Tapiwa

Mr MAINGENI Marshall

Supervised by :

Mr ARAB Zoubir

Members of the jury:

President: Mr OUGHLISSI Ma

Examiner: Ms KHERBACHI Sonia

PROMOTION 2023

ABSTRACT

Performance is often employed in company evaluations as the search for the maximum proportion between the outcome obtained and the methods utilized to attain a particular target. As a result, it is frequently seen as a quantitative indicator of profits or earnings to be realized. The assessment of a company's performance is a problem that is still important today, and it plays a significant part in regulating a company's performance and ensuring that resources are collected and used effectively and efficiently. To evaluate a company's performance, the management controller is in charge of identifying indicators that permit him to formulate an assessment as well as assessment models.In addition, assessing a company's financial performance is still an important topic. It helps to evaluate the success of the firm and ensure that resources are collected and used effectively and economically. Establishing the tools, techniques, and procedures of analysis after gathering the relevant information and data. They were applicable to the Enterprise Portuaire de Béjaia (EPB) through an examination of the company's financial status in the years 2021 and 2022.

DEDICATION

Firstly, I’d like to thank God the Almighty, for your love and mercy, for leading me through life's ups and downs, and for gifting me with opportunities that have led me to where I am today.

To my family, thank you for always being there for me, for your unconditional love, and for making sacrifices to help me reach my goals. You're my rock, and I couldn't do it without you.

Thank you to all of my friends for your constant support, for being there to raise me up when I needed it the most, and for always believing in me. Your friendship means everything to me.

I dedicate this moment to all of you, and I pledge to keep working towards my goals with your love and support. From the bottom of my heart, thank you.

With love and appreciation,

[ADAM TAPIWA]

To my divine Creator, God, I offer my deepest gratitude for your infinite love, guidance, and blessings. You have been my constant source of strength and inspiration, guiding me through life's challenges and illuminating my path. Your grace and mercy have been my refuge, and I am forever grateful for the blessings you have bestowed upon me. Thank you for your unwavering presence and for guiding me towards a life filled with purpose and fulfillment.

To my family and friends, you are my pillars of strength, my shelter in the storm, and the source of my endless gratitude. I am eternally thankful for your love, support, and faith in me. Together, you have shaped me into the person I am today, and for that, I am forever indebted.

With all my love and appreciation,

[MAINGENI Marshall]

ACKNOWLEDGEMENTS

We are deeply grateful for the guidance and blessings you have bestowed upon us throughout our journey. Your divine presence has been a constant source of strength and inspiration, LORD!

I would like to express my sincere appreciation to my supervisor, Mr. Zoubir ARAB, for his unwavering support and invaluable mentorship. His expertise and dedication have played a pivotal role in shaping my professional growth and success.

We would also like to extend our heartfelt thanks to Mr. Mardi, the Head of the Finance and Accounting Department at Enterprise Portuaire de Bejaia. Your leadership and guidance have provided us with valuable insights and opportunities for learning and development. May the lord bless.

We are truly fortunate to have had the privilege of working under the guidance of such remarkable individuals. Your unwavering belief in our abilities has been a constant motivation for us to strive for excellence.

Once again, I express our deepest gratitude to Mr. Zoubir Arab, and Mr. Mardi for their instrumental roles in our journey. We are forever indebted to your support and encouragement.

ADAM Tapiwa and MAINGENI Marshall

LIST OF TABLES

LIST OF ABBREVIATIONS

EPB	ENTREPRISE PORTUTAIRE DE BEJAIA
ROE	RETURN ON EQUITY
ROCE	RETURN ON CAPITAL EMPLOYED
ROI	RETURN ON INVESTMENT
ROA	RETURN ON ASSETS
COGS	COST OF GOODS SOLD
AR	ACCOUNT RECEIVABLES
MS	MARKETABLE SECURITIES
CE	CASH AND CASH EQUIVALENTS
CA	CURRENT ASSETS
CL	CURRENT LIABILITIES
EBT	EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTISATION
NOPAT	NET OPERATING PROFIT AFTER TAX
EBT	EARNINGS BEFORE TAX
TR	TAX RATE
EVA	ECONOMIC VALUE ADDED
OA	OPERATING ASSETS
WCR	WORKING CAPITAL REQUIREMENT
RV	REALISABLE VALUE
CM	COMMERCIAL MARGIN
NWC	NET WORKING CAPITAL
OR	OPERATING RESULT
ANR	ANNUAL NET RESULT
SFC	SELF FINANCING CAPACITY
CAF	CAPACITY OF AUTO-FINANCE
EM	EQUITY MULTIPLIER
AT	ASSETS TURNOVER

SUMMARY

GENERAL INTRODUCTION

Introduction

Companies try to increase their performance in an increasingly competitive economic world by optimizing the link between their results and the measures utilized. To accomplish this goal, an objective examination of the company's performance is required, which includes defining important indicators and employing relevant methods. Models that consider both the financial dimension and factors relevant to the company's development potential, such as customers, internal processes, learning, and innovation, can be used by leaders[1].

To correctly analyze an organization's success, the measurements that truly matter must be identified and ranked in order of priority. Incorrect measurements may offer an incomplete or incorrect impression of the firm. As a result, financial analysis is a useful tool for comprehending the firm through its financial statements and providing an overall assessment of its current and future financial performance.

Using diverse performance data, financial analysis assists in forming a judgment on a company's performance and dangers. It is a combination of ideas, methodologies, and tools that allow for the formulation of an evaluation pertaining to a company's financial status, the risks that impact it, and the quality of its performance.

In addition, assessing performance measurements and potential is frequently a critical job for any business leader, as it allows for better strategic policy planning. This emphasizes the significance of corporate performance as measured by financial analysis.

Financial analysis is the process of assessing financial statements such as the income statement, balance sheet, and cash flow statement. This provides a thorough insight into the company's financial health and wellbeing. Furthermore, financial analysis evaluates the company's financial health by taking into account several performance indicators such as profitability, liquidity, solvency, or efficiency.

More so, to perform financial analysis effectively, there are generally six steps to follow. These include identifying the industry's economic characteristics, assessing a company's financial statements, calculating financial ratios, comparing financial ratios with industry benchmarks, and creating a report with recommendations for improvement.

[1] Smith, J. (2023). A Holistic Approach to Performance Management. Business Insider. https://www.businessinsider.com/holistic-approach-performance-management-2023-06.

It is an important tool for organizations to use in assessing their financial health, identifying opportunities for development, and making sound decisions. It entails applying knowledge and abilities to analyze accounting and financial data in order to generate a judgment on the financial status, risks, and performance of the firm. Financial analysis also allows for the examination of a company's current and future financial performance, assisting organizations in strategic planning.

Furthermore, some businesses are experiencing severe financial issues in today's economic environment, raising questions about the methods used to monitor performance and the role of financial analysis in improving and consolidating financial health.

In this regard, our work will focus on the application of this company's analytical tools to accounting and financial documentation. The methods utilized will provide us with an impartial and objective viewpoint on its financial status, allowing us to answer the following primary question: **How well is the company performing financially?**

Because of this main question, it brought up some subsidiary questions :

• Is the EPB's profitability adequate to assure its self-sufficiency?

• How does the EPB’s financial performance compare to previous year?

To better comprehend our research and answer these questions, we suggest the following two hypotheses:

- EPB's current financial structure is strong, allowing it to achieve financial balance as compared to its previous year.
- EPB's profitability is adequate to assure self-financing.

Once initial solutions to our objectives are offered, it is critical to collect appropriate data to validate these hypotheses in order to compare projections with reality and detect inconsistencies, allowing them to confirm or disprove previously produced assumptions. To do this analysis, we will look at the following: the balance sheet, income statement and cash flow statement and the FPIs and KPIs.

To avoid dealing with a broad study topic, we have narrowed it down in terms of domain, time, and space. In the field, the subject is limited to financial analysis, more specifically to the analysis of the financial structure, the analysis by the ratio method, as well as the analysis of profitability and activity; in time, our research spans three years, from 2021 to 2022 ; and in space, our study focuses on the EPB and all of its branches of activity.

To address all of these concerns, we have organized our research study into three chapters apart from the general introduction and conclusion. The first chapter presents a theoretical framework concerning general information on performance. The second chapter is about key performance indicators and the last chapter is devoted to the practical framework concerning the analysis of financial performance of EPB. Finally, in answer to the first queries, our case study led to a conclusion.

CHAPTER I. GENERAL INFORMATION ON PERFORMANCE

Performance is the ability of a business to implement a strategy to achieve previously set objectives, expressed in terms of process efficiency, service quality or management efficiency. Their performance approach is a management system aimed at improving the effectiveness of the organization by orienting management towards the achievement of results within the framework predetermined means.

This chapter will therefore aim to develop the main axes to be examined during assessment of the viability of the business.

Section 01. Performance Basics

In this section we try to focus on the concept of performance, by presenting a certain number of definitions of some related concepts

1.1 Definitions

Performance can be defined in several ways, because of that, we have come with several interpretations according to different authors.

The author KHEMAKHEM in his work "dynamic control of management" explained the notion of performance as follows: "performance is a word that does not exist in classical French. It causes a lot of confusion. The root of this word is Latin, but it is English that gave it its meaning. The closest words of performance are “performar” in Latin, “to perform” and “performance” in English”.[2]

- A reminder of these words will suffice to clarify the meaning given to performance in management control: Performance means: to fully shape something. The performance of personnel of an organization is to give form and reality to the system of standards projected and planned by the leaders.
- To perform means: a task with regularity, methods and application, performing it, bring about its accomplishment in a more suitable manner more particularly, it is giving effect to an obligation, fulfilling a promise, executing the clauses of a contract or an order.

Therefore, performance is the fact of achieving the set objective in a relevant way. In other words, it is the combination between effectiveness and efficiency.

[2] KHEMAKHEM(A): “The dynamics of management control”, 2nd edition, DUNOD, Paris, 1976, p.6

LORINO wrote on this subject "Is only the efficiency in the company that contributes to improve the cost value, which is improving the net value creation »[3]

"The performance of the company is based on the pair of cost-value, the two terms of which are inseparable but fundamentally distinct. Is successful in the company everything which contributes to improving the cost/value ratio. On the contrary it is not necessarily performance, which contributes in decreasing the cost or increasing the value, separately.

“The performance of a productivity centre (workshop, unit, department, company, branch, etc.) means the efficiency and productivity in which this centre of responsibility has achieved the objectives which are accepted.”

1.2 Performance components

In the general, performance is the combination of effectiveness and efficiency; the relevance and economy, in other words, a business is performance if is only apply these concepts:

- **Efficacy**

It relates to the use of the means to obtain the results given in the framework of the objectives set. In a generic way that largely suits us, "It's the ability of a specific to modify a work situation, the maintenance of which constitutes an obstacle”[4]

More simply, we can define efficiency "as the relationship between the result achieved by a system and the intended objectives. The closer the results will be to the targeted objectives more the system will be effective. We will therefore express the degree of efficiency to characterize the performance of a system.

In a briefer way we can summarize the efficiency in the following formula:

Efficacy = *Results achieved/ Objectives targeted*

- **Efficiency**

[3] LORINO Philips, "method and practice of performance" Edition editions of organizations, Paris, 2003, P5.
[4] BOISLANDELLE, (HM): “Human resource management in SMEs”, Edition ECONOMICA, Paris, 1998, P139.

By efficiency, we mean the relationship between the goods or services produced, on the one hand and the resources used to produce them, on the other hand. In an operation based on efficiency, for a set of resources used the product obtained is maximum, or yet the means used are minimal for any given quality and quantity of products or of services (i.e. efficiency corresponds to the best possible management of means, capacities in relation to the results).[5]

"It is the ratio between the effort and the total means deployed in an activity on the one hand, and the real utility that people derive from it in the form of use value on the other"

So, we can summarize the efficiency in the following formula:

Efficiency = *Results achieved / Means implemented*

- **Relevance**

Relevance is the concept that the information generated by an accounting system should impact the decision-making of someone perusing the information. The concept of relevance remains very subjective and difficult to measure. However, we will be able to admit that the relevance is the conformity of the means and actions implemented in order to achieve a given objective.

- **Economy**

By economy, we mean the conditions under which resources are acquired human and material. For an operation to be economical, the acquisition of resources must be of acceptable quality and at the lowest possible cost.[6]

In addition, performance requires an interdependent global vision of all internal and external, quantitative and qualitative, technical and human parameters, physical and financial management. The manager must therefore seek the performance global, which integrates several levels of evaluation:

For production, it is the permanent improvement of productivity, therefore a physical performance, combined with a high level of quality;

- For sales, it is competitiveness on the market;
- For finance, it is profitability that can be defined in several ways.

[5] STEERS, RM “Problems in the measurement of organizational effectivenses”, Administrative Science Quarterly, December 1975, volume 20, p. 546-558.
[6] MACHESNAY, Business Economics, Ed Eyrolles, Paris, 1991, p.38.

1.3 The objectives of Performance

The measurement of business performance in an endless list, in fact it is a multitude of objectives and goals which group as follows:

- Develop innovative products;
- Reward individual performance;
- Improve manufacturing processes and the working atmosphere;
- Reduce manufacturing costs
- Launch new products and meet delivery deadlines;
- Develop the creativity of the staff
- Improve the handling of complaints
- Develop market share and build customer loyalty;
- Strengthen and improve safety at work
- Identify and assess key skills
- Anticipate customer needs and improve profitability;
- Consolidate and develop know-how.

1.4 Types of Performance

For a long period of time, performance has tendency of being approached in a more overall way than just solely assessment of profitability for the company or for the shareholder[7]. The performance of the company also results from its integration into an environment which it is important to understand and master the rules of the game; we can distinguish three types of performance which are:

1.4.1 Organizational performance

Organizational performance concerns the way the company is organized to achieve its objectives and the way in which it manages to achieve it, there are four factors of organizational effectiveness:

-Respect for the formal structure,

[7] BARET P, The contingent evaluation of the global performance of companies: a method for founding a socially responsible management? 2nd CEROS research day, P.124 .

-The relationships between the components of the organization (integration logic organizational),

-The quality of the circulation of information,

-The flexibility of the structure.

In this conception, the performance of the company results from the value of its organization. The performance is decisive and it imposes its demands on the social system. It structures employment and all positions, which in turn determine the professional requirements.[8]

1.4.2 Strategic and competitive performance

Contrary to short-term views of performance driven by appreciating the market value of the company, some companies have bet everything on the performance at long term, guaranteeing their sustainability. Companies that have achieved global leadership in course of the last twenty years have all started with ambitions that were not corresponding with their resources and capabilities. But they used an obsession to win at all levels of organization and they have maintained this obsession over the course of ten or twenty years during which they have conquered this global leadership.[9]

The performance is maintaining a "distance" with the competitors through logic of long-term development maintained by a strong motivation (base on the reward system) of all members of the organization.

Long-term performance is therefore associated with the ability to question advantages acquired to avoid the failure of a good concept, to the definition of a system of will aiming for the long term and the ability of the company to find sources of creative value of margin.

The search for performance no longer depends solely on the action of the firm, but also its ability to adapt to, or even appropriate, the rules of the competitive game in a given sector.

The nature of the competitive system determines how performance can be obtained, taking into consideration the modes of competition. It is by detecting enough fairly the changing characteristics of the competitive systems of each of the activities company or by

[8] KALIKA. M "organizational structure and environment of the company", in the small Posters, n°88 of July 24, 1989, p.52
[9] KALIKA. M "Organizational structure and environment of the company", in the small Posters, n°88 of July 24, 1989, p.52.

anticipating new bases of differentiation (creation of value) that companies can appropriate potential sources of performance.

Performance can be both the exploitation of an existing potential (which allows maintaining a favourable position) and the development of new forms of benefits competition by anticipation / construction of the rules of the game that will prevail in the future. Competitive performance largely depends on the strategic analysis of the rules of the game competitive.

Emphasizing the quality of the strategy, and therefore of the strategist, focused on understanding of the environment, this approach spontaneously tended to identify the overall performance to competitiveness.

1.4.3 Human performance

The recognition has increased that the company is not sustainably performing financially if it is not efficient ethically and socially. Related questions the skills, the capacity for initiative, the support of employees, the achievement of goals, the sense of purpose.[10]

Human efficiency has always resulted from the gathering of collaborators:

-Motivated,

-competent,

-communication skills.

Since 1985, many research works have been carried out to improve understand this concept of efficiency and performance by men. These various works highlight evidence that competence, its acquisition, its development, its management, are essential therefore as a decisive factor for the achievement of human efficiency, whatever the form.

To obtain performance in an organization, it is considered that while skills are always a source of performance, skills alone are not enough to determine their level.

With equal competence, the performances can be different. That’s, if the competence is know-how, performance always presupposes the existence of a desire do or motivation. This motivation (that is to say, what will lead the actor to engage effectively in the action proposed

[10] BOISLANDELLE H M. Human resources management in SMEs. Editing. Paris: ECONOMICA, 1998 , P.139.

to it by the company) determines the strategies of actions chosen by the actor, strategies subject to data from the work environment which make it more or less possible to carry out the action. This environment itself can be characterized by organizational data (prescribed roles, inductions, means…) and cultural data (dominant representation).

1.5 Performance theories

There are two main theories:

1.5.1 Goal theory

LEVY LEBOYER about the setting goals as much as on both levels personal and organizational.[11]

LOCKE Edwin and Laham define purpose as the desire to achieve a certain level of performance. He demonstrates that goals are powerful determinants of supply and activity that lead to this performance, even if the goal itself is not and cannot be achieved.

This concept is subjective, it is defined in relation to the probability of reaching a result given, probability estimated according to performance observed in the past.[12]

1.5.2 The reinforcement theory

This theory states that any behaviour whether positive or negative can be controlled, or even modified, depending on the desired result. It is based on the assumption that our behaviours are controlled by their consequences, and our steps, by internal phenomena such as needs, attitudes, values, etc.

[11]LEVY – LEBOYER: “motivation in the business model and strategy”, Edition des EDITION OF ORGANIZATION, Paris, 2001.
[12] MICHEL S, LEDRU M: "Capital-Competence in the company", editor: ESF (education without borders) edition, 1991, p 221

1.6 Performance characteristics

Performance brings together a set of characteristics that can be enumerated in the following points:

1.6.1 Judgement support

It implies a judgment of values on its environment about the activities, the results, products and effects of the organization on its environment. This concept has, as a social construct, as many meanings as there are individuals or groups that use it.

So, performance remains a matter of perception. For a manager, it could be the company's profitability or competitiveness; for an employee, it could be the climate work, and for a client the quality of the services rendered.

1.6.2 Evolution over time

Internal evaluation criteria and those defined by the ever-changing environment. These are factors that condition the success of the company during an innovation phase may prove to be incompatible with those required during a development phase. There must be combinations of human, technical, financial, organizational, that they are effective, in a given context and which are no longer there so in the other words these combinations are multiple, and change over time.[13]

1.6.3 Performance is controlled

Financial criteria are no longer enough for managers, and in practice, non-financial indicators complement first, they are the drivers of success future, they provide pilots with an overall view of performance in several areas simultaneously.

As a result, performance has a retroactive effect on the organization, it acts on the management behaviour if the results are below the objectives, and the managers will reconsider the strategic choices.

1.6.4 Antinomy components (opposites)

Antinomy components are presented as a set of parameters complementary and sometimes contradictory. This is verified when the leader seeks to minimize costs, while

[13] GRANSTED, (I): “The industrial dead end”, Edition of the threshold, 1980, P.33.

ensuring product quality is improved and morale is maintained employees. These criteria therefore impose permanent arbitration. All components have not the same importance.

Section 02. The forms and dimensions of Performance

In general, we make a distinction between external performance, which is aimed at actors in contractual relationship with the organization, and the internal performance which concerns essentially the actors of the organization.

The following table states the differences:

Table 01: The differences between External performance and internal performance:

External Performance	**Internal Performance**
Mainly focused on shareholders and financial institutions.	It is focused towards managers.
Focuses on present or future result.	Focuses on the process of producing the result from the resources of the organisation
It generates major financial analysis	It is needed to provide necessary information on decision making
Requires producing and communicating financial information	Requires a unique vision of performance in order to coordinate actions of each towards the same goal

2.1 Forms of performance

There are several performance forms that include the following:

2.1.1 Customer performance:

Customer satisfaction ensures a certain sustainability of the industrial sector or business of the company. This satisfaction requires a significant mobilization of all of the company's resources over a fairly long period of time. Companies have well understood that to be competitive they must make consistent efforts to capture and retain market share. These efforts materialize by anticipating customer expectations and also by seeking to retain them.

2.1.2 Shareholder performance

Access to capital has become a strategic issue for the company due to several interdependent developments; in particular, one can quote the growth of the needs in capital, linked to technological developments and more recently, a strong comeback of shareholders and an increased role for institutional investors. In addition, the need of business expansion pushed them to continually seek capital in order to support their economic growth. According to the financial markets, the performance of the company is measured by the creation of wealth for the shareholder.

2.1.3 Personal performance

To innovate and better serve the customer, it is necessary for the company to motivate their employees in such a way that each employee feels involved and responsible for the future of the company. Since then, competition for a particular expertise has forced companies to effectively retain their human capital. Moreover, if this were able succeed in maintaining a good performance in human resources management; they will then have understood the relationship of trust between employee and company.

2.1.4 Partner performance

Nowadays, companies entrust more and more activities with high added value to partners. Its activities, such as design or transport, represent a significant strategic impact in the value chain of companies. The optimization of value chain becomes partly dependent on the efficiency of the supplier (partner) in question. Thus, the relationship between company and supplier is not limited to a simple agreement contractual but of a long-term strategic relationship. Therefore, strategic management is the search for a permanent exchange of information between the partners, which allows saving significant costs that make the difference compared to the competition. This relationship between the companies and the partner is a source of synergies within the same value chain.

2.1.5 The social performance

To be successful, today's business must have a strategic vision that is shared by all, employees and managers. In other words, it is not possible for the company to succeed by concentrating on the economic aspect only without taking into consideration the social aspect.

In addition, the globalization of information and the pressure of society environment have made the activity of companies more and more complex, because, in order to assess in their social environment several variables such as: the environment, the rights of the work, have become an integral part of business strategies. So, it's not enough to minimize costs without taking into account the value of the social risk incurred by the company.[14]

2.2 Actions to control and improve performance

Many actions to control and improve performance are as follow:

2.2.1 Performance control

Performance prediction and monitoring are part of a comprehensive approach to search for performance management:

- In terms of expressing the results, according to quantitative and qualitative criteria.
- In terms of how to obtain these results: it involves putting in place the means of forecasting, coordination and control such as all the actions day-to-day activities of the various players involved in achieving the objectives of the company; controlling performance then means achieving the objectives and means that we have given ourselves.
- In terms of reactivity in order to reduce the response time to any changing the environment. Anticipation, rapid information on performance contributes to this responsiveness.

2.2.2 Responsibility of actors

The complexity of some organizations forces management to decentralize decisions. The need for responsiveness in a highly competitive market requires taking the decision closer to the field. Forecasting and management control are then based on a growing number of actors. Then, managers delegate more and more decisions towards unit, service and project managers. These participating in the forecast’s choice of action programs, but, in return, report on their

[14] BOUBBAS Toufik, BOUBBAS Abdelhak "The analysis of the performance of the company", Thesis of master: management: University of Bejaia: 2014, p12. 13

performance. This empowerment promotes learning by the actors because the analysis of failures, when they are of internal origin, allows them not to be produced.

Decentralization, if it corresponds to an effective delegation of decisions, motivates those in charge and brings the places closer to the decisions of the actors, which increases their involvement. Without this decentralization, the research for performance control would take the form of authoritarian planning and control-verification, which is less motivating.

2.2.3 Actions to improve performance

To improve the performance of the company, it is necessary to act on three components: the organization of the company, the information system, and management control.

- **Organizational nature**

Anticipating and management control are based on centres of responsibility, organization division:

- Led by an operational manager who participates in the development of forecasts and reports results;
- Basics such as creation of budget, and also budget control by variances.

- **The quality of the information system**

It must be able:

- To allocate to the responsibility which caters the costs that has already incurred; a poor allocation of these costs leads to cross-subsidies which can induce erroneous decisions and a demobilization of the actors;
- To provide decision-makers with relevant data as well as the means of processing of this data;
- To perceive any new event likely to have an impact on the performance in order to react quickly.

- **Evolution of the role of a management control**

It stands out more for its ability to advise, analyse and synthesize information, both to operational staff and the hierarchy, and by monitoring actions led by the actors.

Section 03. General information on financial analysis

Financial analysis is the study of a company from a financial point of view, based on accounting documents and economic and financial information related to the company or its market.

3.1 History of financial analysis

During the eve of the 1929 crisis which was supposed to introduce a profound change in habits, the jobs of the banks essentially consisted in ensuring the movements of accounts and to grant occasional cash facilities. The problem was to ensure the financing of huge industries (coal, construction, mechanics, etc.). Operating rights were granted subject to strong guarantees intended to avoid confusion between the risk of the banker and that of the company, the guarantees in fact allowing the banker to ensure reimbursement of the fate of the debtor company. From guarantees were based on property forming part of the company's assets, but not directly affected by its operation or quite simply on the personal assets of the business owners. The heritage essentially constituted in the eyes of the people of the time.[15]

As a result, the risk of bank credit was then linked to the legal terms of the taking of guarantee. It was still necessary to verify that the property given as collateral had a value independent of the evolution of the company, and then assess this good as well as the risks related losses. The uncertainty as to the true value of the net assets in the event of liquidation, together with the difficulty of valuing the assets given as collateral and determining independence from the operation of the business, will show bankers that the simple solvency research was insufficient to rationally determine the decision to grant credit.

3.2 Some definitions of financial analysis

To understand more about this approach of financial analysis, we propose the following definitions:

[15] AHARONI, Y, The evolution and Management of state-owned Enterprise, Cambridge, Harper and Row Publisher, 1986, p.453

"Financial analysis is a set of concepts, methods and instruments that make it possible to formulate an assessment relating to the financial situation of a company, the risks which affect it, and the quality of its performance.

"All the knowledge necessary to understand the techniques to be implemented to study the activity, profitability and financing of the company"[16]

3.3 The role of financial analysis within the company

Financial analysis plays a dual role in the internal communication process and external to the company, firstly it constitutes a source of indicators developed from accounting information and established by the company; on the other hand, it allows recipients of the information to interpret it properly without difficulties.

- Indeed, the financial analysis essentially aims to:
- Improve the management of the company based on a precise diagnosis;
- Study competitors, customers or suppliers, in terms of its management and its solvency;
- Determine the present situation and anticipate the future situation by calculating the operations;
- That the decision-making must be confirmed in the current state of the company and tends to achieve goals within a given period;
- Have a control study in order to verify if the management of the company is satisfactory or not;
- Maintain a financial balance between the jobs and the resources of the company;
- Find new resources to ensure continued funding.

3.4 Objectives of the financial analysis

The objectives of the financial analysis are different depending on whether it is carried out by the company itself, through financial services, or by third parties such as bankers, credit organizations, and shareholder suppliers. We can differentiate the internal and external objectives of the financial analysis:

[16] SLOAN, A. My years With General Motors, Doubledy, New York 1963, P.18.

3.4.1 Internal objectives

- Measure the company's ability to create value;
- Identify the strengths and weaknesses of the company,
- Analyse the evolution of turnover, financial structure and cash flow;
- Measure the company's solvency and liquidity;
- Determine needs in terms of short-term credit;
- Assess the risk for the company involved in setting up these loans;
- Evaluate the financial independence of the company, and its debt capacity in the perspective of future needs;
- Measure the profitability of the company.

3.4.2 External objectives

- lead a well-reasoned decision consistent with the commercial strategy of the company;
- Detailed understanding of the economics of the company, i.e., its market positioning.
- From the internal and external objectives, we can say that:
- The general objective of financial analysis is to study the equilibrium conditions financial position and to provide an overview of the company's situation and solvency.

3.5 Sources of information for financial analysis

To give a better opinion on the situation and the performance of a company, the analysis based on these following various sources of information;

3.5.1 Sources of non-financial information

A lot of information is available at the Registry of the Commercial Court to distinguish the following:

- Extract on which one will find in particular the date of creation and the legal form of the company, the identity of the leaders, its goodwill...
- Details of guarantees given by the company, details of leasing contracts real estate.
- The presentation brochures of the company and its competitors give many indications on the activity of the company, its strategy and its situation.

3.5.2 Sources of financial information

These sources include the balance sheet, income statement, cash flow statement and statement of changes in equity, they are published at least annually, i.e., each closing of the financial year, to understand these documents it will be necessary to study the appendix which includes information on any transactions made by the company.

The balance sheet, the income statement and the appendix are the mandatory documents and the raw material for analysing the activity and performance of a company, called also the "financial statements"[17]

According to Jonathan BERK the financial statements can be defined as follows:

The financial statements are accounting documents prepared at regular intervals by all companies, for these documents to be useful to stakeholders, they must be: understandable, reliable, relevant and comparable.[18]

- **The balance sheet**

A balance sheet is a financial statement that shows a company's financial situation at a specific point in time. It discloses a company's assets, liabilities, and shareholder equity, which is the worth of a company's assets after deducting its obligations.

A balance sheet is created in accordance with the accounting equation, which stipulates that assets are equal liabilities plus equity. As a result, total assets must always equal total liabilities and equity.

- **Non-current assets**

Non-current assets correspond to all the goods and receivables appearing in the company's assets and intended to be used in a sustainable manner. This definition highlights the economic function fulfilled by the elements of fixed assets by their differentiation by nature: tangible, intangible and financial fixed assets.

- **Tangible fixed assets:** These are durable physical assets owned by the company such as land, buildings, technical installations, etc.

[17] Namazov, Vugar. "Structured financing: linkage between commodities and financial markets." In Systems Analysis in Economics - 2020. Moscow, "Science" Publishing House, 2021.
[1818] Thibierge, Christophe, and Andrew Beresford. "Financial Analysis." In A Practical Guide to Corporate Finance, 8–46. London: Palgrave Macmillan UK, 2015.

- **Intangible fixed assets:** These are rights obtained in exchange for expenses, but also for charges activated in accounting. For example concessions, patents, licenses and trademarks goodwill.
- **Financial fixed assets:** are made up of receivables and securities held a priori with a view to the long term or as part of an overall company development strategy. A distinction is made between: Shareholdings, fixed securities from portfolio activity, other fixed securities, loans and other financial fixed assets.[19]

➢ **Current assets (CA):**

It corresponds to all the assets within the current fiscal year or operating cycle.

- **Inventory**

They include all goods acquired or created by the company and which are intended to be sold or supplied, or to be consumed for manufacturing or business needs. Such as:

- **Raw materials and supplies:** these are objects and substances intended to be incorporated into products or to be consumed within the framework of the production processes implemented by the company. These items include non-recoverable commercial packaging that is delivered to customers at the same time as its contents;
- **Work in progress:** concerns goods in the process of production such as services in the process of being developed. The following case can correspond to work in progress (for example constructions not completed in the construction or public works sector) or to studies in progress (file or plan in progress in an architect's office);
- **Intermediate or finished products:** are those which have reached a manufacturing stage and are available in the event of a later phase of the production cycle. The finished products are ready to be sold or delivered;
- **Goods:** include items of stock that the company has purchased and which can be resold as is, independently of any transformation process.

[19] HOARAU Christian, "Financial analysis and evaluation of companies and groups", Ed Vuibert, Paris 2008, P 55-56.

- **Receivables and advances**

They include all the rights acquired by the company as a result of its relations with third parties. Such as:

- **Advances and deposits paid on orders for other goods and services:** payments made by the company to suppliers of other goods and services;
- **Trade receivables and related accounts:** receivables related to the sale of goods or services and trade bills receivable;
- **Other debtors and other miscellaneous receivables:** receivables from disposals of marketable securities or fixed assets, tax receivables.

- **The Treasury**

Beyond the accounting wording, the heading of investment securities and the other cash items cover the company's liquidities. It is indeed, from a financial point of view, cash available or nearly available in the form of treasury assets held. It includes the following accounts:

- **Securities investment:** securities acquired by the company to make profitable the available cash, with a view to making a gain in the short term;
- **Availabilities**: deposits of funds in bank accounts, postal bank, cash in hand.

- **Liabilities**

The liabilities include all the funds used by the company; it is made up of all the sources of financing that allow the company to finance its assets and its activity. Their classifications are made by degree of eligibility.[20]

- **Equity**

Equity capital is permanent resources made available to the company and which are made up of initial contributions and a fraction of the monetary surplus (Capital, Reserves, Revaluation

[20] HONORE.L, "Financial management", NATHAN edition, Paris, 2001, page 20.

difference, Retained earnings, Investment subsidies, Earnings from financial year, Provisions for liabilities and charges, etc.).

- **Share capital:** This represents the funds contributed by the owners to the creation of the company, to which are added any capital increases. The capital is a non-eligible liability that is to say non-refundable.
- **Reserves:** These are profits permanently allocated to the company until the contrary decision of the competent bodies. These profits, which are reserves, constitute an important element in the assets of a company and are allocated to various items. A distinction is made between legal reservations and optional reservations.

Note: the legal reserve is calculated by a fraction of 5% of the net income, it is compulsory to constitute and it stops when it reaches 10% of the share capital. Its interest is to use it in the event of a need for financing and to avoid external financing.

- **The revaluation difference:** This is the counterpart of the capital gains made on fixed assets within the framework of a balance sheet revaluation operation.
- **Retained earnings:** This represents the cumulative profits from previous years that have not been distributed and not allocated to reserves or the cumulative previous losses that have not been absorbed by the profits of previous year (N-1).
- **Investment subsidy:** It corresponds to a financial aid paid by the public authorities (State or local authorities) to finance the investments or fixed assets of a company.
- **Annual Net Income:** it corresponds to the difference between income and expenses for the financial year. It gives the balance sheet of the company a balance, that is to say, it ensures that the total assets are equal to the total liabilities. It can be either positive or negative.

It is calculated as follows:

Annual Net Income = Assets – Liabilities

Let's keep in mind that whatever the sign of the result (positive or negative), it is always recorded as a liability on the balance sheet. This is explained by the fact that the result is a debt of the company towards its partners.

- **Provisions for risks and charges: Provisions for risks and charges make it possible to anticipate, in accounting terms, a proven risk whose consequences will take effect at the end of the closing of the accounting year. They appear on the balance sheet as a debt and therefore increase the liability.**

- **Non-current liabilities**

The overall heading of debts must be structured in such a way as to link these different elements to the major functional cycles that run through the company. On the liabilities side, it is a question of distinguishing between that which relates to the operating cycle, that of the non-operating cycle and that which is part of the specifically financial logic of sustainable financing. We distinguish:

- **Financial debts: Financial debts are those that were originally concluded with lenders with a long-term perspective. The company's objective is to have sustainable financing. The headings concerned by financial debts are: convertible bond loans and other bond loans, loans and debts with credit institutions, miscellaneous financial loans and debts.**
- **Miscellaneous debts (non-operating): The category of miscellaneous debts appears as a residual item of debts which fall neither under the logic of financial indebtedness nor that of operations (debts on fixed assets, tax debts (tax on profits), other debts).**
- **Current liabilities (CL)**

However, this is in from of cash item which has already been distinguished from assets. The concerned items include those which testify to the use by the company of a financing instrument in logic of adjustment of the net cash balance (discounted bills not due, current bank overdrafts and bank credit balances, accrued interest due on debts if known).

- **Operating payables: operating payables include:**

- Advances and down payments received on orders in progress;
- Supplier debts and related accounts;
- Tax and social operating debts.

- **3.5.2.2 Representation of the Balance Sheet:**

The structure of the balance sheet is composed of two parts; we have the assets and the liabilities which will be represented in two different tables.

Table 02: Presentation of balance sheet's Assets:

ASSETS	**N**			**N-1**
	GROSS	ARMOTIZATION AND DEPRECIATION	NET	NET
NON-CURRENT ASSETS **Intangible assets** Research and development costs Commercial property Advances and deposits **Fixed assets** Ground Buildings Technical installations, equipment and industrial tools Tangible asset in progress Advances and deposits **Financial fixed assets** Holdings Receivables related to investments Other fixed securities Loan and other non-current financial assets Deferred tax assets				
TOTAL NON-CURRENT ASSETS				
CURRENT ASSETS Inventories and work in progress Receivables and similar uses Customer Other debtors Taxes and similar Other receivables and similar uses **AVAILABLITY** Investment and other current financing Treasury				
TOTAL CURRENT ASSETS				
GENERAL TOTAL OF ASSETS				

Source: compiled by us from EPB's documents

Table 03: Presentation of balance sheet's liabilities

Liabilities	NOTE	N	N-1
EQUITY Issued capital Uncalled capital Premium and reserves-consolidated (1) Revaluation differences Equivalence differences (1) Net income (1) Other equity - retained earnings Share of the consolidating company (1) Share of minority interests (1)			
TOTAL 1			
NON-CURRENT LIABILITIES Borrowings and financial debts Taxes (deferred and provisioned) Other non-current debt provision and income Recorded in advance			
TOTAL NON-CURRENT LIABILITIES 2			
CURRENT LIABILITIES Accounts payable Taxes Other debts Passive cash			
TOTAL CURRENT LIABILITIES 3			
GENERAL TOTAL OF LIABILITIES			

Source: financial accounting system (scf) 2010

(1) To be used only for the presentation of consolidated financial statements

- **The Income Statement**

"The income statement represents a summary of the company's activity during the financial year (between two balance sheets). It is structured in three parts which include items related to operations, items related to financial aspects and those resulting from phenomena that do not correspond to the normal activity of the company (exceptional items). Just as in the balance sheet, these elements are dissociated into two groups, those having a character of resources, which are called products and those having a character of uses, which are called expenses”. [21]

The income statement is an accounting document summarizing the activity of the company's activity which makes it possible to know the expenses and products during a financial year, the difference between these allows the company to generate a result (profit or loss).

As a result, the income statement is established from the balances of the management accounts which are:

- Class 06: expense accounts;
- Class 07: product accounts;

❖ **The structure of the income statement:**

The income statement, as its name suggests, has the main purpose of showing, from the products and expenses of the financial year to lead to the formation of the result.

➢ **The Expenses:**

Expenses are decreases in economic benefits during the year in the form of outflows or decreases in assets, or incurrence of liabilities which result in a decrease in equity, other than through distributions to dividends to shareholders.

Expenses are divided into three main headings:

➢ **Operating expenses:**

They consist of expenses or costs relating to the normal and current operation of the financial year. They include in particular consumption of goods, raw materials and supplies and costs. The fees represent data paid or to be paid to third parties in return for services provided or services rendered by them.

➢ **Exceptional expenses**:

Represent all expenses that are not part of the company's operating and financial operations. We distinguish:

- Exceptional charges on management transactions (penalties on market and commercial transactions, tax and criminal fines, receivables that have become irrecoverable during the financial year);
- Exceptional charges on capital transactions (disposals of fixed assets),

[21] TAZDAIT Ali, “Mastery of the financial accounting system”, ACG edition, 1st edition, Algiers, 2009, P 81.

- Exceptional allowances for depreciation and provisions (faster depreciation, recording of the risks of reversible depreciation), employee participation in the company's results, income tax.

- **Financial charges:**

These are charges that the company bears to finance its operation. They are three types:

- Interest and similar charges: these charges depend on the company's financial policy. They are determined by the way in which the company organizes the financing of its structure and its activity;
- Allocations to depreciation, redemption premiums, bonds, allocations to provisions for depreciation of securities and financial charges;
- Other financial charges: negative differences in charges and net charges on disposals of marketable securities

Table 04: presentation of the income statement

Elements	**Note**	**N**	**N-1**
Turnover Change in finished and work-in-progress inventory Immobilised production Operating grants			
1- Annual Production			
Consumed purchases External services and other consumption			
2- Consumption of the exercise			
3- Operating added value (1-2)			
Personnel costs Taxes other and payments			
4- Gross operating surplus			
Other operating income Other operating expenses Allocations to depreciation and provisions Reversal of impairment losses and provisions			
5- Operating Result			
Financial income Financial expenses			
6- Financial Result			
7- Earnings before tax (5+6)			
Tax payable on ordinary results Deferred tax (variations) on ordinary income			
Total revenue from ordinary activities			
Total expenses from ordinary activities			
8- Net income from ordinary activities			
Extraordinary item (income) Extraordinary item (expenses)			
9- Extraordinary Income			
10- Annual Net Income			
Share in the net results of associates			
11- Net result of the consolidated group			
Of which minority share Group share			

Source: financial accounting system (scf) 2010

❖ Results

It is the payment that the company receives from its customer after having sold a commodity. In other words, they are receipts, income or gains made by the company over a period of time.

i. Operating Results

This is the set of sales listed during the financial year in question.

We distinguish:

- Sales of goods;
- The production sold,
- Turnover,
- Operating subsidies (the aid that the State grants to companies to cover the purchase price and the high cost of income).

ii. Financial Results

These are income from the investment of the company's cash in the financial market. We can cite:

- Financial income from participation (dividends, interest linked to participation claims),
- Income from other securities and receivables from fixed assets,
- Other interest and similar income is generally income collected from the company's cash assets,
- Reversal of provisions and charge transfer (equal to the reduction in the risk of depreciation), positive exchange rate differences (exchange gains made by the company),
- Net income on sale of securities (capital gains realized on sale of investment securities).

iii. The Exceptional Results

These are products not included in the part of financial operations, operating the business, we have:

- Exceptional income on management operations (customer penalties, donations received, tax relief);
- Exceptional income on capital transactions (Proceeds from the sale of assets);
- Shares of investment subsidies;

- Reversals of provisions and transfers of charges.

3.6 Financial Equilibrium Indicators

The financial balance of a company is a function of the consistency equilibrium that exists between the resources and its use. This consistency determines its solvency and liquidity.

3.6.1 Net working capital (NWC)

It is the difference between a business's short-term assets and its short-term debts and liabilities, and in other words it is the surplus of long-term resources intended to cover short-term uses.

Table 05: NWC in the balance sheet format:

<table>
<tr><td>Net fixed assets</td><td rowspan="2">Permanent Capitals</td></tr>
<tr><td rowspan="2">Current assets</td></tr>
<tr><td>Short-term debts</td></tr>
</table>

Source: Cohen. E "Financial Analysis" 6th Edition, Economica, page 250

The calculation of Net working capital:

- **NWC =*Current assets – Short-term debts***

  Or
- **NWC= *Permanent Capital- Fixed assets***

- **The interpretation of NWC**

If the NWC is greater than zero: in this case the fixed assets have been fully financed by permanent capital plus a surplus.

- Surplus: this is the margin of safety in case of particularly short-term need.
- If the NWC less than zero: fixed assets have not been entirely financed by the permanent capital.
- If the NWC equal to zero: we can conclude that the financial equilibrium has been reached. Short- and long-term liabilities are equal to long-term and short-term assets.

3.6.2 The working capital requirement (WCR)

It is the amount of money required to cover all the operations of the company (purchase, sale, manufacture, etc.)

According to Christophe THIBIBIERGE "WCR represents the difference between operating assets (stocks and trade receivables) and operating debts. It is then expressed by the difference between the needs arising from the operating cycle (financing of stocks and receivables) and operating resources (short-term debts).[22]

- **WCR=** ***Inventory + Accounts Receivables – Accounts Payable*.**

Or

- **WCR= (*Current assets - Cash)- (Current liabilities - Bank overdraft)***

3.6.3 Net Cash :

Company's cash represents the available funds enabling it to finance their short-term expenses.

Net Cash = ***Available values – Financial debt***

Net Cash = ***Net Working Capital (NWC) - Working Capital Requirement (WCR)***

- **The interpretation of cash and equivalents**
- **Net Cash** > **Zero:**

[22] THIBIERGE Christophe, "Financial analysis", VUIBERT edition. Paris, 2005, P 9. 40.

In this case the company is in good financial state since the company has the liquidity which enables it to meet its financial debt.

- **Net Cash <Zero**:

Having a negative in cash and cash equivalents, it shows that the company is depending on short term financial resources. This jeopardizes its financial autonomy.

- **Net Cash = Zero:**

This situation reflects short term financial autonomy and this independence is temporary.

3.6.4 The analysis of the company's activity

- **Intermediate management balances (IMB)**

The table of intermediate management balances includes seven successive balances obtained by difference between certain products and certain expenses.

The first two balances are intended for the analysis of the company's activity, and the other five are devoted to the analysis of the result.

- **The commercial margin (CM)**

The commercial margin concerns only the trading activity. it represents the resources which are generated by the company's commercial activity, and allows the development of its commercial policy to be assessed successfully.

CM= Turnover – Purchases

- **Value added (VA)**

The value-added measures the economic weight of the company and its level of growth. It determines the wealth created by the company.

VA= Annual production – Annual consumption.

The exercise of production measures better the activity of transformation of the company, despite the output of this activity (sales, storage, fixed assets) where,

- **Annual Production**

The production of the financial year better measures the activity of transformation of the company, whatever the fate of the products of this activity (sales, storage, fixed assets).

It consists in measuring the economic activity of a company; it is equal to the sum of the production sold, the production stored and the immobilized production.

It is calculated as follows:

Annual Production = Production sold + Production stored + Capitalized production.

- It represents the value of everything the company has produced during its financial year.
- The value added represents the wealth generated by the company.

- **Gross operating surplus (GOS)**

The gross operating surplus is a specific balance that represents the profit generated by the company after remuneration of the factor of production and taxes which are linked to production. It measures the economic performance of the company.

GOS = Value added – (Personnel expenses + Taxes other and payments).

It represents the finance generated by the operations of production and commercialisation.

- **Operating result**

It reflects the company's economic performance. This balance takes into account the amortization and depreciation policy of the company. It can be calculated regardless of the financial and tax policy of the company.

Operating result = GOS + Other Operating Income - Other Operating Expenses - Amortization and Operating provision + Recovery and transfer of operating expenses.

- **The earnings before tax (EBT)**

It is a measure of economic and financial profitability of the company. The earnings before tax reveals the company's earnings before taxes are deducted, is calculated by subtracting all expenses excluding taxes for revenue.

EBT = Operating Result + Financial Result

- **The Exceptional Result**

Exceptional result is the difference between exceptional income and expenses.

Exceptional result = Exceptional Iincome - Exceptional expenses.

- **Annual Net Resul (ANR)**

It is established by the difference between all income and expenses for the financial year. It is obtained by summing the current result before tax and the exceptional result while removing the total income tax and employee profit-sharing.

It is calculated as follows:

ANR= EBT + Exceptional result - Corporation tax – Defered Tax

3.6.5. Analysis by Ratios

The ratios in general are considered as indicators that the leaders use to conduct the financial analyzes of their companies, they are also used by the investors in particular within the framework of an evaluation.

Ratios are the reports that allow comparisons to be made between different masses or between different entities. They are most often expressed by a percentage or by a coefficient. The ratios apply to many areas[23]. They are particularly useful in the context of financial analysis to make comparisons between companies and to assess the performance of a company. The analysis by the method of the ratios makes it possible to know if the objective was reached by the financial means of the company. It is a method that allows managers to have a sure idea:

- The growth of their businesses (financial performance);
- Master the company and assess the importance of its capacities and qualities in order to exploit them;
- Assess the size of their weaknesses to know how to deal with them;
- Affirm that operations are profitable.

[23] Ginglinger. E. "financial management of the company", Edition Dalloz, Paris1991, P 13.

3.6.6 Types of Ratios

There are many types of ratios which include the following:

a) **Profitability Ratios:**

- **Return Asset Ratio**

The return on total assets ratio clarifies how a company's investments generate value, which makes a company's productivity of great importance**.**

Return on assets = (Net Result/ Total Assets) * 100

➢

- **Net Commercial Profitability Ratio**

It is a financial ratio that makes it possible to measure the profitability of a company according to its volume of business and to estimate the impact of a drop in the company's turnover on its net income. It is calculated as follows:

Net Commercial Profitability Ratio = (Operating Result / Turnover)*100

- **Economic Rrofitability Ratio**

Economic profitability therefore measures the efficiency of the means of production implemented in the context of its activity.

Economic profitability = [(Operating Result)/ Total Assetsl] * 100

- **Financial Profitability Ratio**

It measures the ability of capital invested by shareholders and partners (equity) to generate a certain level of profit.

- **Financial profitability = (Net result / Equity) * 100**

There is a connection between the financial profitability and the economic profitability, in case the economic profitability is higher than the cost of the indebtedness, a judicious recourse to the indebtedness could improve the financial profitability .

- **Leverage Ratio**

The leverage effect consists in proving that the mode of financing of the assets of a company has a direct impact on its financial profitability, it is useful for the company to know if it can borrow its equity a certain number of times, but to ensure that the sums borrowed and invested yield more than they cost.

b) Liquidity Ratios

The liquidity of a company explains the position of the company to meet its obligations through its ability to generate financial flows.

- **General Liquidity Ratio**

It is obtained by the ratio between current assets and short-tem debts. It measures the solvency of the most exigible debts of the company from the liquidation of its most available assets.

General liquidity Ratio = (Current assets / Short-term Debts) * 100

- **Reduced liquidity ratios**

The reduced liquidity ratio combines inventories whose liquidity is uncertain with liabilities due in the short term. This ratio determines the company's ability to repay its short-term debt without resorting to the sale of inventory.

Reduced liquidity ratio = (Current Assets excluding Inventory / Short-term Debts) * 100

- **Immediate liquidity ratio**

It only contains cash and current liabilities. It consists in translating, from the liquidities of the company, its capacity (of the company) to pay its short-term debts with the cash it has.

Immediate liquidity ratio = (Value Available / Short-term Debts) * 100

c) Financial Structure Ratios

They compare external financing to the company's own funds.

- **The permanent funding ratio:**

Permanent funding ratio: (Permanent capital / fixed assets)* 100

- **Financial independence ratio**

It is the degree of independence towards the various suppliers of the company. It must exceed 50%

Financial independence = (Equity / Permanent Capital) * 100

- **Indebtness Ratio**

It measures the level of indebtness of a company in relation to its equity, the higher the ratio, the more indebted the company.

Indebtness Ratio= (Total debts / Total assets) * 100

- **Financial Autonomy Ratio**

It evaluates the degree of importance of internal financing in relation to total financing, it is expressed as a percentage and must be at least 20% in practice.

Financial Autonomy Ratio = (Equity / Total liabilities) * 100

- **The General Solvency Ratio**

This ratio measures the company's ability to pay all of its debts using all of its assets. It should naturally be greater than 100%.

The General Solvency Ratio = (Total Assets / Total Debts) * 100

3.6.7 Self-financing capacity (SFC)

The self-financing capacity of a company is a key indicator for assessing its performances. Self-financing capacity means the surplus cash from a company's business, which allows it to finance its growth. But this cash surplus can also be used for other purposes, and its calculation serves as a measurement tool in several important ways. [24]

The self-financing capacity represents the main sustainable resources of the company, or even a monetary surplus which it uses to finance by itself, investments, debts and dividends. It constitutes a flow of funds.

Their objectives allowing the company to finance by its own means:

- Remuneration of partners;
- Renewal and acquisition of new investments;
- The increase in its financial safety margin;
- Coverage of losses, risks and repayment of loans.

Self-financing capacity measures the development capacity of the company, its degree of financial independence, and therefore its debt potential.

- **Methods of calculating Self-financing capacity**

Self-financing capacity can be calculated using two different methods:

- **The subtraction method**

Self-financing capacity is calculated from the gross operating surplus to which we add the cashable proceeds (except proceeds from asset disposals), then from which we subtract all the cashable expenses.

It is formulated as follows:

SFC = *GOS + Other operating revenues – Other operating –Financial expenses +Financial Income –Revenue Tax*

In this scenario, only "Expenses with exploitation," "Expenses with indemnities, donations, and assets ceded," and "Expenditure on refinancing interest recorded by entities the object of which is leasing" are considered for the same fair play considerations considered in determining the GOS indicator; the other elements regarding expenses with external services

[24] Kuratko, Donald F., and Jeffrey S. Hornsby. "Financial Analysis." In New Venture Management, 195–215. Third edition. | New York: Routledge, 2021.: Routledge, 2020.

and taxes, payments, and assimilated payments are found in the structure of the Value-Added indicator.

According to this computation, GOS is the most important component of the SFC at the "exploitation" level. SFC therefore emerges as a kind of "self-financing capacity" independent of foreign financing policy (which intervenes at the financial level) and unusual conditions (at the extraordinary level).

- **The addition method**

Its formula:

SFC = *Net result of the exercise + Value adjustments on fixed assets, current assets and provisions on provisions*

Taking into account the content of the profit and loss account as specified in the Accounting Regulations on individual annual financial statements and consolidated annual financial statements, as well as the method for determining the value adjustments for fixed assets, working assets, and provisions. If only value changes in operational activity are used when calculating the EBE, value adjustments for financial assets and financial investments kept as current assets, which are included in financial costs, are also considered when calculating the CAF.

In essence, self-financing capacity is an indicator that expresses the enterprise's financial independence, reflecting a potential flow of availability that is dependent, on the one hand, on the enterprise's profitability and, on the other hand, on the enterprise's investment policy and fixed asset depreciation methods

Conclusion

This chapter has enabled us to define and understand all the aspects of business performance. Company performance is considered the realization of the couple effectiveness and efficiency, indeed, to be successful is to be efficient and effective (performance = efficiency + effectiveness). But after understanding the concept of performance, monitoring and evaluation are necessary because the new world economic order increasingly obliges companies to do “more” and with “less”.

CHAPTER II. PERFORMANCE INDICATORS

"Performance" refers to the ability to accomplish predetermined goals in terms of process efficiency, quality of service, or managerial effectiveness. The performance approach is a management method whose purpose is to increase the effectiveness of the management organization in accomplishing results within the specified limits.

In fact, the organization has created a number of performance indicators, allowing management controllers to monitor business activity and take remedial action. They enable you to evaluate a company's financial situation, comprehend its progression from year to year, and compare it to other organizations in the same industry.

Section 01: Indicators of performance evaluation

Indicators of performance evaluation are critical for assessing and evaluating an organization's operational effectiveness and efficiency. Folan and Browne's 2005 analysis of performance measurement recognized four categories of performance measurement: recommendations, frameworks, systems, and inter-organizational performance measurement.[25]

a. An indicator

An indication is a quantifiable value or statistic that offers information about a certain phenomenon or circumstance. Indicators are used to measure and evaluate a system's, organization's, or process's performance or progress. Indicators are used to convey information on many elements of a situation or occurrence and can be quantitative or qualitative.

Indicators can be used to track progress toward objectives, identify areas for improvement, and provide information for decision-making. They are a crucial tool for tracking and assessing the efficacy of policies, initiatives, and interventions.

b. Performance indicator

A performance indicator, often known as a key performance indicator (KPI), is a measurable number or metric that aids businesses in tracking and evaluating progress toward certain business objectives or goals.[26]

[25] ScienceDirect. (2005). A review of performance measurement: Towards performance management. https://www.sciencedirect.com/science/article/abs/pii/S0166361505000412

[26] Performance Management. (2012). Key Performance Indicators (KPI) | Examples, Guide And Process Explained. https://www.applicationperformancemanagement.org/performance-testing/key-performance-indicators/

Moreso, Performance indicators are an important tool for helping businesses assess their progress and identify areas for development, allowing them to make data-driven decisions and achieve their goals more effectively.

c. Key Performance Indicators (KPIs) or 10key Indicators

Key Performance Indicators (KPIs) are the subset of performance indicators most critical to your business at the highest level of your organization. KPIs are used to help you measure your progress toward achieving your strategic goals.

1.1 Invention of a financial performance indicator (FPI)

An indicator is information, or a collection of information, that is precise, helpful, and relevant to the management and that contributes to the assessment of a situation. It can be stated in a variety of formats and units.[27]

1.1.1 Functions of FPIs and steps for inventing the FPIs

The function of financial performance indicators is to provide insight into a business's or organization's financial health and performance;

- They aid in tracking progress toward financial goals and objectives, identifying areas for improvement, and informing strategic decision-making. Some of the key functions of financial performance indicators include:
- Monitoring financial performance: by tracking key metrics such as revenue growth, profitability, and liquidity, they can gain insight into the financial health of the organization and identify trends or areas for improvement.
- Assessing business efficiency: for example, assess efficiency of business operations through metrics such as inventory turnover or account payable turnover can provide insight into how efficiently a business is managing its resources.
- Comparing performance to industry benchmarks: to assess how well a business is performing relative to its peers.

[27] Oboloo. (n.d.). Understanding Financial Performance Indicators: A Beginner's Guide. https://oboloo.com/blog/understanding-financial-performance-indicators-a-beginners-guide/

- Supporting strategic decision-making: managers, for example, can make educated decisions about where to deploy resources and invest for growth by examining the profitability of various products or services.
- Communicating with Stakeholders: FPIs can be used to inform stakeholders such as investors, lenders, and regulators about financial performance.[28]

The indicators' domains of examination are numerous, since all of them can be measured according to user needs by factors pertaining to all action variables: yield, time, quality, flow, productivity, margin rate, stocks, security, services, and complexity.[29]([30])

1.1.2 The steps for creating a financial performance indicator

These steps are generally as follows:

- Define the goal: determine the exact business goal that the performance indicator is designed to monitor. This goal should be in line with the organization's broader strategy or mission.
- Select a metric: determine the metric that will be used to track progress toward the goal. This statistic should be relevant, quantifiable, and directly related to the goal.
- Create a baseline: create a baseline measurement for the chosen metric to use as a starting point for tracking progress. This baseline should be based on historical data or industry benchmarks.
- Set explicit targets or goals for the chosen statistic, depending on what is achievable and connected with the broader business goal.
- Track and monitor progress toward the stated targets on a regular basis, using the chosen metric as a key performance indicator.
- Analyze outcomes: examine the performance indicator results to detect trends, patterns, and opportunities for improvement. Use this analysis to guide decision-making and alter methods as needed.
- Communicate the results: results must be communicated to all key stakeholders, including management, employees, and investors. This message should include both

[28] In S. J. Kovner & J. R. Knickman (Eds.), Financial Performance Indicators (FPIs). (2007). Encyclopedia of Health Care Management. Sage Publications.
[29] ResearchGate. (n.d.). Financial Performance Indicators. https://www.researchgate.net/figure/Financial-Performance-Indicators_tbl1_340644715
[30] Journal of Contemporary Research in Business. (2015). Impact of financial performance indicators (FPIs) on profitability. https://www.journalcra.com/article/impact-financial-performance-indicators-fpis-profitability

quantitative and qualitative data to provide a complete picture of progress toward the goal.

Creating a financial performance indicator, in general, involves diligent planning, analysis, and communication, as well as a deep understanding of the specific company purpose and related metrics. By following these procedures, organizations can design effective performance indicators that enhance overall business success.[31]

1.2 Classification of performance indicators

The majority of KPIs are classified into four types, each with its own set of attributes, time range, and users. These four categories are strategic, operational, leading or lagging and functional KPIs.

1.2.1 Strategic and operational KPIs

Strategic KPIs are often at the highest level. These KPIs may show how a company is performing, but they don't provide much information beyond a high-level picture. Executives are the most likely to employ strategic KPIs, which include return on investment, profit margin, and total business revenue.

While operational KPIs have a much shorter time horizon. These KPIs assess how a company performs month after month (or even day after day) by analyzing multiple processes, segments, or geographical locations. Management usually uses operational KPIs to evaluate questions raised by reviewing strategic KPIs. If an executive notices that overall revenue is declining, they may investigate whether specific product lines are failing.[32]

1.2.2 Leading/lagging and functional KPIs.

Leading and lagging KPIs identify the nature of the data being studied and whether it is indicating something that will happen in the future or something that has already happened. Consider two separate key performance indicators (KPIs): the amount of overtime hours worked and the profit margin for a flagship product. If the organization begins to observe lower production quality, the number of extra hours worked may be a leading KPI. Profit margins, on the other hand, are a byproduct of operations and are seen as a lagging indicator.

[31] Kaplan. (2012). Financial performance indicators. https://kfknowledgebank.kaplan.co.uk/management-accounting/performance-management/financial-performance-indicators
[32] Marr. B (n.d.). What Is The Difference Between Strategic And Operational KPIs? https://bernardmarr.com/what-is-the-difference-between-strategic-and-operational-kpis/

While functional KPIs focus on certain departments or functions inside an organization. For example, the finance department may keep track of how many new suppliers they register in their accounting information system each month, but the marketing department may track how many hits each email distribution gets. These KPIs can be strategic or operational in nature, but they are most useful to a certain group of users.[33]

1.3 Performance indicators

Financial performance indicators are ratios obtained from two magnitudes that are commonly determined between two functional masses of the balance sheet. Ratios are used to assess profitability, cost structure, productivity, solvency, liquidity, and financial balance, among other things.

They allow you to assess a company's financial situation, compare its evolution from one year to the next, and compare it to other companies in the same industry. There are four types of financial ratios used to assess the performance of a business which are liquidity ratios, activity ratios (also called efficiency ratios), profitability ratios and leverage ratios.

1.3.1 Profitability ratios

These types of KPIs measure how well a company is performing in generating sales while keeping expenses low. Profitability is a metric that gauges a company's capacity to reap advantages from the resources it has put in place. Profitability refers to a company's capacity to improve the value of its capital invested or to achieve a specific level of result or income for a particular number of resources spent in the firm.

The company's profitability reflects an evaluation of the performance of resources invested by capital providers. As a result, financial analysts like it as an evaluation tool. Profitability is classified into three types: return on capital employed (ROCE), return on equity (ROE), and commercial profitability.[34]

[33] ASCM. (2018). How to Spot Leading and Lagging Key-Performance Indicators. https://www.ascm.org/ascm-insights/how-to-spot-leading-and-lagging-key-performance-indicators/
[34] Investopedia. (2023). Profitability Ratios: What They Are, Common Types, and How Businesses Use Them. https://www.investopedia.com/terms/p/profitabilityratios.asp

- **A) Return ratios**

Return ratios provide information that can be used to evaluate how well a company generates returns and creates wealth for its shareholders. These profitability ratios compare investments in assets or equity to net income. Those measurements can indicate a company's capability to manage these investments.

- **i. Return On Capital Employed**

The 'primary ratio' is a financial ratio that is used to gauge a company's profitability and the efficiency with which it utilizes its resources. Simply put, it assesses a company's ability to generate profits from capital.

Its formula is as follows: : **ROCE** = $\frac{\textbf{EBT}}{\textbf{Capital Employed}} * \mathbf{100}$ where,

- **EBIT=** ***Revenue – COGS (Cost of goods sold) – Operating expenses and***
- **Capital employed =** ***Equity + Non-current Liabilities***

The greater your ROCE, the better. This is due to the fact that a higher ROCE suggests that a greater portion of your company's wealth may be returned to stakeholders as profit. Although a "good ROCE" varies depending on your company's size, in general, the ROCE should be at least double the current interest rates.

- **ii. Return On Equity**

Return on equity (ROE) is a financial performance metric that is determined by dividing net income by shareholders' equity. ROE is defined as the return on net assets since shareholders' equity equals a company's assets less its debt.

ROE is regarded as a measure of a company's profitability and efficiency in producing profits. The greater the ROE, the more effective management is in generating revenue and growth from equity financing.

In addition, in its derivation, it is a two-part ratio since it combines the income statement and the balance sheet, where net income or profit is compared to shareholders' equity. The total return on equity capital measures the firm's capacity to transform equity investments into profits. To put it another way, it evaluates the profits earned from shareholders' equity for each dollar invested.

It is formulated as follows: **ROE**= $\frac{\textbf{Net Income}}{\textbf{Average Shareholders' Equity}} * \mathbf{100}$ and,

A return of 15-20% is considered satisfactory. ROE, like other financial statistics, is utilized while appraising stocks. It is crucial to remember, however, that there are many more elements to consider when appraising a company than just return on equity.

NOTE THAT: Warren Buffett, the famed investor, has a solution to the problem. He believes that both the ROE and the ROCE should be greater than 20%. The closer they are to one another, the better, and any significant differences between ROE and ROCE are undesirable.

- **iii. Return on Assets (ROA)**

Profitability is assessed relative to costs and expenses. It's analyzed in comparison to assets to see how effective a company is at deploying assets to generate sales and profits. The use of the term "return" in the ROA measure customarily refers to net profit or net income—the value of earnings from sales after all costs, expenses, and taxes. ROA is net income divided by total assets.

The more assets that a company has amassed, the greater the sales and potential profits the company may generate. As economies of scale help lower costs and improve margins, returns may grow at a faster rate than assets, ultimately increasing ROA.

It is formulated as follows, **ROA**= $\frac{\textbf{Earnings after Tax}}{\textbf{\textit{Total Assets}}}*100$

All other factors being equal, a greater ratio suggests better financial success than a lower one.

- **B. Margin ratios**

Different profit margins are used to assess a company's profitability at various cost levels. These profit margins comprise gross margin, operating margin, pretax margin, and net profit margin. Profit margins widen when costs are low and contract as more expenditures (e.g., cost of goods sold (COGS), operational expenses, and taxes) are included.

- **Gross Margin**

The gross margin indicates how much profit remains after deducting the direct cost of sales (COGS) but before deducting less direct expenditures such as sales and marketing. A firm with a high added value, such as a service company, would often have a high gross margin, whereas a trading business adds less value to the product and hence has a low gross margin.

Formula of GM, **Gross margin**= $\frac{\textbf{Gross Profit}}{\textbf{sales}} * \mathbf{100}$

- **Net margin**

Net margin expresses a company's net profits as a proportion of its sales. The net margin is calculated as follows:

Net margin= $\frac{\textbf{Net profit}}{\textbf{Sales}}$*100

- **Operating margin**

The operational margin is the proportion of revenue that remains after deducting COGS and typical operating expenditures (e.g., sales and marketing, general, and administrative expenses). It evaluates operational profit in relation to revenue.

The operating margin can reveal how well a corporation conducts its operations. This can offer insight into how successfully management keeps expenses low and profits high.

It is calculated as follows, **Operating margin**= $\frac{\textbf{Operating Earnings}}{\textbf{Revenue}}$ *100

1.3.2 Liquidity ratios

Liquidity ratios are a type of financial indicator that assesses a debtor's capacity to repay existing debt commitments without borrowing external cash. Liquidity ratios use variables such as the current ratio, quick ratio, and operational cash flow ratio to assess a company's capacity to satisfy debt obligations and margin of safety.[35]

- **Current Ratio**

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its total current assets such as cash, accounts receivable, and inventories. The higher the ratio, the better the company's liquidity position:

[35] Investopedia. (2022). Understanding Liquidity Ratios: Types and Their Importance. https://www.investopedia.com/terms/l/liquidityratios.asp

Current ratio= $\frac{\boldsymbol{Current\ Assets}}{\boldsymbol{Current\ liabilities}}$

We note that, in many circumstances, a firm with a current ratio of less than 1.00 has the cash on hand to satisfy its short-term commitments if they were all due at the same time, whereas a current ratio larger than 1.00 suggests that the company has the financial resources to remain solvent in the near term.

However, because the current ratio is only a snapshot at any given time, it is rarely an accurate representation of a company's short-term liquidity or long-term solvency.

- **Quick Ratio**

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets and therefore excludes inventories from its current assets. It is also known as the acid-test ratio:

- **Quick ratio**= $\frac{\boldsymbol{C+MS+AR}}{\boldsymbol{CL}}$*100

where:

***C*=** cash & cash equivalents

***MS*=** marketable securities

***AR*=** accounts receivable

***CL*=** current liabilities

It is also calculated as follows:

- **Acid test ratio=** $\frac{\textbf{Current assets} - \textbf{inventory} - \textbf{prepaid expenses}}{\boldsymbol{CL}} * \mathbf{100}$

Quick liquidity ratios are usually expressed as a percentage. The higher the percentage, the more liquid and capable of paying off any money owed the company is. A company with a low quick liquidity ratio that finds itself with a sudden increase in liabilities may have to sell off long-term assets or borrow money.

- **Operational Cash-flow Ratio**

The operating cash flow ratio is a measure of how readily current liabilities are covered by the cash flows generated from a company's operations. This ratio can help gauge a company's liquidity in the short term and its formula is as follows:

Operational Cash-flow Ratio= $\frac{\textbf{Operational Cash flow}}{\boldsymbol{CL}}$

A higher ratio means that a company has generated more cash in a period than what was immediately needed to pay off current liabilities.

1.3.3 Leverage ratios

Leverage ratios measure the overall debt level of a business, as well as a business's ability to repay new and existing loans. These are ratios to use when you want to know how extensively you're using debt to support your business.[36]

- **Debt-to-equity ratio**

The debt-to-equity ratio compares how much debt you use to finance your firm to how much equity you have.

High ratios suggest that the firm is excessively reliant on debt. Lower ratios indicate a healthy dependence on debt, but they might also indicate an excessively cautious attitude toward investment.

Bankers use the debt-to-equity ratio to determine how your assets are financed, whether through creditors or your own investments, for example. In general, a smaller ratio is a favorable predictor of your capacity to repay your obligations or take on more debt to support new prospects.

Debt-to-equity ratio= $\frac{\boldsymbol{TOTAL\ LIABILITIES}}{\boldsymbol{SHAREHOLDERS'\ EQUITY}}$

- **Debt-to-asset ratio (D/A)**

The debt-to-asset ratio is comparable to the debt-to-equity ratio. It establishes a company's degree of indebtness, or the proportion of its assets owned by creditors. When the

[36] FINANCIAL RATIO ANALYSIS: 45 ratios with theory & interpretation of financial statements. https://books.google.com/books/about/FINANCIAL_RATIO_ANALYSIS.html?id=RcnsDwAAQBAJ

ratio is greater than 1.0, it indicates that the majority of the assets are financed by debt.

Formula for **debt-to-asset ratio**= $\frac{\boldsymbol{TOTAL\ LIABILITIES}}{\boldsymbol{ASSETS}}$

- **Debt service to income ratio**

The debt service coverage ratio (also known as the debt servicing ratio) calculates how much EBITDA (earnings before interest, taxes, depreciation, and amortization) a firm creates for every dinar paid in interest and principal.

Higher ratios are preferred since they demonstrate your company's ability to service its debt quickly. The debt service coverage ratio is extensively used by bankers and investors to determine a company's degree of indebtedness and future prospects.

Formula for **debt service coverage ratio**= $\frac{\boldsymbol{EBITDA}}{\text{(INTEREST+PRINCIPAL)}}$

1.3.4 Activity ratios

Activity ratios, also called efficiency ratios are used to measure a company's ability to convert their production into cash or income. Often measure over a three-to-five-year period, they provide insight into areas of your business such as collections, cash flow and operational results. There is different types of these ratios for example average days inventory, inventory turnover, average collection period, average days payable and cash conversion cycle ratio.[37]

1.4 Advantages and disadvantages of financial performance

Financial performance is a crucial aspect of any organization. In this context, it is important to understand the advantages and disadvantages of financial performance to make informed decisions. Here are some advantages and disadvantages of financial performance:

1.4.1 Advantages:

They are:

- **Implementing Organizational Strategy:**

[37] Corporate Finance Institute. (2020). Activity Ratios - Overview, Categories, and Formulas. https://corporatefinanceinstitute.com/resources/accounting/activity-ratios/

Accountants help in implementing, communicating, and evolving organizational strategies through the information they provide to the management. Financial performance measurement is one of the essential tools used by the accountants for this purpose.

- **Avoiding Unnecessary Debt:**

Financial management aims at the proper and efficient application of funds, which leads to avoiding any need for additional funds requirements by the business. This helps the business to avoid any unnecessary debt, which can be detrimental to its financial performance.

- **Budgeting and Planning:**

Financial statements reveal the company's budgets, which helps in future planning and decision-making. The budgets show how much is being spent on various activities and where the organization can cut costs.[38]

1.4.2 Disadvantages :

They include:

- **Costly:**

Financial management can be costly, especially for small businesses that cannot afford to hire professional financial advisors. The cost can outweigh the benefits of financial management, making it difficult for businesses to justify its use.

[38] IPL.org. (2012). Advantages And Disadvantages Of Financial Performance. https://www.ipl.org/essay/Advantages-And-Disadvantages-Of-Financial-Performance-FJZ4G6XSQG

- **Lack of Objectivity:**

Financial performance measurement can lack objectivity, especially if the financial statements are prepared by the management. In such cases, the financial statements can be manipulated to show a better financial performance than the actual performance.

- **Limited Focus:**

Financial performance measurement only focuses on financial aspects such as revenue, profit, and cash flow. It does not take into account other non-financial aspects such as customer satisfaction, employee engagement, and environmental impact. This limited focus can lead to a skewed perspective of the overall organizational performance.[39]

In conclusion, financial performance measurement has its advantages and disadvantages, and it is essential to consider both while making financial decisions. It is crucial to understand the limitations of financial performance measurement and consider other non-financial aspects to get a more holistic view of organizational performance.

[39] Simplilearn. (2022). Financial Performance: Understanding the Concepts and Its Areas. https://www.simplilearn.com/financial-performance-rar21-article

Section 02. The financial Dashboard

Managers or decision-makers want artificial indications that are gathered together in the form of a dashboard in order to monitor and assess the performance of the organization. The definition of the dashboard is hence the focus of this section. How will it develop?

2.1 A Financial Dashboard

A financial dashboard is a tool that gives a company's or person's financial performance in a visual representation. This allows them to measure financial KPIs, manage cash flow, and keep track of costs, sales, and profits. Modern digital financial dashboards often largely rely on graphics to depict a significant amount of information in a single view, and financial dashboards incorporate numerous sources of data to give a full and accurate financial picture.

- **a) Steps for developing a business dashboard**

The various steps of developing a good business dashboard are the following:

- **Step 1: Setting Objectives**

The first step in developing a financial dashboard is to identify the objectives. The balanced scorecard method is a good place to start when creating a financial dashboard. Profits, sales, and costs are tracked as important financial objectives in this method. This is an important step since it determines which metrics are tracked and reported on your dashboard.

- **Step 2: Identify Key Performance Indicators**

After defining the goals, the next stage is to determine the key performance indicators (KPIs) that will aid in measuring progress toward those goals. KPIs are the measures that are most important to the organization and will aid in tracking and monitoring progress toward those objectives. It is critical to identify KPIs that are both aligned with the organization's goals and easily measurable. These can include, among other things, revenue growth, profit margins, and cash flow.

- **Step 3: Gather data**

The third step in constructing a financial dashboard is collecting the data that will be utilized to build the dashboard. Data sources include financial statements, accounting software, and spreadsheets, to name a few. The data should be organized in such a way that it is easy to analyze and interpret.

- **Step 4: Choose a Dashboard Tool**

After acquiring the data, the next step is to choose a dashboard tool to build the dashboard. Dashboard applications are available in both free and paid versions. The tool should be chosen based on business requirements such as ease of use, customization options, and integration capabilities.

- **Step 5: Design the Dashboard**

The dashboard's design is critical to its effectiveness. The dashboard should be designed to provide a clear and concise summary of the most important financial indicators. It should be easy to read, visually appealing, and simple to use. The dashboard should also be flexible so that stakeholders can customize it to their individual needs.

- **Step 6: Test and improve**

After designing the dashboard, it is critical to thoroughly test it to ensure that it meets the needs of the business. A wide set of stakeholders should test the dashboard to verify that it effectively communicates financial information. The dashboard could be improved based on comments to make it even more effective.

- **Step 7: Implementation and Monitoring**

The dashboard may be applied and monitored after it has been tested and refined. It is critical to evaluate the dashboard on a frequent basis to ensure that it continues to provide financial information. To ensure that stakeholders have access to the most up-to-date information, the dashboard should be updated on a regular basis with the most recent financial data.

In conclusion, creating a financial dashboard is a critical step in efficiently managing a business's finances. Following the steps outlined in this guide, businesses can create a financial dashboard that provides a clear overview of financial data and assists stakeholders in making informed decisions. With the correct data and tools, a financial dashboard can be a useful tool for organizations of all sizes.

2.2 The functions and limitations of a financial dashboard

A financial dashboard is a visual representation of a company's financial performance. It typically includes charts, graphs, and other visuals that track key metrics, such as revenue, expenses, and profits. Financial dashboards can be used by businesses of all sizes to track their financial health and make informed decisions about their future.

2.2.1 The functions of a financial dashboard

Here are some of the functions of a financial dashboard:

- **Monitoring and reassuring relevant data**

A financial dashboard's main job is to monitor, measure, and evaluate essential data in critical areas. Businesses may quickly access and monitor key financial parameters such as sales, costs, and profits on a single screen by aggregating data from numerous sources. This enables companies to keep track of their financial performance and make data-driven choices.

- **Enhancing Decision-Making**

Financial dashboards save time and money by providing the most recent findings for each report. This implies that organizations may make judgments and take action quickly based on the dashboard's real-time financial data. Furthermore, financial dashboards can provide insights that would not be readily apparent in a traditional financial statement, allowing businesses to make better decisions.

- **Identifying trends and patterns**

Another use of a financial dashboard is to uncover trends and patterns that were previously invisible. Businesses may quickly detect trends and patterns in their financial performance over time by examining the data in graphical or tabular form. This enables organizations to better understand and act on the fundamental factors affecting their financial success.

2.2.2 Financial Dashboard Limitations

Here are some of the limitations of a financial dashboard:

- **Inadequate Context**

Although financial dashboards can provide snapshots of important measures, they are frequently inadequate at providing the nuance and context required for effective data-driven decision-making. Financial dashboards are often confined to displaying pre-determined key performance indicators (KPIs), which may or may not represent the complete context of the event. Businesses must be cautious not to rely simply on financial dashboards for decision-making, and they must assure a more in-depth grasp of the underlying facts.

- **Excessive Reliance on Aggregated Data**

Another disadvantage of financial dashboards is their reliance on aggregated data. While aggregated data can provide a useful overview of financial performance, it may miss important insights that are only visible at a finer level. Businesses must guarantee that they have access to precise data that is pertinent to the choice at hand.

- **Potential for misleading information**

Moreso, if financial dashboards are not carefully designed, they can sometimes provide misleading information. Businesses must ensure that the dashboard data is accurate, relevant, and up-to-date. Furthermore, they should be cautious not to rely solely on a single KPI, as this may not accurately reflect their financial performance.

In conclusion, financial dashboards may be effective instruments for monitoring and analyzing a company's financial performance. They may assist firms in making rapid, educated decisions, identifying trends and patterns, and ultimately driving development. However, businesses must be aware of financial dashboards' limitations, particularly their potential for providing misleading information and a lack of context.

Section 03. Financial performance measurement

Financial performance analysis is the examination and interpretation of financial statements in order to conduct a complete diagnostic of the business's profitability and financial soundness. Financial performance assessment is vital for both internal and external usage since it determines a company's potential future development, structure, efficacy, and, most significantly, performance.

3.1 Performance measurement

Performance measurement is the process of assessing the efficiency and effectiveness of projects, programs, and initiatives. It is a methodical strategy of gathering, analyzing, and assessing how "on track" a project or program is to reach its targeted results, goals, and objectives.

Also, an organization will often assess performance in order to demonstrate responsibility, assist decision-making, and improve procedures. It should be noted that this is not a prescriptive method; businesses must design their own performance measurements based on their project goals and circumstances.

In addition, performance measurement should be seen as an inherent element of any planning process from the start, and it should be incorporated into every plan or project with specific goals and objectives. Performance measurements provide data to help organizations make strategic decisions about what they do and how they perform.

Moreover, performance measurement frameworks are adaptable and may be applied to a new or current effort to assess the efficacy of a pilot project, a multi-year program, or a strategic planning process.

On this subject Rossi, P. H., Lipsey, M. W., and Freeman, H. E. stated that "Performance measurement is the process of evaluating an organization or program's effectiveness and efficiency in achieving its objectives or goals"[40]

In other words, it entails gathering, analyzing, and reporting data on program activities, outputs, and results. PMSs are established and deployed to monitor and assess performance by tracking progress toward certain goals and objectives.

3.2 Why do we measure performance?

We measure performance for the following reasons:

- **for goals and objectives setting**

Goal setting is aided by performance management, which provides an organized procedure for defining, monitoring, and changing objectives. Defining targets, setting measurements, identifying key performance indicators (KPIs), and developing action plans to attain those objectives are all part of this process. Individuals and teams may focus their efforts on the most critical tasks and measure progress toward attaining those goals if they have a clear set of objectives and metrics.

- **Accountability**

[40] P. H. Rossi, M. W. Lipsey and H. E. Freeman, 2004 , "Evaluation A Systematic Approach," 7th Edition, Sage Publication, Inc., Thousand Oaks, p-

Accountability is another reason why organizations measure performance. By setting clear performance standards and goals, individuals and teams can be held accountable for their performance. Performance measurement provides objective data that can be used to hold individuals and teams accountable for their performance and determine if they are meeting their performance goals.

- **System and resource alignment**

Performance management is crucial to aligning resources and processes to achieve strategic goals. Organizations can discover areas where resources and processes need to be modified to better support goal attainment by assessing performance. For example, if a company is failing to fulfill its sales objectives, performance management may identify the precise sales KPIs that need to be improved and assist the company in adjusting its sales strategy.

- **for performance improvement**

It establishes a structure for providing and receiving feedback, which is critical for personal and professional development. Regular feedback assists individuals and teams in identifying their strengths and limitations, as well as areas for improvement. Depending on the business, this input might come from managers, colleagues, or consumers.

- **for compensation and benefits purposes**

Performance management is also essential for setting pay and awards. Organizations may stimulate people and teams to accomplish their goals and improve their performance by assessing performance and relating it to compensation and awards. Bonuses, promotions, and other types of acknowledgements for great performance may be included.

- **aids decision-making**

Performance evaluation is also important in decision-making. It gives information that may be used to make educated decisions, such as whether to invest in certain projects or initiatives, identify areas that need more resources, and assess the performance of present policies and processes. Performance measurement assists firms in making data-driven decisions that can lead to greater performance and efficiency.

- **for compliance**

Organizations or businesses also assess performance for compliance reasons. Regulatory compliance is required in some businesses, such as healthcare and the financial sector. These firms may verify that they are meeting compliance standards and avoiding penalties and fines by measuring performance.

- **Advantage in the marketplace**

Finally, performance measurement has the potential to create a competitive edge. Businesses may discover areas of strength and weakness by assessing performance, allowing them to focus on increasing their strengths and reducing their flaws. Performance measurement may also be used to benchmark against industry standards, allowing companies to compare their performance to rivals and discover areas for development.

3.3 Conditions for a good performance measurement

Setting clear and attainable performance standards and goals, collecting and evaluating data, and delivering feedback to employees are all components of effective performance assessment.[41]

Here are some conditions to consider to ensure effective performance measurement:

- **establish clear performance standards and goals:**

It is critical to establish clear performance standards and goals that match the mission and objectives of the company. These criteria must be explicit, quantifiable, achievable, timely, and relevant.

[41] OpenStax. (2019). 12.2 Identify the Characteristics of an Effective Performance Measure - Principles of Accounting, Volume 2: Managerial Accounting. https://openstax.org/books/principles-managerial-accounting/pages/12-2-identify-the-characteristics-of-an-effective-performance-measure

- **use objective and reliable measurements:**

To guarantee that the data acquired is accurate and useful in making choices, performance metrics should be objective and trustworthy. Quality, quantity, punctuality, attendance, customer happiness, and cost-effectiveness are all common performance measures.

- **use multiple data sources:**

To get a complete picture of employee performance, firms should gather information from a variety of sources, including supervisors, peers, subordinates, and customers.

- **provide regular feedback:**

Employees require timely feedback on their performance to understand how well they are doing and where they need to improve. Regular feedback sessions help employees understand their strengths and limitations, identify areas for development, and stay motivated to reach their goals.

- **train managers and workers:**

Managers and employees must understand the performance management process, their roles and responsibilities, and the performance criteria and measurements. Training may assist managers in providing constructive feedback and assisting staff in attaining their goals.

By addressing these requirements, businesses may guarantee that their performance measurement practices are effective in driving performance, boosting employee engagement, and attaining corporate goals.

3.4 The Financial performance measurement models

Financial performance models are analytical tools used by firms to assess their financial health and predict future financial results.

Steps to consider when choosing a financial performance assessment model

- Develop knowledge of the problem, the model's users, and the model's overall aim. It is critical to understand the assessment's objective, who will use the model, and what specific problem the model is designed to address.
- Determine the financial KPIs (key performance indicators) that are important to the financial health of your firm. Profitability, liquidity, solvency, efficiency, and valuation

are just a few of the financial KPIs. Understanding these indicators will put you in a better position to understand how your firm is functioning financially.

- Select a financial performance evaluation approach that corresponds with your organization's goals and key performance indicators (KPIs). Financial performance evaluation methodologies such as the DuPont analysis, economic value added (EVA), and return on investment (ROI) are available. Each model has advantages and disadvantages; therefore, it is critical to choose the one that best meets the goals of your firm.
- Create the financial model on a single spreadsheet. This simplifies the model and eliminates user mistakes. To guarantee that the financial performance evaluation model stays relevant and accurate, it should be evaluated and updated on a regular basis.

By following these steps, you can choose the best financial performance assessment model for your organization, helping you to better understand and manage your financial health.

3.4.1 Performance models

Many measures and formulas used to analyze a company's financial health and overall condition are referred to as financial performance measurement models. Financial KPIs, which fall under areas like profitability, liquidity, solvency, efficiency, and valuation, are examples of financial performance assessment methods. Other models consist of:

- **a. The DuPont analysis**

The DuPont analysis is a technique used to track the financial success of a corporation. F. Donaldson Brown, who worked for the DuPont Corporation at the time, invented it in 1914. His approach combines profits, investment, and working capital into a single statistic known as return on investment (ROI). It was adopted by other corporations and became a standard metric for all DuPont departments.[42]

It is used to assess the various components of a company's ROE. This enables an investor to discover which financial activities are primarily responsible for variations in ROE. This type of tool can be used by an investor to assess the operational efficiency of two similar

[42] WallStreetMojo. (2023). Dupont Analysis - What Is It, Examples, Equation (3 Step & 5 Step). https://www.wallstreetmojo.com/dupont-analysis/

organizations. Managers may utilize DuPont analysis to discover potential strengths and weaknesses.[43]

- **Formula and Calculation of DuPont Analysis**

The Dupont analysis is an expanded return on equity formula, calculated by multiplying the net profit margin by the asset turnover by the equity multiplier.

The three step DuPont Analysis= ***Net Profit Margin*** **×** ***AT*** **×** ***EM,***

Where its components are:

- **Net Profit**

The net profit margin is the ratio of bottom-line profits compared to total revenue or total sales. This is one of the most basic measures of profitability.

Profit margin= $\frac{\textbf{Net Income}}{\boldsymbol{Revenue}}$***100**

- **AT=** ***Asset*** **Turnover**

The asset turnover ratio measures how efficiently a company uses its assets to generate revenue.

AT= $\frac{\boldsymbol{Sales}}{\boldsymbol{Average\ Total\ Asset}}$

- **EM=** ***Equity*** **Multiplier**

Financial leverage, or the equity multiplier, is an indirect analysis of a company's use of debt to finance its assets.

EM= $\frac{\boldsymbol{Average\ Total\ Assets}}{\boldsymbol{Average\ Shareholder's\ Equity}}$***100**

- **Then the five-step version of the DuPont analysis is formulated as follows**:

ROE= $\frac{\boldsymbol{EBT}}{\boldsymbol{S}} * \frac{\boldsymbol{S}}{\boldsymbol{A}} * \frac{\boldsymbol{A}}{\boldsymbol{E}} *$ ***(1- TR)***

[43] Bitic,U.S(2016) Managing business Performance: the Science and the art. Edinburgh, Scotland. John Wiley and Sons, Ltd. p-254-256.

Where:

EBT= *Earnings before tax*

S= *Sales*

A= *Assets*

E= *Equity*

TR= *Tax Rate*

Note That: DuPont analysis breaks ROE into its constituent components to determine which of these factors are most responsible for changes in ROE.

- **Drawbacks of this model**

While the DuPont analysis is a valuable tool for managers, analysts, and investors, it is not without flaws. Because of its size, it necessitates a number of inputs. As with any computation, the correctness of the inputs determines the accuracy of the outputs.

This tool makes use of data from a company's income statement and balance sheet, some of which may be inaccurate. Even if the data used for computations is solid, there are still possible issues, such as the difficulty in identifying whether ratios are good or poor in comparison to industry norms.

Seasonal effects, depending on the business, might also be crucial to consider because they can alter ratios. For example, some businesses maintain a larger volume of inventory at various seasons of the year. Accounting methods differing between organizations might also make accurate comparisons difficult.

In conclusion, the DuPont analysis is a useful tool for investors and analysts to assess a company's fundamental performance.[44]

[44] Corporate Finance Institute. (2020). Learn How To Create A DuPont Analysis Model. https://corporatefinanceinstitute.com/resources/accounting/dupont-analysis/

- **b. The economic value added (EVA) model**

Economic value added is a financial performance tool that assesses a company’s profitability. It compares the company's net operating profit after taxes (NOPAT) to the cost of capital invested. Stern Stewart & Co. invented this metric, often known as economic profit. It is stated in monetary terms or as a return on investment (ROI).

In addition, the total amount of capital invested in the firm (typically stated as a percentage of total assets) is subtracted from the net operating profit after taxes (NOPAT). Economic profit is the resulting figure. If EVA is positive, the business's return on invested capital exceeds the cost of funding; if it is negative, the company is destroying value.[45]

And, it is a great tool for measuring a company's performance since it considers both the cost of capital and the return on investment. It is also valuable for comparing the performance of various firms since it gives a measure of the economic value provided by each. EVA may also be used to evaluate a company's performance over time because it measures the company's ability to produce economic value.

➢ **How to calculate EVA?**

The formula for calculating EVA is as follows:

EVA = ***NOPAT - (Cost of Capital * Invested Capital)***

Where,

- **NOPAT**= *Net Operating Profit After Taxes,*
- **Cost of Capital**= *the cost of funds used to finance operations (such as interest payments or dividends)*
- **Invested Capital**= *the total amount of capital invested in the company (usually expressed as a percentage of total assets).*

❖ **The Benefits and Drawbacks of Using EVA as a Performance Metric**

Using EVA as a performance metric offers both benefits and drawbacks. On the one hand, it is simple to grasp and may give helpful insights into a company's profitability and financial

[45] Grant, J. L. (2003). Foundations of Economic Value Added. John Wiley & Sons, Inc., Hoboken, New Jersey. p-3-7

performance. However, it does not account for non-financial elements such as customer happiness or employee morale, which means that judgments based exclusively on EVA, may not always be the best.

- **3.3.1.3 The performance measurement questionnaire (PMQ)**

The PMQ was created by Dixon et al. (1990) to serve as a decision tool for managers. Essentially, it is a structured questionnaire that audits the compatibility of a firm's performance measures in relation to its improvement aims and objectives. The questionnaire analyses alignment, congruence, consensus and confusion – helping maintain consistency between the firm's strategy, improvement actions and measures. Essentially it is different from previous frameworks and models as it does not attempt to provide a framework for designing a performance measurement system, rather it is a tool for auditing the appropriateness of a performance measurement system.[46]

3.5 The limitations of FPIs

Financial performance measures provide valuable insights into a company's overall standing in terms of assets, liabilities, equity, expenses, revenue, and overall profitability.

However, it is important to note that financial performance measures also have certain limitations which are:

- these measures are historical, meaning they provide information on past performance and may not be predictive of future performance.
- financial performance measures may not account for intangible assets, such as the company's brand value, which can impact its overall success).
- additionally, financial performance measures may be influenced by external factors, such as economic conditions and industry trends, which are beyond the control of the company.
- It is important to consider these limitations when using financial performance measures to evaluate a company's succes.

[46] esearchGate. (2015). Performance Measurement Model for Moroccan Automotive Suppliers Using PMQ and AHP.https://www.researchgate.net/publication/284551948_Performance_Measurement_Model_for_Moroccan_Automotive_Suppliers_Using_PMQ_and_AHP

Conclusion

Finally, performance indicators are critical tools for businesses to use in monitoring and evaluating their progress toward reaching their objectives. KPIs assist companies in identifying areas of success and possible development, as well as in making educated decisions based on the data gathered. Organizations may track their performance and alter their plans by establishing clear and quantifiable KPIs. KPIs may be used to assess critical performance indicators like financial performance, customer happiness, and management efficiency in a variety of industries, including the public and private sectors.

While KPIs are not the main determinant of an organization's performance, they do give useful insights that may assist businesses in making educated decisions and achieving their goals. As a result, it is critical for firms to carefully pick and routinely analyze their KPIs.

CHAPTER III : ANALYSIS OF FINANCIAL PERFORMANCE OF THE ENTREPRISE PORTUAIRE DE BEJAIA (EPB)

CHAPTER III ANALYSIS OF FINANCIAL PERFORMANCE OF THE ENTREPRISE PORTUAIRE DE BEJAIA (EPB)

This chapter is divided into three sections. The first section focuses on the "Presentation of EPB", the second to "measurement of financial performance of EPB" by various FPIs, and the third to "financial performance evaluation models". Finally, we will conclude this chapter with a summary of the company's overall financial status.

Section 01. Presentation of the Bejaia Port Company ("EPB")

The Entreprise Portuaire de Bejaia (EPB) is a public entity that operates the Bejaia Port in Algeria, which is the country's second biggest port after that of Algiers.[47]

1.1 History of EPB

Decree n°82-285 of August 14, 1982 published in the official journal n° 33 led to the creation of the Port Company of Bejaia; socialist enterprise of an economic nature; in accordance with the principles of the corporate organization charter, the provisions of ordinance no. 71-74 of November 16, 1971 relating to the socialist management of companies. The company, deemed commercial in its relations with third parties, was governed by the legislation in force and subject to the rules enacted by the aforementioned decree.

To accomplish its missions, the company is substituted for the Office National des Ports (ONP), for la Société Nationale Manutention (SO.NA.MA) and partly for la Compagnie Nationale Algérienne de Navigation (CNAN). It was endowed by the State with the assets, activities, structures and resources held by the ONP, la SO.NA.MA and the Towing activity, previously devolved to la CNAN, as well as personnel linked to the management and operation of these.

In implementation of Laws No. 88.01, 88.03 and 88.04 of 02 January 1988 within the framework of economic reforms and on the autonomy of enterprises, and following the requirements of Decrees No. 88.101 of 16 May 1988, No. 88.199 of 21 June 1988 and No. 88.177 of 28 September 1988, the Port Company of Béjaïa; socialist enterprise; is transformed

[47] *Accueil - Entreprise portuaire de bejaia*. (2018, December 9). Entreprise Portuaire de Bejaia - Un Port Diversifié, Un Pôle Logistique Incontesté. http://www.portdebejaia.dz

into a Public Economic Company, Joint Stock Company (EPE-SPA) since February 15, 1989, its share capital was set at ten million (10,000,000) Algerian dinars, currently, it has been increased to 3,500,000,000 DA.

1.2 Geographical location of the port of Bejaia

The port is located in the bay of the city of Bejaia, the artificial maritime and port public domain is delimited:

- To the north by the national road n°9.
- To the south by the closing and offshore piers for a length of 2.750 m.
- To the east by the East pier.
- To the west by the industrial zone of Bejaia.

Its geolocation is

- North latitude: 36°45' 24".
- East longitude : 05°05'50"

1.3 Port's missions and activities of the company

1.3.1 Missions of the company

Its missions are:

- Organization of the reception of ships
- Aid to navigation (Piloting of ships)
- Stevedoring activity (warehousing and delivery of import and export goods).
- Transit of passengers and their vehicles.
- Management and development of the port domain.
- Loading/unloading and pre-evacuation cargo support.

- Ensure the permanent availability of human and material resources.
- Continuously improve performance (human, material and budgetary)
- Make the most of port infrastructure and superstructures
- Manage quality, environment, health and safety management systems.

1.3.2 Activities of the company

The main activities of the company are:

- **Routing of ships from the harbor to the quay**

In certain exceptional cases, of massive arrival at the harbour, the ships remain on standby in the mooring area (harbour) until authorization is obtained to reach a berth at dock. The latter is issued after a placement conference which is held daily at the level of the Harbour Master's Office.

- **Towing**

It consists in pulling or pushing the ship, to carry out docking, shifting or unberthing maneuvers. It also consists of carrying out conveying operations and assisting in the execution of other maneuvers.

- **Steering**

It is provided day and night by the Harbor Master's Office and is compulsory when entering and leaving the ship. It consists of assisting the captain in the conduct of his ship inside the port.

- **Mooring**

This consists of mooring or unmooring the ship from its berth.

- **Handling and stevedoring operations for goods**

these consist of:

- Loading and unloading of goods.
- Receipt of goods.
- Transfer to storage areas, hangars and platforms, dry ports.
- Preservation or safekeeping of goods on land or hangar and outside port.
- Checking of goods.

Other services are also provided to vessels and customers such as:

- Removal of waste from ships and sanitation of berths.
- Weighing of goods (weighbridges).
- Rental of tugs or speedboats (for supplying ships, transporting medical assistance, assistance and rescue on the high seas).

1.4 Functional Departments

These are support structures for operational structures.

a. Functional Deputy General Management

It is responsible for designing, coordinate and control actions related to the management and development of the company.

b. Management and Audit Department (MAD)

It is responsible for:

- Provide assurance to the company on the degree of control of its operations;
- Provide advice and assistance;

- Evaluate the internal control system;
- Implement, maintain and continuously improve the Integrated Management System (project plans and measurement indicators);
- Actively contribute to the establishment and development of an HSE culture within the company and the port community;
- Contribute to awareness-raising and training actions on risk prevention of pollution, the protection of the environment, the health of workers and emergency response.

c. Information Systems Direction

It is responsible for:

- Validate and control the messages disseminated through the various media advertisers;
- Evaluate and recommend IT investments corresponding to the needs expressed;
- Ensure a technological watch on developments in the business sector in information systems and work methodology relating to the centre staff;
- Ensure the improvement and development of the information system of the company;
- Ensure the adequacy between the needs of the company's users, the strategy and IT tools;

d. Finance and Accounting Department (FAD)

It is responsible for:

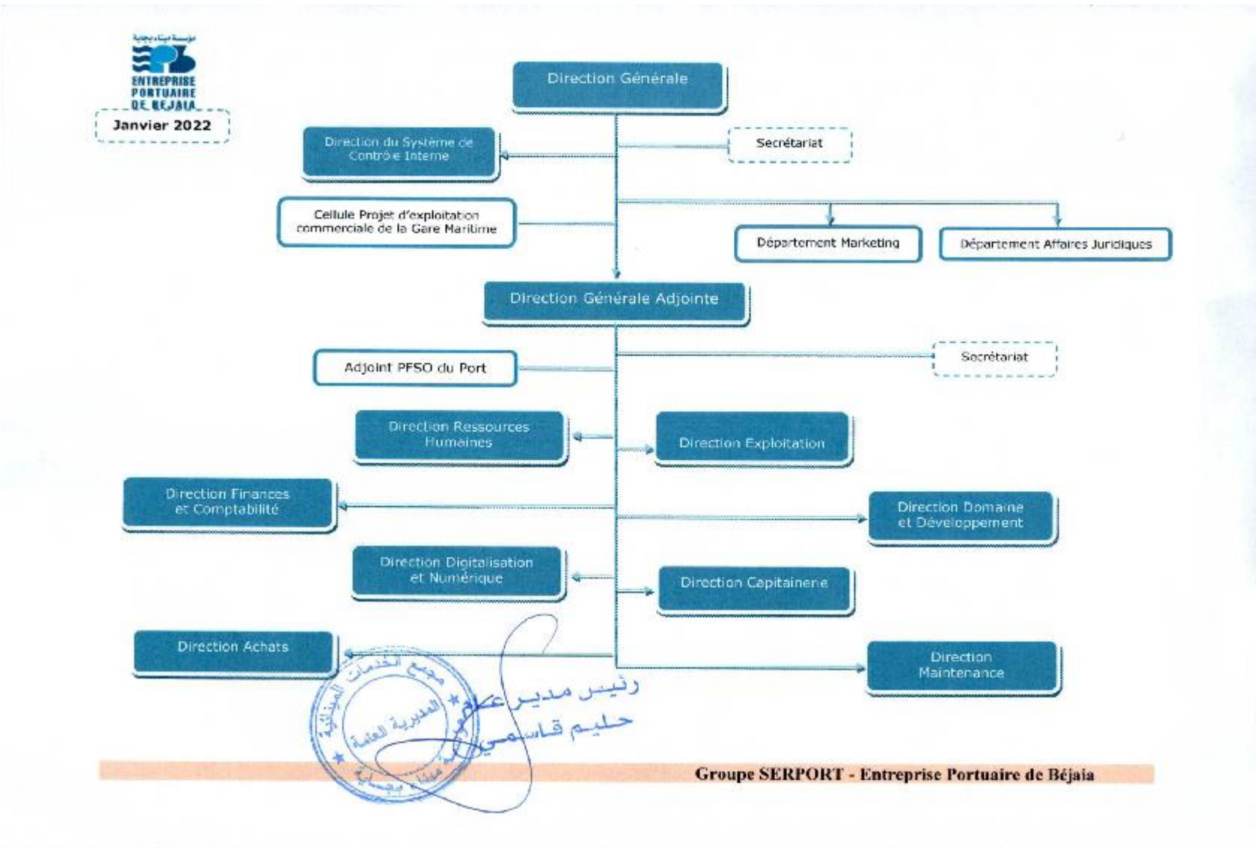
- Bookkeeping.
- Cash management (expenses, income and investments).
- Keeping inventories.
- Management control (cost accounting and budgetary control).

e. Human Resources Direction (HRD)

It is responsible for planning, organizing and to carry out all actions related to the management of human resources, ensuring that rigorous application of social laws and regulations. It performs the following tasks:

- Staff career management (file).
- Management of general resources (regular purchases, vehicle fleet, etc.

1.4.6 Organizational Chart



Section 02. Measuring the performance of the EPB

In the second section, we are going to present the various indicators of performance applied in our case study which is **Entreprise Portuare de Bejaia ("EPB")** by focusing on the various accounting documents of the financial statements provided by the **"EPB"** (Balance Sheet, Income Statement, Cash Flow Table, etc.) during our internship period for a period of one (1) month, running from March 19th to April 17th. We are going to put into practice the different methods and tools for evaluating financial performance recently mentioned in the theoretical part.

We are going to carry out our case study from the Direction of Finance and Accounting which is responsible for the accounting management of all the operations. It is structured in three services:

- General accounting department,
- Analytical accounting services,
- Finance & Budget department.

2.1 Financial Analysis

Financial analysis is the process of analyzing EPB's financial statements to evaluate its financial performance and business value . Financial accounting requires all companies to create a balance sheet, income statement, and cash flow statement, which form the basis for financial statement analysis during a certain period of their activities.

2.1.1 The Balance Sheet Analysis

The balance sheet assets are divided into two parts: non-current assets and current assets and are presented as follows:

Table 06: EPB's Assets for the financial year 2021-2022 In KDA:

Elements	Gross 2022	Amort 2022	Net 2022	Net 2021
Non-current assets				
Acquisition difference (Goodwill)	-	-	-	-
Intangible assets	59 119	58 570	549	3 820
Tangible assets	22 610 332	9 911 954	12 698 378	13 532 319
Assets in progress	1 173 038	-	1 173 038	1 172 183
Financial fixed assets	2 789 299	17 000	2 772 299	4 169 322
Deferred tax assets	421 834	-	421 834	402 907
Total non-current assets	**27 053 622**	**9 987 524**	**17 066 098**	**19 280 550**
Current Assets				
Stocks and work in progress	357 963	1 271	356 692	352 675
Receivables and similar uses	1 293 689	401 149	892 540	752 898
Availability and similar	1 051 215	-	1 051 215	701 925
Total Current Assets	**2 702 867**	**402 420**	**2 300 447**	**1 807 4978**
General Total Assets	**29 756 489**	**10 389 944**	**19 366 545**	**21 088 048**

We note that the EPB closes financial year 2022 with a total **of 19 366 545 KDA** as compared to **21 088 0478 KDA** for the year 2021; there is a decrease of **1 721 503 KDA, or (-08%).**

We will provide explanations following this decrease in assets by studying each component of the assets on the balance sheet.

a. Fixed assets of EPB

The tables below show the fixed assets of EPB for year 2021 and 2022:

Table 07: Non-current assets In KDA

Elements	2022 (2)	2021 (1)	Diff (2) – (1)	%
Intangible assets	549	3 820	-3 271	-86
Tangible assets	12 698 378	13 532 318	-833 940	-06%
Assets in progress	1 173 038	1 172 183	+855	
Financial fixed assets	2 772 299	4 169 322	-1 397 023	-33%
Total	**16 644 264**	**18 877 643**	**-2 233 379**	**-12%**

As of 31/12/2022 the EPB held the fixed assets amounting to **16 644 264 KDA** against **18 877 643 KDA** in 2021, that is a decrease of **-12%** induced by:

- **Intangible fixed assets,** which go from **3,825 KDA** in 2021 to **549 KDA** in 2022, i.e. a drop of **-86 %,** which represents the annual amortization of this asset.
- **Tangible fixed assets** decreased by **-06%** or **-833,940 KDA** through the effect of low renewal (new acquisitions) , and the depreciation allowances for the financial year on the other hand, it is necessary to also report the extraction of low value items **(-60,000 DA excluding tax)** for a gross amount of **37,189 KDA** as well as the exit of an asset (CHELI 02) for a gross value of **43 464 KDA.**

Table 08: Fixed assets in progress: relate to the following projects:

Constructions :	**1 117 729 KDA**
Project construction of a ferry terminal	1 115 204 KDA
Supply & installation of sanitary cabins at the maritime station	2 525 KDA
Technical facilities, equipment and tools :	**5 396 KDA**
Acquisition of (08) retractable bollards	4 541 KDA
Acquisition of (03) engines for mini excavators	855 KDA
Other property, plant and equipment :	**49 912 KDA**
Port fence construction project	49 912 KDA
Total	**1 173 037 KDA**

Financial fixed assets: the net value goes from 4,169,322 KDA to 31/12/2021 at 2,772,299 KDA at 31/12/2022, i.e. -1,397,023 KDA, direct result the early repayment of the "construction of the new ferry terminal" credit by using term deposits, as well as the recall of a DAT for short-term liquidity needs for an amount of 400,000 KDA .

Table 09: Financial fixed assets consist of:

BMT Subsidiary Title	255 000 KDA
SAIDAL shares	6 750 KD
Long Term Deposits	2 510 000 KDA
Deposits & guarantees paid	549 KDA

Table 10: Deferred tax on assets: In KDA

Elements	2022	2021	Difference	%
Deferred tax on assets	421 834	402 907	+18 927	+05

The increase in deferred tax on assets is due to the readjustment of the provision for indemnities of retirement at 31.12.2022, they are detailed as follows:

- Deferred tax assets on retirement benefits 383 445 KDA;
- Deferred tax assets on accrued expenses 38 389 KDA.

b. Current assets

The tables below represent the company's current assets during these two years of activity:

Table 11: Stocks and work in progress: In KDA

Elements	2022 (2)	2021 (1)	Difference (2) – (1)	%
Stocks and work in progress	356 692	352 675	+ 4 017	+01%

The value of stocks and work-in-progress is **356,692 KDA**, there is an increase of **01%** compared to the 2021 financial year, mainly due to the supply of spare parts for naval equipment as well as lubricants used for the maintenance of machinery.

Table 12: Other current assets In KDA

Elements	2022 (2)	2021 (1)	Difference (2) – (1)	%
Clients	800 835	609 758	+ 191 077	+ 31%
Other debtors	84 263	122 217	-37 954	-31%
Taxes and similar	7 442	20 921	-13 479	-65%
Other current assets	-	-	-	-
Total	**892 540**	**752 896**	**+139 644**	**+18%**

At the end of financial year 2022, the net amount of receivables and similar uses is **892,540 KDA** compared to **752,896 KDA** in 2021, that is **18%** incease detailed as follows:

Customers and related accounts:

- Customers, National Companies 195 473 KDA;
- Customers, Public Administrations 25 856 KDA;
- Clients, private companies 565 472KDA.

Products not yet invoiced in the amount of **14,034 KDA** constituting a figure revenue achieved as of December 31, 2022 to be billed to customers for the financial year after 2023.

The cumulative impairment losses on trade receivables amount to to **288,053 KDA**.

Table 13: Availabilities and similars In KDA

Elements	**2022 (1)**	**2021 (1)**	**Difference (2) – (1)**	**%**
Investments & financial assets	50 000	-	+50 000	+100%
Treasury	1 001 215	701 925	+299 290	+43%
Total	1 051 215	701 925	349 290	50%

As of December 31, 2022, cash and similar items (including accrued income not yet due, as well as a short-term debts of **50,000 KDA** on the closing date) for an amount of

1,051,215 KDA experienced an increase of +349,290 KDA, i.e. **(+50%)** compared to the financial year 2021, This change and despite the very significant decrease in receipts received from customers **(-340,000 KDA)** is explained by:

- Lower supplier spend -135 911 KDA;
- Lower capital expenditure -217 162 KDA;
- Claims compensation +400 000 KDA.

c. Liabities of EPB

The information below shows the debts that the company owes to others, usually in the form of money or other assets:

Table 14: Liabilities of EPB In KDA

Elements	Net 2022	Net 2021
Equity		
Issued capital	3 500 000	3 500 000
Premiums and reserves	9 474 645	9 662 006
Net profit	558 574	633 058
Other equity – Retained earnings	-	-33 153
Total	**13 533 219**	**13 761 911**
Non-current liabilities		
Borrowing and financial debts	2 153 689	3 887 256
Other non-current debts	139 204	139 204
Provisions and deferred income	1 550 290	1 472 999
Total of Non-current liabilities	**3 843 183**	**5 499 459**
Current liabilities		
Supplier and related accounts	415 079	495 554
Taxes	277 605	204 082
Other debts	1 271 579	1 127 042
Liability cash	25 880	-
Total of Current liabilities	**1 990 143**	**1 990 143**
Total Liabilities	**19 366 545**	**21 088 048**

Table 15: Equity In KDA:

Elements	2022 (2)	2021 (1)	Difference (2) – (1)	%
Issued capital	3 500 000	3 500 000	-	-
Premiums and reserves	9 474 645	9 662 006	-187 361	-02%
Net profit	558 574	633 058	-74 484	-12%
Other equity – Retained earnings	-	-33 153	-	-
Total	**13 533 219**	**13 761 911**	**-228 692**	**-02%**

Permanent capital made up of shareholders' equity and long & medium-term debts amounting to **17,376,402 KDA**, represent **90%** of total liabilities.

Short-term debts amounting to **1,990,143 KDA**, or **10%** of the total liabilities representing what the company owes to suppliers, social and tax organizations.

The Equity, which represents 70% of the balance sheet total, fell by **-228,692 KDA**, that is **(-02%),** compared to 2021, this regression is the result of taking dividends for the 2021 financial year from optional reserves, as well as the reduction in the net income for the financial year ended 2022.

Table 16: Non-current liabilities In KDA:

Element	2022 (2)	2021 (1)	Difference (2) – (1)	%
Borrowings and financial debts	2 153 689	3 887 256	-1 733 567	-45%
Other non-current debts	139 204	139 204	-	
Provisions and deferred income	1 550 290	1 472 999	+77 291	+05%
Total	3 843 183	5 499 459	-1 656 276	-30%

Borrowings and financial debts at the end of financial yaer 2022 in the amount of **2,153,689 KDA** have experienced a contraction of **-1,733,567 KDA**, i.e. **(-45%)** compared to financial year 2021, which represents the share of loans repaid during the closed financial year, in particular the early repayment of the loan financing the new ferry terminal for a total of 931,000 KDA, the remainder to be reimbursed can be summarized as follows:

- Concreting of the TIXTER extra-port area, 168 229 KDA ;
- Acquisition of port cranes, 212 500 KDA ;
- Concreting of the extra-port area of TIXTER "Part A" 114,171 KDA;
- Acquisition of a tugboat, 308 789 KDA ;
- Construction of a berth, 1 333 333 KDA.
- Deposits and guarantees received, the amount amounts on 31/12/2022 at **16 667 KDA.**
- Other non-current debts: in the amount of **139,204 KDA** represent the concession of TIXTER BBA land, and Provisions and prepaid income: in the amount of **1,550,290 KDA.**

Table 17: Current liabilities In KDA:

Elements	**2022 (2)**	**2021 (1)**	**Difference (2) – (1)**	**%**
Accounts payable	415 079	495 554	-80 475	-16%
Taxes	277 605	204 082	+73 523	+36%
Other debts	1 271 579	1 127 042	+144 537	+13%
Passive cash	25 880	-	-	-
Total	**1 990 143**	**1 826 678**	**+163 465**	**+09%**

Current liabilities, which represent short-term debts, they experienced a significant increase of **163 464 KDA** , or **09%** compared to 2021**.**

Suppliers and related accounts amounting to **415,079 KDA** experienced a decrease of **-80,475 KDA**, or **(-16%)**.

As of December 31, 2022, suppliers are detailed as follows**:**

- Stock supplier: 41 707 KDA ;
- Service Providers: 34 803KDA;
- Energy Suppliers: 53KDA;
- Water suppliers: 578KDA;
- Fixed Asset Suppliers: 86 823KDA;;
- Retention of Guarantees: 248 140KDA;
- Invoices to be received: 2 975KDA.

The amount of the tax on 31/12/2022 amounts to **277,605 KDA**, it has increased by **73, 523KDA**, or **36%** compared to the previous financial year.

- **Other current debts**: Amount at 12/31/2022 to 1,271,579 KDA against **1,127,042 KDA** in 2021, i.e. a increase of **+13 %.**
- **Passive cash**: Represents accrued and unmatured financial debts (interest charges) on all loans as of 12/31/2022, for a total amount of **25,880 KDA**

d. The mass balance sheets of EPB

It compliles all assets and liabilities of the company, it is illustrated by the table below:

Table 18: The Mass Balance sheet of 2021 In KDA:

Assets			**Liabilities**		
Elements	Amount	%	Elements	Amount	%
Fixed assets	19 280 550	91%	Permanent capital	19 261 370	91%
Current assets	1 807 498	09%	Equity	13 761 911	
Operating value	352 675		Long-term debts	5 499 459	
Realizable value	752 898				
Value available	701 925		Short-term debts	1 826 678	09%
Total	**21 088 048**	**100%**	**Total**	**21 088 048**	**100%**

Table 19: The Mass Balance sheet of 2022 In KDA:

Assets			**Liabilities**		
Elements	Amount	%	Elements	Amount	%
Fixed assets	17 066 098	88%	Permanent capital	17 376 402	90 %
Current assets	2 300 447	12%	Equity	13 533 219	
Operating value	356 692		Long-term debts	3 843 183	
Realizable value	892 540				
Value available	1 051 215		Short-term debts	1 990 143	10 %
Total	**19 366 545**	**100%**	**Total**	**19 366 545**	**100%**

2.1.2 The Analysis of the Income Statements by Intermediate Management Balances

The tables below show an approach used by EPB to analyse their income stament:

Table 20: Intermediate management balances In KDA:

Elements	**2022 (2)**	**2021 (1)**	**Difference (2) – (1)**	**%**
Turnover	5 375 320	5 266 785	+108 535	+02%
Intermediate consumption	580 851	715 352	-134 501	-19%
Added Value	4 794 469	4 551 433	+243 036	+05%
Gross Operating Surplus	1 342 960	1 035 278	+307 682	+30%
Operating Result	595 307	400 951	+194 356	+48%
Financial Result	88 332	290 823	-202 491	-70%
Earning Before Tax	683 639	691 774	-8 135	-1%
Annual Net Result	558 574	633 058	-74 484	-12%

During the period from the 1st of January to 31-12-2022, the Bejaia unit achieved a turnover of **5 375 320KDA**, an increase of **02%** compared to the previous year. This increase is explained by the increase in the volume of activity for the period.

The consumption shows an amount of **580 851KDA**, that is a negative variation of **-19%** compared to the previous year. The decrease in consumption is linked to the low evolution of production for the 2022 financial year.

Added value has appreciated by **(+05%)** resulting from the increase in turnover, but also the decrease recorded at the level of intermediate consumption of exercise, on the other hand.

The gross operating surplus: meanwhile, is increased by **(+30%),** because the costs of personnel are stagnating, and taxes and duties are declining in parallel.

The operating result is showing a strong increase **(+48%)** result of the compensation to the losses and loss of earnings from the incident caused by the vessel "VEGA SIGMA" as well as as the setting in play of a guarantee bond, acquisition of tugboat.

The financial result has decreased due to the receiption of few dividends from the BMT subsidiary, associated with a drop in income from bank investments, led to a decrease in the financial result which is **(-70%).**

The Net Annuual results for the 2021 and 2022 financial years are positive respectively **633 058 KDA** and **558 574 KDA** , we notice a decrease of **74 484 KDA** , or -**12%** compared to the 2021 financial year. The EPB closes the 2022 financial year with a positive net result of **558 574 KDA.**

2.1.3 Self-financing Capacity (SFC):

The SFC represents all the internal resources realised by the company from its actual activity. It is defined as the deference between the cashable products and cashable expenses.

Table 21: Calculating SFC by the addition method In KDA:

Elements	**Formulas**	**2021**	**2022**
Self-financing capacity	Annual Net Result + Depreciation allowance - Reversal of provision	633 058 1 022 240 1 022 239	558 574 1 305 088 34136
SFC		**1 635 905**	**1 829 526**

The Self-financing capacity is positive in both years, it has increased by 11.54% compared to 2021, this is justified by the increase in non-cash expenses, in particular the allocations to depreciation and provisions and also the EPB has generated monetary surplus to ensure the internal financing of its activities or repay its loans.

2.2 Financial Performance Analysis Indicators:

Generally, the companies use indicators which are reliable, easy to calculate, easily interpreted and likely to be used to assess performance

2.2.1 Analysis by financial balances:

a. Net Working Capital(NWC)

It assesses the portion of permanent capital that can be used to finance long-term operating expenses. It is calculated by two methods from the top of the balance sheet or from the bottom of the balance sheet.

- **NWC = Permanent Capital – Fixed Assets**

Or It can also be calculated by the following formula:

- **NWC = Current assets – Short-term Debts**

Table 22: Calculating NWC In KDA:

Elements	2021	2022
Permanent Capital (1)	19 261 370	17 376 402
Fixed Assets (2)	19 280 550	17 066 098
NWC (1) - (2)	**-19 180**	**310 304**
Current assets (1)	1 807 498	2 300 447
Short-term Debts (2)	1 826 678	1 990 143
NWC (1) - (2)	**-19 180**	**310 304**

We noted that during these two financial years, the "EPB" realised a negative Net Working Capital in 2021 and a positive net working capital in 2022. The principle of financial equilibrium was not respected in 2021 because their sustainable assets were not entirely financed by its sustainable resources and it generated a deficit.

In 2022, the sustainable assets were entirely financed by its permanent resources, and it generated a surplus of security. If we are to compare the two financial years, we notice that in 2021 the NWC is lower than that of 2022, (**+ 329 484 KDA** compared to 2021).

- **b. Working Capital Requirement (WCR)**

It refers to the amount the company needs to finance its operations. It is a short-term financial equilibrium.

WCR= (Operating value + Realizable value) – (Short-term debts - Bank overdraft)

Table 23: Calculating WCR In KDA:

Elements	2021	2022
Operating value (1)	352 675	356 692
Realizable value (2)	752 898	892 540
(Short-term debts- Bank overdraft) (3)	1 826 678	1 990 143
WCR (1) + (2) – (3)	**-721 105**	**-740 911**

The Working Capital Requirement for the last two financial years 2021 & 2022 are negative, this means that the company's operating needs are less important than the resources of operations**.**

c. Net cash

It is all the liquidities available in the company and which can be used in the short term.

- **Net cash = NWC – WCR**

Or

- **Net cash = Available Values – Financial Debt**

Table 24: Calculating Net Cash In KDA:

Elements	**2021**	**2022**
Available Values	701 925	1 051 215
Financial Debt	-	-
Net Cash	**701 925**	**1 051 215**
NWC	-19 180	310 304
WCR	-721 105	-740 911
Net Cash	**701 925**	**1 051 215**

The Net Cash for the two financial years 2021 and 2022 is positive, respectively **701 925KDA** and **1 051 215KDA.** This means that the resources exceed the expenses, in this case the company has the necessary resources to finance its needs. And also the 2022 cash flow has increased by **349 290 KDA** compared to the 2021 financial year.

2.2.2 Analysis by ratio method:

In addition to the method of financial balance indicators, we can analyze the situation of the Company by the method of ratios by calculating the following ratios:

i. Financial structure ratios

They are used to analyze a company's capital structure, which refers to its mix of debt and equity. They are shown by the tables below:

Table 25: Financial structure ratios In KDA:

Elements	Formula	2021	2022
Permanent Funding Ratio	**Permanent capital / Fixed assets**	1.00	1.01
Financial Independence Ratio	**Equity / permanent capital**	0.71	0.78
Financial Autonomy Ratio	**Equity / Total debts**	1.88	2.34
Indebteness Ratio	**Total debts / Total assets**	0.35	0.30
Total Funding Ratio	**Equity / Total assets**	0.65	0.70

Permanent funding ratio is average during the last 02 years, The assets capitalized is financed by permanent capital.

Ratio of financial autonomy is also greater than 1, this means that the company is able to cope with its indebtedness.

Debt ratio is less than **50%.** The level of indebtedness of the company is weak.

- **ii. Liquidity ratios**

These ratios measure the company's ability to convert its assets into cash to pay for its current assets.

Table 26: Liquidity ratios In KDA:

Elements	Formulas	2021	2022
General liquidity ratio	**Current assets / Short-term Debts**	0.99	1.16
Reduced liquidity ratio	**(RV+ AV) / Short-term Debts**	0.80	1.1
Immediate liquidity ratio	**AV / Short-term Debts**	0.38	0.53

The general liquidity ratio is **0.99** in 2021 and **1.16** in 2022; this means that in 2021 the company's assets were lower than its liabilities. In 2022 the company's assets were greater than its liabilities; this result is good because the company has short-term assets which it can liquidate to repay its short-term debts. This ratio is greater than 1 during the financial year 2022, which means it met the specific standard and in 2021 the ratio is less than 1.

Reduced liquidity ratio is **0.80** in 2021 and **1.1** in 2022; this means that in 2021 the company's assets were lower than its liabilities. This ratio is greater than 1 during the financial year 2022 which means that the company covers its short-term debts with its combined receivables and liquidities.

For **the immediate liquidity ratio**, the "EPB" can immediately repay its due debts for 2022 financial year because of its liquidity of **0.53**, it exceeds 0.5. For the year 2021, the ratio does not exceed **0.5** which **0.38** so the company cannot immediately repay its due debts.

- **iii. Solvency ratio**

This ratio measures the ability of the company to honor its financial commitments.

Table 27: Solvency ratio In KDA:

Elements	**Formulas**	**2021**	**2022**
General solvency Ratio	**Total assets / Total debts**	2.88	3.32

We notice that this ratio is greater than (1) during the two fiscal years, but with an increase of **15.28% i**n 2022, this means that the company is able to honor these commitments by repaying their debts quickly.

a. Profitability Ratios and Leverage

Table 28: Profitability Ratios and Leverage In KDA:

Elements	Formulas	2021	2022
Financial profitability Ratio	**Net Result / Equity**	0.05	0.04
Economic profitability Ratio	**Operating Result / Total Assets**	0.02	0.03
Net commercial profitability ratio	**Net Result / Turnover**	0.12	0.10
Leverage	**ROA – ROE**	0.03	0.01

Financial profitability ratio remains satisfactory during the last two (02) financial years with a slight decline in 2022, mainly due to the **12%** drop in the company's results.

Ratio of commercial profitability, the given result must be the most important possible because it expresses the rate of return for each dinar of turnover, it drops by 02 points.

We notice that the **leverage effect** is positive during the two years 2021 and 2022, which means that the economic profitability is sufficient to cover the cost of indebtedness, that is to say that the interest rate of the loans is lower than the economic rates of return makes a profit of 12DA in 2021, 10DA in 2022). There is a decrease of 2% compared to last year. The decrease to its volume of activity is due to a decrease in net profit.

Section 03. Performance Evaluation Models

Performance evaluation or measurement models are a set of metrics and indicators used to assess the performance of a company. They can be used to track progress against goals, identify areas for improvement, and make strategic decisions.

We have a lot of models(for example the EVA, PMQs…etc) which may help us to understand and explain the financial performance of the EPB but we are going to use the DuPont analysis and the traditional metrics(we calcalcuted in the previous section) to assess the performance of the EPB.

3.1 The DuPont analysis model

It is used to assess the various components of a company's ROE. This enables an investor to discover which financial activities are primarily responsible for variations in ROE. We going to use this model to determine the strength and weakness of EPB.

It is formulated as follows:

Three step DuPont Analysis= Profit Margin× AT× EM

Table 29: DuPont analysis ROE In KDA:

Elements	**2021**	**2022**
Profit Margin	0.12	0.10
Assets Turnover	0.25	0.28
Equity Multiplier	153.2%	143.1%
DuPont Analysis result: ROE	0.05	0.04

DuPont Analysis is a financial model used to understand the factors that contribute to a EPB's return on equity (ROE). It breaks down ROE into three components: net profit margin, asset turnover, and financial leverage ratio. A company's ROE can be calculated using the formula: ***ROE = Net Profit Margin X Total Asset Turnover X Equity Multiplier*.**

Based on the provided information, the EPB's ROE was **5%** in 2021 and decreased to **4%** in 2022. The net profit margin was **12%** in 2021 and decreased to **10%** in 2022. The asset turnover increased from **0.25** in 2021 to 0.28 in 2022. Finally, the equity multiplier was **153.2%** in 2021 and decreased to **143.1%** in 2022.

The decrease in the company's ROE in 2022 can be attributed to a decline in both the net profit margin and the equity multiplier. The net profit margin decreased from **12%** to **10%**, indicating that the company is making less profit per dollar of sales. The equity multiplier decreased from **153.2%** to **143.1%,** indicating that the company is using less financial leverage. However, the asset turnover increased from **0.25** to **0.28**, indicating that the company is generating more sales per dollar of assets.

In conclusion, it shows that the decline in the company's ROE in 2022 can be attributed to a decrease in the net profit margin and the equity multiplier, despite an increase in asset turnover.

Conclusion

In this chapter we have been able to put into practice almost all the theoretical notions mentioned in the previous chapters, that is to say the evaluation of the financial performance of the EPB.

Indeed, the company is balanced in the long term by the fact that its working capital is positive during the financial years 2022, contrary to its short-term situation which makes it dependent on its bank and which obliges it to resort to a increase in financial debts (bank loans) to cover its operating needs in order to safeguard its sustainability.

We found that the company is efficient, its operating activity, as well as its capital are profitable and this is due to the positive results generated during the two financial years.

GENERAL CONCLUSION

Our research on the assessment of financial performance within the company port of Bejaia **(EPB)** allowed us to understand the concept of financial performance by studying the terms that characterize it before discussing the elements that determine performance through financial analysis, which is the subject of our research.

The evaluation of the financial performance aims to make a judgment on the activities of the company from an established diagnosis, through (the Income Statements and the Balance Sheets).

We got to know the firm, which allowed us to give an overview of the **EPB** and its organizational structure. Indeed, the information gathered at the end of this study, such as the end-of-year reports, allowed us to evaluate the financial performance.

So the evaluation of the financial performance of the **EBP** allowed us to understand the concept of financial performance, by studying the terms that characterize them before talking about the elements that determine them and which is the subject of our case study, while highlighting the various tools for analyzing its activity and its financial structure.

After analysis and interpretation of the results, the performance evaluation within the EBP during the financial years 2021 and 2022, allowed us to to answer the following questions:

• Is the **EPB's** profitability adequate to assure its self-sufficiency?

• How does the EPB’s financial performance compare to previous year?

The aforementioned issues caused us to make the assumptions that the **EPB** is a profitable firm because its variety ratios are showing positive results, that its parameters are healthy, and that the techniques used to assess its performance are adequate.

Although it is a profitable firm, there is a decrease in its Annual Net Result by **-12%** compared to the previous financial year (2021) which was caused by an increase in taxes and expenses that had a significant impact on the **EPB's** net profit income, cash flow, and ability to pay down debt or make acquisitions. To maintain or increase net profit income, It may need to find ways to increase its revenue or decrease expenses. We suggest that the company can increase its revenue and decrease expenses by diversifying services, attracting more clients, reducing fixed and variable facility costs, improving the efficiency of production, and tailoring pricing strategy.

Our research inside the **EPB** has helped us to comprehend key performance indicators (KPIs and FPIs), which are an assessment of performance based on ratios and indicators. As a result, we attempted to use the dashboard and DuPont analysis model as evaluation tools for financial performance assessment.

We also sought to quantify the financial and economic performance of the **"EPB"**s two exercises. This measure enabled us to apply the essential performance assessment indicators in the field and learn about the company's performance level. As a result, our corporate experience has broadened our understanding of how an organization operates.

In adddition, we have come to a conclusion that the financial structure of our our case study has confirmed the hypothes becauces it has its financial balance and the Self-financing capacity is positive in both years, it has increased by 11.54% compared to 2021.

BIBLIOGRAPHY

Bibliography

1. Accueil - Entreprise portuaire de bejaia. (2018, December 9). Entreprise Portuaire de Bejaia - Un Port Diversifié, Un Pôle Logistique Incontesté. http://www.portdebejaia.dz
2. AHARONI, Y, The evolution and Management of state-owned Enterprise, Cambridge, Harper and Row Publisher, 1986, p.453
3. AHP.https://www.researchgate.net/publication/284551948_Performance_Measurement_Model_for_Moroccan_Automotive_Suppliers_Using_PMQ_and_AHP
4. ASCM. (2018). How to Spot Leading and Lagging Key-Performance Indicators. https://www.ascm.org/ascm-insights/how-to-spot-leading-and-lagging-key-performance-indicators/
5. Bernard Marr. (n.d.). What Is The Difference Between Strategic And Operational KPIs? https://bernardmarr.com/what-is-the-difference-between-strategic-and-operational-kpis/
6. BOISLANDELLE H M. Human resources management in SMEs. Editing. Paris: ECONOMICA, 1998 , P.139.
7. Corporate Finance Institute. (2020). Learn How To Create A DuPont Analysis Model. https://corporatefinanceinstitute.com/resources/accounting/dupont-analysis/
8. Corporate Finance Institute. (2020). Activity Ratios - Overview, Categories, and Formulas. https://corporatefinanceinstitute.com/resources/accounting/activity-ratios/
9. Financial Performance Indicators (FPIs). (2007). In S. J. Kovner & J. R. Knickman (Eds.), Encyclopedia of Health Care Management. Sage Publications.
10. FINANCIAL RATIO ANALYSIS: 45 ratios with theory & interpretation of financial statements.
11. GRANSTED, (I): “The industrial dead end”, Edition of the threshold, 1980, P.33.
12. Grant, J. L. (2003). Foundations of Economic Value Added. John Wiley & Sons, Inc., Hoboken, New Jersey. p-3-7
13. Hayward, E. (2021, August 4). What is a data dashboard? Klipfolio. https://www.klipfolio.com/blog/what-is-a-data-dashboard
14. HOARAU Christian, “Financial analysis and evaluation of companies and groups”, Ed Vuibert, Paris 2008, P 55-56.
15. HONORE.L, “Financial management”, NATHAN edition, Paris, 2001, page 20.
16. https://books.google.com/books/about/FINANCIAL_RATIO_ANALYSIS.html?id=RcnsDwAAQBAJ
17. https://www.wallstreetmojo.com/dupont-analysis/
18. Investopedia. (2022). Understanding Liquidity Ratios: Types and Their Importance. https://www.investopedia.com/terms/l/liquidityratios.asp
19. Investopedia. (2023). Profitability Ratios: What They Are, Common Types, and How Businesses Use Them. https://www.investopedia.com/terms/p/profitabilityratios.asp
20. IPL.org. (2012). Advantages And Disadvantages Of Financial Performance. https://www.ipl.org/essay/Advantages-And-Disadvantages-Of-Financial-Performance-FJZ4G6XSQG
21. Journal of Contemporary Research in Business. (2015). Impact of financial performance indicators (FPIs) on profitability. https://www.journalcra.com/article/impact-financial-performance-indicators-fpis-profitability

22. KALIKA. M "Organizational structure and environment of the company", in the small Posters, n°88 of July 24, 1989, p.52.
23. Kaplan. (2012). Financial performance indicators. https://kfknowledgebank.kaplan.co.uk/management-accounting/performance-management/financial-performance-indicators
24. KHEMAKHEM(A): “The dynamics of management control”, 2nd edition, DUNOD, Paris, 1976, p.6
25. Kuratko, Donald F., and Jeffrey S. Hornsby. "Financial Analysis." In New Venture Management, 195–215. Third edition. | New York: Routledge, 2021.: Routledge, 2020.
26. LEVY – LEBOYER: “motivation in the business model and strategy”, Edition des EDITION OF ORGANIZATION, Paris, 2001.
27. LORINO Philips, "method and practice of performance" Edition editions of organizations, Paris, 2003, P5.
28. MACHESNAY, Business Economics, Ed Eyrolles, Paris, 1991, p.38.
29. MICHEL S, LEDRU M: "Capital-Competence in the company", editor: ESF (education without borders) edition, 1991, p 221
30. Namazov, Vugar. "Structured financing: linkage between commodities and financial markets." In Systems Analysis in Economics - 2020. Moscow, "Science" Publishing House, 2021.
31. Oboloo. (n.d.). Understanding Financial Performance Indicators: A Beginner's Guide. https://oboloo.com/blog/understanding-financial-performance-indicators-a-beginners-guide/
32. OpenStax. (2019). 12.2 Identify the Characteristics of an Effective Performance Measure - Principles of Accounting, Volume 2: Managerial Accounting. https://openstax.org/books/principles-managerial-accounting/pages/12-2-identify-the-characteristics-of-an-effective-performance-measure
33. P. H. Rossi, M. W. Lipsey and H. E. Freeman, 2004 , “Evaluation A Systematic Approach,” 7th Edition, Sage Publication, Inc., Thousand Oaks.
34. PERARD, Josette, Financial management, 1st edition Management, finance 1990, P.44.
35. pplication Performance Management. (2012). Key Performance Indicators (KPI) | Examples, Guide And Process Explained. https://www.applicationperformancemanagement.org/performance-testing/key-performance-indicators/
36. ResearchGate. (n.d.). Financial Performance Indicators. ScienceDirect. (2005). A review of performance measurement: Towards performance management. https://www.sciencedirect.com/science/article/abs/pii/S0166361505000412.
37. Simplilearn. (2022). Financial Performance: Understanding the Concepts and Its Areas. https://www.simplilearn.com/financial-performance-rar21-article
38. SLOAN, A. My years With General Motors, Doubledy, New York 1963, P.18.
39. Smith, J. (2023). A Holistic Approach to Performance Management. Business Insider. https://www.businessinsider.com/holistic-approach-performance-management-2023-06.
40. STEERS, RM “Problems in the measurement of organizational effectivenses”, Administrative Science Quarterly, December 1975, volume 20, p. 546-558.

41. TAZDAIT Ali, “Mastery of the financial accounting system”, ACG edition, 1st edition, Algiers, 2009, P 81.

42. Thibierge, Christophe, and Andrew Beresford. "Financial Analysis." In A Practical Guide to Corporate Finance, 8–46. London: Palgrave Macmillan UK, 2015.

43. THIBIERGE Christophe, “Financial analysis”, VUIBERT edition. Paris, 2005, P 9. 40.

44. https://www.mataf.net/fr/edu/glossaire/ratios.

45. https://www.researchgate.net/figure/Financial-Performance-Indicators_tbl1_340644715

46. WallStreetMojo. (2023). Dupont Analysis - What Is It, Examples, Equation (3 Step & 5 Step).

ANNEXES

ANNEXES

BEJAIA PORT COMPANY

BEJAIA PORT COMPANY

Financial year 2022

INCOME STATEMENT AS AT 31/12/2022

Elements	Note	Exercise	Previous exercice
Turnover		5,375,320,136.47	5,266,784,876.16
Change in stocks produced and in progress			
Immobilized production		-	-
Operating grants			
I.EXERCISE PRODUCTION		5,375,320,136.47	5,266,784,876.16
Consumed purchases		- 234,118,094.22	- 210,244,839.74
External services and other consumption		- 346,732,764.73	- 505,107,112.92
II. CONSUMPTION DURING THE YEAR		- 580,850,858.95	- 715,351,952.66
III. OPERATING ADDED VALUE (I-II)		4,794,469,277.52	4,551,432,923.50
Staff costs		- 3,342,074,935.76	- 3,348,127,686.32
Taxes other and payments		- 109,434,102.85	- 168,027,095.00
IV.GROSS OPERATING SURPLUS		1,342,960,238.91	1,035,278,142.18
Other operating income		526,128,615.36	383,036,195.93
Other operating expenses		- 2,829,940.47	- 14,516,856.58
Allocations to depreciation and provisions		- 1,305,088,168.13	- 1,022,239,875.14
Reversal of impairment losses and provisions		34,136,413.35	19,393,184.42

V. OPERATING INCOME		595,307,159.02	400,950,790.81
Financial products		243,248,787.40	488,546,783.48
Financial expenses		- 154,916,859.03	- 197,723,930.08
VI. BOTTOM LINE		88,331,928.37	290,822,853.40
VII. ORDINARY INCOME BEFORE TAX (V+VI)		683,639,087.39	691,773,644.21
Taxes payable on ordinary results		- 143,991,345.00	- 81,859,970.00
Deferred tax (Variations) on ordinary results		18,926,601.24	23,143,913.60
TOTAL INCOME FROM ORDINARY ACTIVITIES		6,178,833,952.58	6,157,761,039.99
TOTAL EXPENSES FOR ORDINARY ACTIVITIES		- 5,620,259,608.95	- 5,524,703,452.18
VIII. NET INCOME FROM ORDINARY ACTIVITIES		558,574,343.63	633,057,587.81
Extraordinary items (income) (to be specified)			
Extraordinary items (expense) (to be specified)			
IX. EXTRAORDINARY RESULT			
X. NET INCOME FOR THE YEAR		558,574,343.63	633,057,587.81
Share in the net results of associates (1)			
XI. CONSOLIDATED NET INCOME (1)			
Of which minority interests (1)			
Group share (1)			
(1) to be used only for the presentation of consolidated financial statements			

CASHFLOW (Direct method) AS AT 31/12/2022

	Note	Exercise	Previous exercice
Cash flow from operating activities (A):			
Receipts received from customers.		5,999,314,952.97	6,341,498,120.12
Other receipts.		529,317,931.16	376,438,598.24
Letters of credit, provisions		- 16,112,064.00	-
Letters of credit, return of provisions		17,645,972.62	-
Amounts paid to suppliers.		- 709,701,210.35	- 845,612,068.68
Amounts paid to staff.		- 2,108,347,310.35	- 2,109,428,707.24
Amounts paid for mission expenses		- 5,405,641.40	- 3,871,942.00
Amounts paid to social works		- 192,715,897.59	- 177,773,019.39
sums paid to social organizations		- 947,824,036.58	- 951,762,051.25
Interest and other financial charges paid.		- 184,831,155.39	- 232,972,635.85
Income taxes paid.		- 37,156,468.00	-
Other taxes and duties.		- 1,453,544,664.95	- 1,565,795,667.77
Amounts paid to subsidiaries		-	-
Other expenses		- 29,989,862.78	- 42,850,385.48
Cash flow before extraordinary items		860,650,545.36	787 870 240.70
Cash flow related to extraordinary items (to be specified)			
Cash flow from operating activities (A)		860,650,545.36	787 870 240.70
Cash flow from investing activity (B):			

Disbursement on acquisition of tangible or intangible fixed assets.		- 88,781,555.30	- 305,944,006.90
Receipts from disposals of tangible or intangible fixed assets.		-	-
Disbursements on acquisition of financial fixed assets.		- 1,410,000,000.00	- 400,000,000.00
Receipts from disposals of financial fixed assets.		2,750,000,000.00	899,999,999.80
Interest received on financial investments.		104,569,478.70	217,372,945.19
Dividends and share of results received.		135,787,360.00	323,033,351.61
Net cash flow from investing activity (B)		1,491,575,283.40	734,462,289.70
<u>Cash flow from financing activities (C):</u>			
Receipt following the issue of shares.			
Dividends and other distributions made.		- 311,750,000.00	- 250,000,000.00
Receipts from borrowings.		-	-
Repayments of loans or other similar debts.		- 1,733,188,657.24	- 1,205,422,055.68
Cash flow from financing activities(C)		- 2,044,938,657.24	- 1,455,422,055.68
Impact of changes in exchange rates on cash and cash equivalents.		- 106,863.00	- 66,258.94
Change in cash for the period (A+B+C)		307,180,308.52	66,844,215.78
Cash and cash equivalents at the beginning of the year		668,154,195.52	601,309,979.74
Cash and cash equivalents at year-end		975,334,504.04	668,154,195.52

BALANCE SHEET AS AT: 31/12/2022

Wording	Note	Gross	To death. / Prov.	Net	Net (N-1)
NON-CURRENT ASSETS					
Goodwill					
Intangible assets		59,119,114.78	58,569,789.03	549,325.75	3,819,836.61
Fixed assets		22, 610, 332,463.63	9,911,954,044.53	12,698,378,419.10	13,532,317,919.10
Lands		69,440,800.00		69,440,800.00	69,440,800.00
Buildings		3,605,971,860.80	781,651,649.91	2,824,320,210.89	2,890,681,336.62
Other property, plant and equipment		18,795,715,802.83	9,130,302,394.62	9,665,413,408.21	10,432,991,782.48
Assets under concession		139,204,000.00	-	139,204,000.00	139,204,000.00
Assets in progress		1,173,037,767.47		1,173,037,767.47	1,172,182,683.41
Financial fixed assets		2,789,299,033.20	17,000,000.00	2,772,299,033.20	4,169,322,441.87
Securities accounted for using the equity method				-	-
Other investments and related receivables		255,000,000.00	-	255,000,000.00	261,529,840.67
Other fixed securities		6,750,080.00	-	6,750,080.00	3,889,915,648.00
Loans and other non-current financial assets		2,527,548,953.20	17,000,000.00	2,510,548,953.20	17,876,953.20
Deferred tax assets		421,834,015.92		421,834,015.92	402,907,414.68
TOTAL NON-CURRENT ASSETS		27,053,622,395.00	9,987,523,833.56	17,066,098,561.44	19,280,550,295.67
CURRENT ASSETS					
Inventories and work in progress		357,963,013.38	1,270,737.88	356,692,275.50	352,675,240.89
Receivables and similar uses		1,293,689,057.25	401,149,199.40	892,539,857.85	752,896,409.12
Clients		1,088,887,937.12	288,053,389.44	800,834,547.68	609,758,514.25
Other debtors		197,359,114.16	113,095,809.96	84,263,304.20	122,216,704.25
Taxes and similar		7,442,005.97		7,442,005.97	20,921,190.62
Other receivables and similar uses					
Availabilities and similar		1,051,214,718.17	-	1,051,214,718.17	701,925,940.19
Investments and other current financial assets		50,000,000.00		50,000,000.00	-
Treasury		1,001,214,718.17		1,001,214,718.17	701,925,940.19
Total current assets		2,702,866,788.80	402,419,937.28	2,300,446,851.52	1,807,497,590.20
GRAND TOTAL ASSETS		29,756,489,183.80	10,389,943,770.84	19,366,545,412.96	21,088,047,885.87

LIABILITIES ON 31/12/2022

Wording	Note	Exercise	Previous exercice
EQUITY			
Issued capital		3,500,000,000.00	3,500,000,000.00
Uncalled capital			
Premiums and reserves (Consolidated reserves) (1)		9,474,645,430.88	9,662,006,017.94
Revaluation			
Equivalence difference (1)			
Net income (Net income group share) (1)		558,574,343.63	633,057,587.81
Other equity - Retained earnings -			- 33,152,606.87
Share of the consolidating company (1)			
Share of minority interests (1)			
TOTAL EQUITY I		13,533,219,774.51	13,761,910,998.88
NON-CURRENT LIABILITIES			
Borrowings and financial debts		2,153,688,913.98	3,887,256,431.08
Taxes (deferred and provisioned)		-	-
Other non-current debts		139,204,000.00	139,204,000.00
Provisions and deferred income		1,550,289,965.31	1,472,999,172.98
TOTAL NON-CURRENT LIABILITIES II		3,843,182,879.29	5,499,459,604.06
CURRENT LIABILITIES			
Accounts payable		415,078,573.92	495,554,417.43
Taxes		277,604,971.62	204,081,273.32
Other current debts		1,271,578,999.49	1,127,041,592.18
Liability cash		25,880,214.13	
TOTAL CURRENT LIABILITIES III		1,990,142,759.16	1,826,677,282.93
GRAND TOTAL LIABILITIES		19,366,545,412.96	21,088,047,885.87
	(1) to be used only for the presentation of consolidated financial statements		

STATEMENT OF CHANGES IN EQUITY AS AT 31/12/2022

	Note	Capital	Prime	Valuation spread	Revaluation	Reserves and result
		social	resignation			
Balance as of December 31, 2020	-	3,500,000,000.00		- 1,375,488.00		10,503,043,523.07
Change in accounting method						
Correction of significant errors						
Revaluation of fixed assets				- 114,624.00		
Gains or losses not recognized in the income statement						
Dividends paid						- 500,000,000.00
Other casts						- 372,700,000.00
Distributed Reserves						-
Increase in capital						
Net income for the year						633,057,587.81
Balance as of December 31, 2021	-	3,500,000,000.00	-	- 1,490,112.00	-	10,263,401,110.88
Change in accounting method						
Correction of significant errors						-
Revaluation of fixed assets				- 165,568.00		-
Gains or losses not recognized in the income statement						
Dividends paid						- 650,000,000.00
Other casts						- 392,100,000.00
Distributed Reserves						
Reservations						255,000,000.00
Increase in capital						
Net income for the year						558,574,343.63
Balance as of December 31, 2022	-	3,500,000,000.00	-	- 1,655,680.00	-	10,034,875,454.51

TABLE OF CONTENTS

Contents

ABSTRACT

Performance is often employed in company evaluations as the search for the maximum proportion between the outcome obtained and the methods utilized to attain a particular target. As a result, it is frequently seen as a quantitative indicator of profits or earnings to be realized. The assessment of a company's performance is a problem that is still important today, and it plays a significant part in regulating a company's performance and ensuring that resources are collected and used effectively and efficiently. To evaluate a company's performance, the management controller is in charge of identifying indicators that permit him to formulate an assessment as well as assessment models.In addition, assessing a company's financial performance is still an important topic. It helps to evaluate the success of the firm and ensure that resources are collected and used effectively and economically. Establishing the tools, techniques, and procedures of analysis after gathering the relevant information and data. They were applicable to the Enterprise Portuaire de Béjaia (EPB) through an examination of the company's financial status in the years 2021 and 2022.