

# Financial budgets: evaluation instrument to future

## Summary

The general objective of the research is the design of methodological models for the preparation of financial budgets, whose function is to carry out the future evaluation of the productive unit, through innovative techniques. A solution flowchart was prepared for each type of budget. The financial economy requires specific instruments for the future evaluation of the productive units, which make up the production of goods and services. For this reason, tools are used for the future evaluation of financial variables from the short to long term, which will allow the evaluation of options for integrating proposals in a successful system, which responds in an environment of uncertainty to the investment function and its impact on the production process. Mastering the future evaluation, knowing its methodology, are part of the basic knowledge of the financier, so that higher education in this area makes sense. The construction of a textbook is another contribution of research in the development of the theoretical perspective.

**Keywords:** financial budget, capital budget, operating budget, cash flow, investments

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## Introduction

The research develops the topic of the future economic-financial evaluation, starting from the tools and analysis, which the economist-financial analyst performs to the productive unit in the prediction of tomorrow, namely the next: month, semester, year, five-year period, decade, etc. It is the methodological application, in order to quantitatively obtain values in monetary or percentage terms in a futuristic perspective, the so-called method of financial projections, to then elaborate the qualitative. This is a challenge for the undergraduate student or the novice in the field of financial budgets.

The research begins in 2020 and ends in November 2022. Its importance lies in the conception of an integral method to build and evaluate future investments through the use of four types of financial budgets. With this vision, these typologies, designed by the authors, were elaborated for the valuation of a set of economic-financial variables, necessary in the forecasting process, as a valid method, in the definition of multiple components of specific items, in the perspective of operation of the productive unit.

In this way, an analytical system of financial logic is built, starting from what should come first in the curricular order, when approaching the subject of financial budgets.

Without deviating from our objective, reference is made to the curricular order. Thus, it has always been insisted that the subject called financial budgets, in relation to the subjects of financial order, should be placed in the curricular order of undergraduate studies, in second or third place of the first financial subjects, due to the fact that all the other financial subjects apply some of the four types of financial budgets in their content, which is why this subject is basic to approach the rest of the financial subjects.

It is for the above mentioned in the philosophical thought of the rational, the determinant of the order of this financial matter, to adapt it to the financial process and to the study program of the Finance and Banking career.

The question of us, the researchers, is argued and has as background that the contents of the present research, in its scheme and structure, reflect in each constructed line, the way of estimating instruments that evaluate the future. To this end, it is of interest to point out that flow charts have been added as didactic tools to support the student in the elaboration of financial budgets.

Another objective of the research is to make up for the scarcity of literature from a financial perspective. The first chapter presents financial budgeting from its theoretical approach. The second chapter develops the capital budget. The third chapter considers the operating budget, the fourth chapter outlines the financial budget and the last chapter, the subject of this article, considers the economic and financial evaluation of the corporate productive unit in the future: The financial projection considering a series of financial indicators in relation to variables, to qualify the viability of the corporate investment. This article considers chapters III and IV of the research carried out.

## Theoretical framework

The futuristic vision of financial budgets in the development of the productive unit, **constitute tools in the theoretical framework, for decision making that give continuity to the corporate enterprise.** Hence, from the perspective of financial economics, in its technical development, these are **precise instruments in the estimation of financial variables**, which, calibrated in scenarios, allow us to define **debt or capital instruments.**

Then, the productive unit's capacity **to execute an investment plan with its** impacts would be determined. The impact on production, income and the cost-benefit ratio and others would be measured in the achievement of the goals estimated in the action plan.

The importance of the use of financial budgets is thus defined, from the technical figure in the evolution of the knowledge of the financiers, who are trained in the Faculty of Economics, towards the incorporation of methodical instruments in undergraduate education.

The financial-banking activity supports productive activities; in its **financial mission it develops under complex and sophisticated parameters**, which require the application of **precise economic-financial instruments**, in the options of integrating proposals, which respond to the investment function in the productive process.

At the School of Economics, University of Panama, the training of graduates (Bachelor's Degree in Finance and Banking and Bachelor's Degree in Investment and Risks) that contribute to the economic and financial work of productive activities is a priority. Hence, **the importance of education-research in specialized areas of economic-financial knowledge.**

The financial activities of banking, bonds and stocks in Panama are carried out in a regulated manner, with information on figures and other financial performance variables, monthly, quarterly, annually, etc., disclosed in the media and other web sites. Thus complying with the third pillar of the comprehensive risk model called **Basel II**. and **Basel III** ([https://www.bis.org/bcbs/publ/d424\\_es.pdf](https://www.bis.org/bcbs/publ/d424_es.pdf),2017)

The financial institutions and their related activities, require to estimate and use in the analytical work, the financial budgets, to **measure the futuristic vision, in order to reach the investment impacts, for the development of the corporate productive activities and any other lower level of production, from SMEs to medium and large companies, considering the risk minimization as a concept in the operation of the productive apparatus.**

Knowledge of the forward-looking valuation process and its analytical tools is crucial for the financier. According to international financial standards a financial instrument is a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another. In the banking area, it refers to **term loans and line of credit**, i.e. bank financing. Also present are the classic debt and investment instruments, such as **bonds and the issuance of shares**, all three of which are an important source of financing in Panama.

**Banking financial instruments are regulated** by the Superintendency of Banks of Panama, so that the regulatory body and other developments in its environment are available for consultation, taking into account statistical figures (Superintendency of Banks of Panama, n.d.). **Bonds and Stocks are regulated** by the Superintendence of Securities Markets of Panama.

### Financial budgets from different perspectives

It introduces the thinking of the bibliographic review, on definitions of the financial budgets, subject of the research, from the method to carry out the financial evaluation in the future.

The preparation and analysis of budgets is an important element in the qualitative and quantitative framework. Perspectives from the point of view of accounting, administration and finance.

Budget is a formal quantitative expression of the objectives that the company intends to achieve in a period, in the development of the adapted strategies, which allows to organize the resources and processes necessary to achieve them and to evaluate their execution. We define its intervention from the managerial and profit control approach.

The budget implies materializing the business plans in the company in areas such as indebtedness, liquidity situation, rotation of quantitative and monetary information, it is also the foundation of the projected financial statements and represents the basis for decision making, since it allows forecasting the economic conditions of the company in areas such as indebtedness, liquidity situation, the nature of financial transactions and the mobilization or rotation of invested funds. It is the orientation from the point of view of accounting and administration.

The budget is financial in nature, since it deals with the management of the company's economic resources during a given period. It serves as an estimate, because in the preparation of budgets, activities that may occur in the future are predicted. The budget is a control, because it serves as a guide or path for management to achieve the proposed objectives. It is a control tool par excellence. It is oriented from the vision of management and accounting.

The subject is approached from the economic notion: Financial budgets are the instruments that we economists-financiers use when we

are going to visualize the future of the productive unit, in a qualitative and quantitative way: next month, semester, year, five years, decade, etc., when making decisions for the continuity of the productive unit or of the corporate company.

### The future economic and financial evaluation

In the constructivist scheme of future economic thinking, it is of interest to propose systems that allow us to reach criteria on the development of financial variables in the near future (short term, medium term and long term).

It is considered a sine qua non or sine quibus non rule that the figures of the variables estimated in future periods should be or be as close as possible to the reality achieved in those periods.

It is the effectiveness in the quantification, in the method, in the periodic adjustment for situations of the environment and at the end; in the previous: The correct decision making, not as an administrative tool, on the contrary, the results as conclusive measures, to give solution to the scheme of productive processes in the corporate economic unit.

It is about the use of economic-financial tools, which are continuously, allowing the productive apparatus to act, achieving the determination, that the investment cycle is executed, through a look into the future: The role of the economist-financialist in the microeconomic environment.

### Projection methods

Typologies represent value instruments for estimating figures on the behavior of a range of variables related to the production process of the corporate enterprise.

Multiple techniques, systems, ways, etc. can be used to reach a reasonable economic-financial forecast criterion in the matter or quantification routine, as an instrument that defines values from the short to the long term.

According to undergraduate and graduate teaching, time series, least squares, nonlinear trends, seasonal variations, auto correlation, etc. are used.

The issue that leads to reflection is related to quantitative judgments in the definition of the correct measurement process, since the projected, underlies in the precision, in the effectiveness of the figures and in a periodic assessment of the environment that leads to an accurate, safe and reliable opinion of a reality in the analyzed future.

### Economic-financial variables

The estimates to be made include financial economic variables through the time function, that is, in terms of future value, present value and terminology of interrelated variables, such as NPV.

In this way, the future value is defined as that value estimated in a projection or forecast of a set of variables, all related to the activity of a productive unit.

The present value refers to these variables at their present value, i.e. their real value.

It can be deduced from the game of value analysis that the present value is the real value of a given economic-financial variable. Also that we economists-financiers use the present value to estimate the real value of a variable.

In the same way, there are past period values, which are those that refer to variables from a previous period, i.e. a preceding period: Last year, last semester, last month, etc.

**Chapter I: the operating budget**

The second type of financial budget is the operating budget, occupies this position, according to the financial logic by its order in the assembly of variables, which are estimated in the capital budget and then the operating budget, which will be used in the third financial budget, called the finance budget.

It includes the variables of income, sales, costs and expenses, including various categories of profits, dividends and other variables that will be presented in the section called the structure of the budget.

Its importance lies in the fact that the budget estimates the future profit based on a certain level of investment, it is possible to visualize the convenience of carrying out projects in the corporate productive unit, in such a way that the management team and its shareholders, in a prior evaluation, can make the right decisions.

**Typology No. 1 - Word Document**

**The proforma income statement**

The operating budget, and its synonym the income statement proforma, quantifies the variables of the income statement.

It is a **financial instrument** that values the net income in investment project scenarios, determines the yields of preferred shares, common shares and the percentage of capitalization. It evaluates growth indicators in subsequent years and compares them with the current period and past periods.

It uses the variables of the past income statement and projects them to subsequent years, using economic-financial forecasting techniques.

It is specified in the elaboration of the proforma of the income statement, its data processing and it is a continuation of the case developed in the point, 2.2 Methodology of Capital Budget Calculation, for which the instrument is designed, that is, the operating budget in typology No. 1. Its conformation is considered in two models, the Word document and Excel. The former is processed manually and the latter gives an automated treatment of the information.

<b>OPERATING BUDGET</b>					
<b>(Thousands of US\$)</b>					
<b>Years ending December 31:</b>					
			<b>1</b>		<b>2</b>
	<b>Years:</b>	<b>%</b>	<b>20__</b>	<b>%</b>	<b>20__</b>
Sales					
Less: Cost of sales					
Gross Profit					
Less: Operating Expenses					
Cost of sales					
General and Administrative Expenses					
Depreciation expense					
Total Operating Expenses					
Operating Income (EBITDA)					
Less: Financial Expenses					
Net income before income tax					
Less: Tax (tax rate 25%)					
Net income after tax					
Less: preferred stock dividends (at US\$)					
Income available for common stockholders					
Earnings per share (EPS)					
Retained earnings					
a. The tax rate of _____ percent for corporations. Special tax deductions that are not directly recorded in this statement of operations					
b. EPS: Calculated by dividing the profit available to common stockholders by the number of common shares outstanding _____ at _____ and _____ at _____.					
Earnings per share (EPS) at _____: \$ _____ / _____ = \$ _____, at _____: \$ _____ / _____ = \$ _____.					
Analysis: 20__ 20__ Cost of sales:  Operating expenses:					
3. Fulfillment of the company's general objective:					
4. Increase in net income: Preferred stock dividends: Common stock dividends:					

**Financial Budget:** Operating Budget

**Source:** Authors' elaboration

**The operating budget estimating system**

**Typology 2 Operating Budget - Excel Document**

<b>OPERATING BUDGET</b>					
<b>(Thousands of US\$)</b>					
<b>Years ending December 31:</b>					
			<b>1</b>		<b>2</b>
	<b>Years:</b>	<b>%</b>	<b>20__</b>	<b>%</b>	<b>20__</b>
Sales					
Less: Cost of sales					
Gross Profit					
Less: Operating Expenses					
Cost of sales					
General and Administrative Expenses					
Depreciation expense					
Total Operating Expenses					
Operating Income (EBITDA)					
Less: Financial Expenses					
Net income before income tax					
Less: Tax (tax rate 25%)					
Net income after tax					
Less: preferred stock dividends (at US\$)					
Income available for common stockholders					
Earnings per share (EPS)					
Retained earnings					
a. The tax rate of _____ percent for corporations.					
Special tax deductions that are not directly recorded in this statement of operations					
b. EPS: Calculated by dividing the profit available to common stockholders by the number of common stockholders' shares.					
common shares outstanding _____ at _____ and _____ en _____, Earnings per share (EPS)					
at _____ : \$ _____ / _____ = \$ _____ ; at _____ : \$ _____ / _____ = _____					
\$ _____					
Analysis: 20__ 20__					
• Cost of sales:					
Operating expenses:					
3. Fulfillment of the company's general objective:					
4. Increase in net income:					
Preferred stock dividends:					
Common stock dividends:					

**Source: Authors' elaboration.**

Because of the systematized processing of the information, it means time savings in the elaboration compared to the manual method in Word.

The operating budget model presented in typologies No. 3 and No. 4 contains the variable components in their order, as shown in the following section on the structure of the operating budget.

The financial logic defines both in absolute values and in percentage terms, the routine in the vertical valuation, the numerical process of subtracting (subtracting or minus) from gross profit to retained earnings, the last variable of this budget.

**The structure of the operating budget**

The operating budget maintains the structure of the Income Statement for past periods and considers the following financial variables:

- I. Sales, Cost of Goods Sold and Gross Profit
- II. Operating Costs and Expenses
- III. Operating Income (EBITDA) and Financial Costs
- IV. Income Tax and Net Profit
- V. Dividends and Capitalization of Profits

A consideration of interest in the routine specialized work of the financier when preparing financial budgets, refers to the prior knowledge of the order, configuration and organization of each of the components of the financial budget, which leads to the qualification and quantification of the variables that make up a particular budget. The qualification is based on the agreement described above (solid, adequate, insufficient, weak and unacceptable) and the figures obtained in absolute values and percentages.

**Vertical, horizontal and projected figures analysis**

Valuation techniques of vertical analysis and horizontal analysis are used in the preparation of the operating budget. Since the horizontal analysis considers time series in the future, and the two-year valuation in particular, we proceed to calculate the growth rates of the subsequent year in relation to the previous year of variables that are of interest in this budget. It is important to lead the student or noble in these estimations to review points 1.3 and 1.4 of the first chapter of the research in order to understand the establishment of parameters, which define the behavior in the short and medium term of the variables involved. The assumptions that model the budget, for the projection of the figures include the following behaviors in thousands of US\$ and in percentage terms, for the next two years:

- I. The investment will be made in year 1. The new sales outlets will start in year 2. Sales, 14,000 year 1, 10% increase year 2 in relation to year 1, 20% year 3 and 10% year 4, in year 4 production and sales stabilize. Other income \$US\$ 1,000,000 to US\$ 3,000,000.
- II. Cost of goods sold, 60% of sales year 1, 59% year 2, in year 2 the cost of goods sold stabilizes at 59% of sales.
- III. Operating expenses and costs, 20% year 1, 18% year 2 (Depreciation, 150 and 250 from year 2 onwards). Interest or financial expenses, 3% of sales year 1 and 4% from year 2 on.
- IV. Preferred stock dividends, 10% of their value and common stock dividends, year 1 20%, 80% retained earnings. Year 2, 50% of earnings available for common stockholders and 50% to capitalize.

The assumptions are based on the economic-financial performance of the corporate productive unit in previous years and the feasibility of the new investment to be made, as well as its impacts in the coming years, considering the scenarios that make reality feasible in both quantitative and qualitative aspects. **Annex No. 1** presents the operating budget in an Excel spreadsheet, duly drafted for the case detailed above.

### The process flowchart

Flowchart No. 1 shows the methodology for calculating the operating budget.

#### Flowchart No. 1

Operating Budget Construction Process	
Stages	Shares
I - Cell formatting, Excel	<ul style="list-style-type: none"> <li>• It is verified that the cell format is in number with 0 decimal places in digits and for percentages in 2 decimal places.</li> </ul>
II - Estimated sales and other income in figures for years 1 and 2 projected. The first year corresponds to year 1	<ul style="list-style-type: none"> <li>• It starts with column No. 2, first projected year.</li> <li>• It is recorded in the second column according to the premises established in point 3.4 of this chapter. The same for the variables from step 4 onwards.</li> </ul>
III - Cost of goods sold and gross profit	<ul style="list-style-type: none"> <li>• It is verified with the budget assumptions and the cost of goods sold is established in column No. 2 (the same for each of the variables established in the operating budget).</li> <li>• The cost of goods sold is then subtracted from sales to obtain the gross profit.</li> </ul>
IV - Establishment of operating expenses and costs	<ul style="list-style-type: none"> <li>• The quantifications established for operating expenses and costs are shown in column No. 2.</li> </ul>
V - Determination operating income or EBITDA and financial costs	<ul style="list-style-type: none"> <li>• Operating expenses and costs are subtracted from gross profit (Commune No. 2).</li> <li>• Next, the behavior of this variable is identified in the assumptions and it is then determined</li> </ul>
VI - Quantification of the net income before income tax and income tax	<ul style="list-style-type: none"> <li>• Subsequently, financial costs are subtracted from EBITDA and net income before income tax is obtained, then income tax is determined (25% tax rate).</li> </ul>
VII - Valuation of net income after taxes	<ul style="list-style-type: none"> <li>• Subsequently, income tax is subtracted from net income to obtain net income after taxes.</li> </ul>
VIII - Preferred stock dividends and common stockholders profit and capitalize	<ul style="list-style-type: none"> <li>• Again, the assumptions are reviewed and the earnings for common stockholders and for capitalization are determined.</li> </ul>
IX - Same process for year 2, fourth column	<ul style="list-style-type: none"> <li>• The above process is repeated for year 2.</li> </ul>
X - Valuation in percentage terms - for each year. Column 1 and 3	<ul style="list-style-type: none"> <li>• Sales and other revenues constitute 100% in the top-down vertical analysis to obtain the % share of each variable in the budget.</li> </ul>
XI - Pouring the analysis	<ul style="list-style-type: none"> <li>• The last action is the qualitative and quantitative analysis, in absolute and percentage terms, of the operating budget.</li> </ul>

Source: Authors' elaboration.

### Chapter II: the finance budget

The financial budget projects the total investment, that is, the total assets and their parts, as well as the liabilities and the capital of the productive unit. It is done considering routines based on the methodical and reasonable composition of variables that make up the statement of financial position. A systemic and reasoned approach is outlined and planned with financial transactions, already estimated in the capital budget and in the operating budget, in the preparation of

the third financial budget, the finance budget, whose conformation is presented in the chapter. The substance of the budget is manifested by the fact that it values the total investment, which is reached in future periods, as a result of the indebtedness and contributions of the corporate enterprise. In addition, it includes transactions from the operating budget, which will be detailed in this section. In conjunction with the financial ratios, products of the three aforementioned budgets, liquidity, yield, indebtedness and other variables are evaluated, which define a decision on the impact of the investment for subsequent periods.

### The proforma of the statement of financial position

The Finance budget, also known as the pro forma statement of financial position. Its construction is a sequence of the case developed

in point 2.2 Capital Budget Calculation Methodology and the aspects indicated in point 3.4 of the operating budget. It is shown in two models, the Word document and the Excel document. Typology No. 3 shows the design of the financial instrument in a Word document.

#### Typology No. 3

FINANCE BUDGET					
(Thousands of US\$) December 31					
Cut: / /		1	2	20	
<b>Assets</b>	<b>Years:</b>				
Current Assets					
Cash, cash or bank					
Marketable securities					
Accounts Receivable					
Inventory					
Total Current Assets					
Gross fixed assets (at cost)					
Land and Buildings					
Machinery and Equipment					
Furniture and fixtures					
Rolling Equipment					
Other- technological					
Total gross fixed assets (at cost)					
Less: accumulated depreciation					
Net fixed assets					
Total assets					
<b>Liabilities and Stockholders' Equity</b>					
Current Liabilities					
Accounts payable					
Notes payable					
Charges payable					
Total Current Liabilities					
Long-term debt					
Total liabilities					
Stockholders' equity					
Preferred stock: _____ authorized and issued shares					
with a face value of US\$ _____ each					
Common Stock: authorized shares					
With a face value of US\$ 100 each					
Paid-in capital above par value common stock					
Retained earnings					
Total stockholders' equity					
Total liabilities and stockholders' equity					
<b>Future financial analysis Growth rates</b>					
<b>FINANCIAL VARIABLES: Financial Ratios 20__ 20__ Increase</b>					
<b>Common stock dividend</b>					
<b>Preferred stock dividend</b>					
<b>ROA</b>					
<b>ROE</b>					
<b>Current ratio</b>					
<b>Indebtedness</b>					
<b>Return on assets increased __%, return on equity increased __%, current ratio increased by __% and indebtedness decreased by __%. ROA has a behavior ____, ROE is rated as ____, current ratio valuation is ____ and indebtedness is ____.</b>					

Source: Authors' elaboration.

### The horizontal analysis and projection method

The preparation of the financial budget is the result of several techniques:

- I. Statement of financial position figures, at a cut-off prior to the first year projected, should be from the last months of the year prior to the first year projected.
- II. Compilation of information on financial transactions of fixed capital investment in each particular item (Capital budget, item 2.2 and Annex 1).
- III. Selection of operating budget information related to financial transactions year 1 and year 2: Depreciation and retained earnings.

IV. Application of horizontal analysis techniques, projected financial ratios and their reasoning.

It is important to lead the student or noble in these estimations to review points 1.3, 1.4, 3.4 of the first and third chapters of the research in order to understand the establishment of parameters that define the short and medium term behavior of the variables involved.

The inducements that make up the financial budget, for the projection of the figures, include the following quantifications in thousands of US\$ and in percentage terms, for the next two years:

- I. The figures of the statement of financial position cut-off for each of the financial variables established therein and maintain the equity of assets = liabilities + capital (Assets for US\$ 9,315,000 and liabilities + capital for the same amount).

- II. The forward financial transactions are listed and are as follows:
- III. Investments are fixed capital investments for the different fixed capital items except for contingencies.
- IV. And retained earnings and operating budget depreciation for years 1 and 2 (see Exhibit 7).

**The budget presents 6 columns, as follows:**

- I. Column No. 1, financial variables of assets, liabilities and equity
- II. Column No. 2 cut-off figures the statement of financial position as of months prior to the year prior to the year 1 to be programmed.
- III. Column No. 3 refers to the financial transactions of year 1, related to each of the fixed capital investments and the depreciation cost and retained earnings.
- IV. Column 4 reflects the planned figures for year 1.
- V. Column 5, indicates the financial transactions of year 2.
- VI. Column 6 shows the estimated figures for the year.

**The paradigm of future estimates and reality:** In order to determine the effectiveness of the economist-financial analyst in his work of

**The process flowchart**

Flowchart No. 2 shows the method of calculating the finance budget.

**Flowchart No. 2**

Finance Budget Estimation Process	
Stages	Shares
I - Cell formatting, Excel	<ul style="list-style-type: none"> <li>• It is verified that the cell format is in number with 0 decimals in figures and for percentages with 2 decimals.</li> </ul>
II - Annotation of the figures of the Statement of Financial Position cut-off to months prior to year 1	<ul style="list-style-type: none"> <li>• It starts with column No. 2, Statement of Financial Position Cut-off</li> <li>• The figures for each asset, liability and capital item are recorded. Verify that assets = liabilities + capital.</li> </ul>
III - Financial transactions for year 1, column 3.	<ul style="list-style-type: none"> <li>• It is positioned in column No. 3</li> <li>• Each fixed capital investment is recorded in numerical order from one to the next.</li> <li>• Each financial transaction noted down has two parts: Example: First capital investment item, transaction No.<sup>(1)</sup>, investments in building, means a notation of that transaction in the building fixed assets item. Its counterpart is in the long-term loans liability, it is also noted that transaction number and the figure in that account. And so on with each of the financial transactions for year 1 (see point 4.3 and Annex No. 2).</li> </ul>
IV - Financial transactions for year 2, column 5	<ul style="list-style-type: none"> <li>• It is located in column No. 5.</li> <li>• We continue with the ascending numbering of financial transactions for year 2, using the method of step 3 (See point 4.3 and Annex 2).</li> </ul>
V - Column No. 4: Establishment of each of the assets, aggregating the financial transactions of year 1.  And recording of liabilities and capital accounts for year 1.	<ul style="list-style-type: none"> <li>• The financial transactions in column 3 in the asset accounts that were affected by financial transactions are added to the assets of the cut-off.</li> <li>• For those that were not affected, the same figure of the cut-off is recorded, using the Ceteris Paribus concept in economics (remain constant).</li> <li>• The only figure that is subtracted in year 1 is in total capital, the reserve for depreciation, which is the counterpart of the annual depreciation, in accumulated depreciation, an account that appears under total gross fixed assets.</li> <li>• At the end of the quantification of all financial variables of the statement of financial position of year 1, assets, liabilities and capital, the equality assets = liabilities + capital is verified.</li> </ul>
VI - Column No. 6: Assets, liabilities and equity, year 2	<ul style="list-style-type: none"> <li>• Proceed in the same way as step 5, but for year 2, column No. 6.</li> </ul>
VII - Estimate of financial ratios and emptying of the analysis	<ul style="list-style-type: none"> <li>• Financial ratios and their growth rates are estimated.</li> <li>• A qualitative analysis of the finance budget is performed.</li> </ul>

Source: Authors' elaboration.

preparing these instruments, when each of these years is reached, the quality of the information obtained and the accuracy of the method used are defined. Thus, the contrast is produced that promotes and distinguishes the quality of the data, based on a systemic performance, product of the intervention of specialized human resources. Annex No. 8 shows the financial budget, which was emptied in the Excel sheet, of the case that has been developed from the first budget emptied in chapter 2 onwards.<sup>1-25</sup>

**The composition of the finance budget**

The ordering of the variables of the pro forma statement of financial position leads to the following financial routine:

- I. Current Assets
- II. Fixed assets
- III. Other Assets
- IV. Current Liabilities and Long-Term Liabilities
- V. The Assets of the Production Unit
- VI. Financial ratios and their analysis for year 1 and year 2

## Conclusion

### The research presents the following results:

- I. A methodology for the construction of financial budgets in the field of financial economics.
- II. Proposes a process framework, to elaborate typologies of financial budgets, considering the qualitative and quantitative perspective, models for the student's understanding of the financial area.
- III. It presents diagrams of the 4 financial budgets, both for the estimation in the Excel sheet and in the Word environment, which refine the comprehension for the student or novice in the subject.
- IV. Develop cases where financial information is integrated in the 4 financial budgets.

### The financial budgets in their approach, present the following considerations:

- I. The preparation and analysis of budgets can be approached from various points of view: accounting, administration and finance. From the economic-financial point of view, budgets are the instruments used to visualize the future of the productive unit, for decision making and the continuity of the productive unit or the corporate company.
- II. For its estimation, the economic-financial evaluation to be carried out, the predictive methodology, the types of budgets, the variables involved, the break-even point analysis and the remuneration to the production factors must be known.
- III. The capital budget is the first of the four financial budgets, and has the role of defining in quantitative terms, a certain level of investment for a future period. The capital budget, from an economic-financial perspective, is a financial instrument that estimates present fixed capital and working capital needs, the total cost of the project and the sources of financing with a focus on execution over the next few years.
- IV. The operating budget considers the variables of the income statement. It is a financial instrument that values net income in investment project scenarios, determines the yields of preferred shares, common shares and the percentage of capitalization. It evaluates growth indicators in subsequent years and compares them with the current and past periods.
- V. The operating budget occupies this position, according to financial logic, because of its order in the assembly of variables, which are estimated in the capital budget and then the operating budget, calculations that will be used in the third financial budget, called the finance budget.
- VI. The third type is called finance budget, it projects the total investment, liabilities and capital of the productive unit. It includes routines based on the methodical and reasonable composition of variables that make up the statement of financial position, transactions with a systemic and reasoned approach.
- VII. The fourth financial budget is called the financial projection, it expresses an analysis in monetary and percentage terms, considering a futuristic vision from the short to the long term. The substance of this budget in financial economics is that through its use, the valuation of the productive unit is made in the future, through the classic instruments for obtaining financial resources to make the investment (bank financing, issuance of bonds and issuance of shares).

- VIII. Four precise financial budget models were designed in the Excel spreadsheet. In addition, four flowcharts were created for each type of budget, so that the student or novice in this subject can understand their valuation process. Also, examples of calculations of each budget in relation to an investment proposal were elaborated, taking into account the consolidated analysis of these budgets.

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## Conflicts of interest

The author declares there is no conflict of interest.

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