

Sales Revenues Makers of Profit Monetary Cash Flow and Financial Resources

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ABSTRACT

Sales revenues must be analysed both from an income point of view through ROS and from a financial and/or monetary point of view, i.e. determined in terms of monetary flows, representing the essential financial lifeblood for the company's management to be carried out in total efficiency and effectiveness. The sales return analysis must therefore be twofold: income and monetary. This analysis must include all the necessary steps to identify the specific causes of the trend, positive or negative, of the profit and monetary 'return' of sales revenue.

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"Return on Sales": Introductory Considerations

The study of the return on sales, from both an income and a financial/monetary point of view, must be carried out within the framework of an integrated information system since, in the absence of such a feature, the analysis carried out may be inefficient and ineffective and sometimes misleading. The use by the company of an integrated information system within which the study of balance sheet data intersects with the quantitative data of management control, all characterised by a formal and substantial homogeneity of the structures and words used to identify a specific account or event, represents a fundamental element for the analysis of ratios to provide helpful information for management decision-making. For the analysis of ROS, as well as the overall income and financial analysis of the company understood in a broad sense and, therefore, also including the values that are, in general, connected to the concept of management control, certain basic rules of conduct must be followed, without which all analysis work leads to results that are, often, inconclusive.

In highly synthetic terms, these simple and, only apparently, banal considerations can be emphasised:

1) If management perceives a global economic/financial information need, the analysis must include, as a critical first step, an in-depth, analytical and exhaustive examination of the company's income and monetary/financial situation concerning the moment one begins this corporate investigation. Claiming to implement control/analysis/research systems that relate to the future without having understood perfectly the company's strengths and weaknesses when one begins the examination is simply absurd and dangerous. Silly because the thought of planning for the future without being aware of the present appears,

in all evidence, to be an unfeasible operation. Difficult because attempting such an operation can lead to the unintentional creation of income and/or financial crashes that, potentially, can lead to situations that are very difficult to recover from. The starting point must, therefore, necessarily be the development of a complete analysis of the company's income, financial and monetary situation conducted on final data as close as possible to the time when the management's in-depth research and implementation of the integrated analysis system begins

2) After understanding the starting company situation, it is necessary, first of all, to understand the 'obligatory' nature of formalising a management control system. In general, one often hears that there is always some planning in the entrepreneur's mind, even in the absence of a formal structured system. The complexity of today's economy, however, also requires a formalisation of the objectives that the company wants to achieve. It can generally identify two problems that can result in this planning phase:

(a) the first 'impasse' can be connected to the tendency every human being develops toward novelty. Introducing a control/programming/analysis system frequently comes up against the idea that 'since it has been going well so far, there is no reason to change...'. The task of top management is, without doubt, to make all employees understand that, at present, even in small and medium-sized enterprises, analysis, planning and in-depth analysis of the company's areas of strength and weakness are necessary but not sufficient conditions for the company to continue to thrive. Necessary because, in its absence, everything is left to improvisation, a hazardous circumstance in times of solid market turbulence. Not sufficient because, as is evident, the company does not generate cash flow and income just because there is a system of planning and analysis in place. The company thrives as the result of a winning business idea. However, the absence of a consumptive analysis of data, severe planning and a phase of

understanding the reasons that led to the achievement of results other than the prearranged ones can undermine, at root, the solidity of a business, even if it is potentially successful.

b) The second problem may, on the other hand, be related to the lack of understanding of the various logical steps that must, appropriately, be followed in the economic/financial planning phase. In many companies, one perceives the need for final and preventive analysis, but the logical path to follow is not clear. Planning is a jigsaw puzzle that must construct following precise logic. Failure to follow the right way can invalidate the programming itself. This is why, in the following chapters, we will identify, in a simple but exhaustive manner, the sequence of operations that the implementation of a programming system requires.

3) After having identified, on the one hand, the starting point of the analysis/analysis of the economic/financial situation and, on the other, the sequence of steps to be followed to build an effective and efficient planning model, it is necessary, to achieve useful information results, to have very clear in mind what the 'end point' of the system is. In other words, it is essential to clarify the fundamental, inevitably complex objective of the integrated analysis system. In this text, the goal will be to create an information 'structure' that can help management understand the company's economic/financial situation, both in global and analytical terms. Anyone reading the following chapters will easily understand the need for the system to be structured in such a way as to analyse, in all their facets, the various management segments of the company. There is nothing to prevent the reader from structuring an information system that, although integrated, is smaller in size than that envisaged in the text. Consequently, if they deem it appropriate, it will enable the reader to implement an information "micro-system" which, while identifying only a part of what could potentially be implemented, configures a set of data has its coherence and logic. The particular configuration and organisation of the following paragraphs will enable everyone to identify the areas of most significant interest.

4) At the end of the process, it is necessary to understand what results in the company has achieved in terms of final data.

As will be verified in the following chapters, this phase of 'understanding' the values achieved ex-post requires, in reality, two distinct moments characterised by equal relevance and operational dignity:

a) If we are at the end of the financial year N and, concerning this administrative period, planning (partial or total, carried out in the last weeks of the administrative period N-1) has been carried out, it is first of all necessary to make a comparison between the targets achieved at the end of the financial year N and the targets planned for the same financial year. The comparison between what we wanted to achieve and what we have achieved is necessary to understand the company's health. It is clear that, in the absence of a phase of comparison with planned targets, the analysis of the final results achieved after implementing a management control process remains incomplete. The comparison between planned data and actual values, therefore, represents a decisive phase in analysing company data, in the absence of which, in reality, the results achieved remain without a specific in-depth examination of the management's actual ability to accomplish the pre-set targets. As seen in the following pages, it must compare company summaries and analytical data concerning individual balance sheet items to be effective and valuable. Therefore, analysing identifiable

variances between planned and actual data requires two levels of study. First, it is necessary to consider macro-aggregates and summarised ratios/flows. It is only appropriate to investigate the data in terms of individual costs and revenues (such a comparison is generally referred to as 'variance analysis'). Combining the two examinations (synthetic and analytical) ensures an understanding of why the actual results are equal to or different from the planned values.

b) Understanding the temporal trend of closing account data is extremely useful to impart the desired direction to company management. b) Secondly, it is then imperative to make a comparison between the two latest sets of final data in the company's possession: to understand the company's reality, it is, in fact, "mandatory" to understand the variances created between the final values of the last closed financial year (financial year N) and data concerning the balance sheet of the previous administrative period. It is advisable to perform this temporal analysis of the final data only on the overall balance sheet values and on quotients/flows concerning the company as a single entity. Comparing individual costs and revenues and their component parts when carrying out an inter-temporal analysis of actual values does not make much sense unless the planning phase is completely lacking in the case of small and medium-sized enterprises. In such a case, comparing data determined at the close of administrative periods is the only instrument of management insight. Only in this hypothesis can the splitting, as far as possible in the absence of planning, of costs and revenues with consequent analysis of the individual variations be considered valid.

Therefore, the above observations are the basic foundation for an analysis of ROS and all other quantitative values that are indispensable for understanding a company's earnings, financial and monetary situation.

Here we will only deal with Return on Sales from the various points of view from which it can study this concept.

Company turnover represents the company's lifeblood from an income, financial and monetary perspective. Sales revenues and third-party services should identify the primary sources of income and financial and monetary flows.

To be truly effective, sales analysis must be carried out at the planning stage and the final step to enable company managers to compare identified objectives and values.

The 'return' on sales must become, for each company, a focal point for in-depth analysis to understand the reasons for the trend in overall profitability and highlight potential spaces for implementing further improvements and/or eliminating inefficiencies or pockets of ineffectiveness.

To delve into every business aspect of sales revenue, it is necessary to illustrate the concept of sales 'return'.

This paper will give the term 'return' both an income and a financial/monetary meaning. Return, therefore, is understood as the 'return' of sales expressed in terms of income components and financial and/or monetary flows interconnected with company turnover

Profit "Return on Sales" : Methods For Determining The Ratio From an economic point of view, the return on sales (henceforth ROS, Return on Sales) is often determined improperly and

misleadingly. This is a hazardous circumstance since the control and in-depth analysis of the ‘return’ on sales assumes an essential role as an instrument of economic research aimed at scrutinising the overall profitability balance of a company.

At the operational level, and sometimes even in the academic sphere, one often witnesses the calculation of an inappropriate sales profitability ratio insofar as it is determined by taking the company’s net profit as the reference value. By comparing net profit and sales revenue + services to third parties, this ratio identifies an index composed of heterogeneous elements. While the denominator represents the positive income component par excellence of the company’s typical activity, the numerator of the above index measures the company’s total income output, which derives not only from the company’s characteristic management but also from the equity, financial, tax and non-characteristic management by definition. When calculated according to this standard, the index trend is also influenced by activities that have nothing to do with the company’s core business. An upward trend could, for example, result from realising a capital gain or a contingent asset. A circumstance that invalidates the interpretation of the ratio trend. There is no need to go any further to understand that such a ratio cannot provide valuable elements of analysis to deepen sales profitability due to the substantial discrepancy between the values contained in the numerator and denominator of the ratio.

It is evident from the above that the sales profitability control must, of necessity, compare homogenous management elements. Since sales represent the ultimate purpose of the company’s typical activity, the income that must be compared with revenues must also describe the economic output of that management. Hence the need to identify a profit aggregate that aggregates, in a single algebraic sum, the revenues and costs of the company’s typical operations. That such an index identifies the so-called ROS is a well-known fact. Circumstances that are perhaps less detailed are;

a) how this ratio is to be determined correctly so that in management control and/or balance sheet analysis, the results of the observation are endowed with high significance;

b) and, above all, how it should analyse this ratio to draw helpful management considerations to improve corporate efficiency and effectiveness.

For the ratio identifying the return on sales to be significant, the company’s characteristic profit must derive from the contraposition between income from typical activities (better known as GOP, acronym for Gross Operating Profit) and revenues from sales and services to third parties net of returns, discounts and rebates.

Table 1: ROS Determination

<u>Profit Return on sales ROS calculated from an incorrect perspective leading to misleading and insignificant results</u>	<u>Profit Return on sales ROS determined from a perspective that leads to significant results</u>
Net profit _____ %	income from ordinary operations (o GOP)
Characteristic revenues	_____ % Characteristic revenues

Analysis of the 5 Characteristic Cost Areas Indispensable For The Analysis Of ‘Return On Sales’ Of An Profit Nature

The sales profitability analysis using an in-depth analysis of the ROS trend requires that the characteristic costs (which are to be deducted from the typical revenues to determine the GOP correctly) be subdivided by destination into five sub-aggregates that identify the cost areas of the characteristic activity. The absence of this subdivision prevents the subsequent analysis of the ROS, which, on the other hand, allows the identification of the specific causes of the trend in sales profitability.

To maximise the significance of the overall earnings analysis of the return on sales, the breakdown of characteristic costs must be as follows:

Table 2: Definition of the 5 Cost Areas of Core Business Activities

CHARACTERISTIC COST AGGREGATE BROKEN DOWN BY MANAGEMENT AREA	CONTENT OF THE COST AGGREGATE
Cost of sale	<p>The cost of sale, or production of the product sold, identifies all production costs incurred by the enterprise in carrying out its core business. To make a complete analysis, it is necessary to locate a sub-aggregate, the cost of the finished product, which identifies the cost incurred to finish the object of production. This cost does not include inventories of finished goods and merchandise, just as it should not include any purchases of goods in the above aggregate. It should be noted that the presence of internal constructions in the company requires that these items be deducted from the cost of the finished product, as internal constructions identify adjustment values of costs incurred to realise multi-year values and which, not having been subject to immediate capitalisation, appear, in the income statement, among the operating costs.</p> <p>In summary terms, the cost of sale can be summarised as follows:</p> <p>Consumption of raw materials Consumption of ancillary materials Consumption of semi-finished goods Production depreciation Productive wages Production severance pay Other industrial costs</p> <p>..... (Internal construction of any kind) Inventories Initial work in progress (Final inventories of work in progress) Inventories. Initial semi-finished products of production (Final inventories of semi-finished products of production)</p> <p>COST OF FINISHED PRODUCTS</p> <p>Inventories Initial of finished products (Closing inventories. of finished products) Inventories Initial goods not processed but sold in the state in which they were purchased goods not processed but sold in the state in which they were purchased (Closing inventories of goods not processed but sold in the state in which they were purchased)</p> <p>----- COST OF GOODS SOLD (COST OF SALE)</p>
Costi di amministrazione	Identifies all administrative costs and negative income components incurred for corporate representation purposes
Costi commerciali	It identifies the sum of commercial, marketing and sales costs
Costi Ricerca e sviluppo	Identifies the sum of research and development costs incurred during the year
Overhead Cost	<p>These costs identify notional values present only in companies belonging to a group. The holding company performs activities from which the subsidiaries or affiliated companies benefit free. It defines group strategy, identifies tax strategies, determines the financial management of intra-group flows, manages human resources at the senior/management level and, often, engages in institutional marketing activities. Subsidiaries or associates enjoy the benefits of these activities free of charge. The holding company does not 'pass on the costs to the companies by issuing invoices but carries out the transaction off the books for internal company purposes only. In the presence of overhead costs in the reclassified profit and loss account, the net income for the year in the final balance sheet differs from the income in the reclassified profit and loss account by precisely the amount of the costs charged off-balance sheet. These amounts are set off the books, and thus, without impact on the subsidiary's financial statements, by parent companies. In the absence of accounting movements, these costs do not appear in the subsidiary's financial statements and therefore only represent amounts included in the reclassification to assess the performance of the subsidiary's management. Including this item allows for a better assessment of the subsidiary's characteristic performance. This company is also "loaded" with the negative income components of which, although it does not make any disbursements as the parent company bears them, it benefits from these amounts.</p>

ROS must be the subject of evaluation and interpretation in the business planning phase and the final accounting of the results achieved so that a comparison can be made between the objectives to be completed and the values realised.

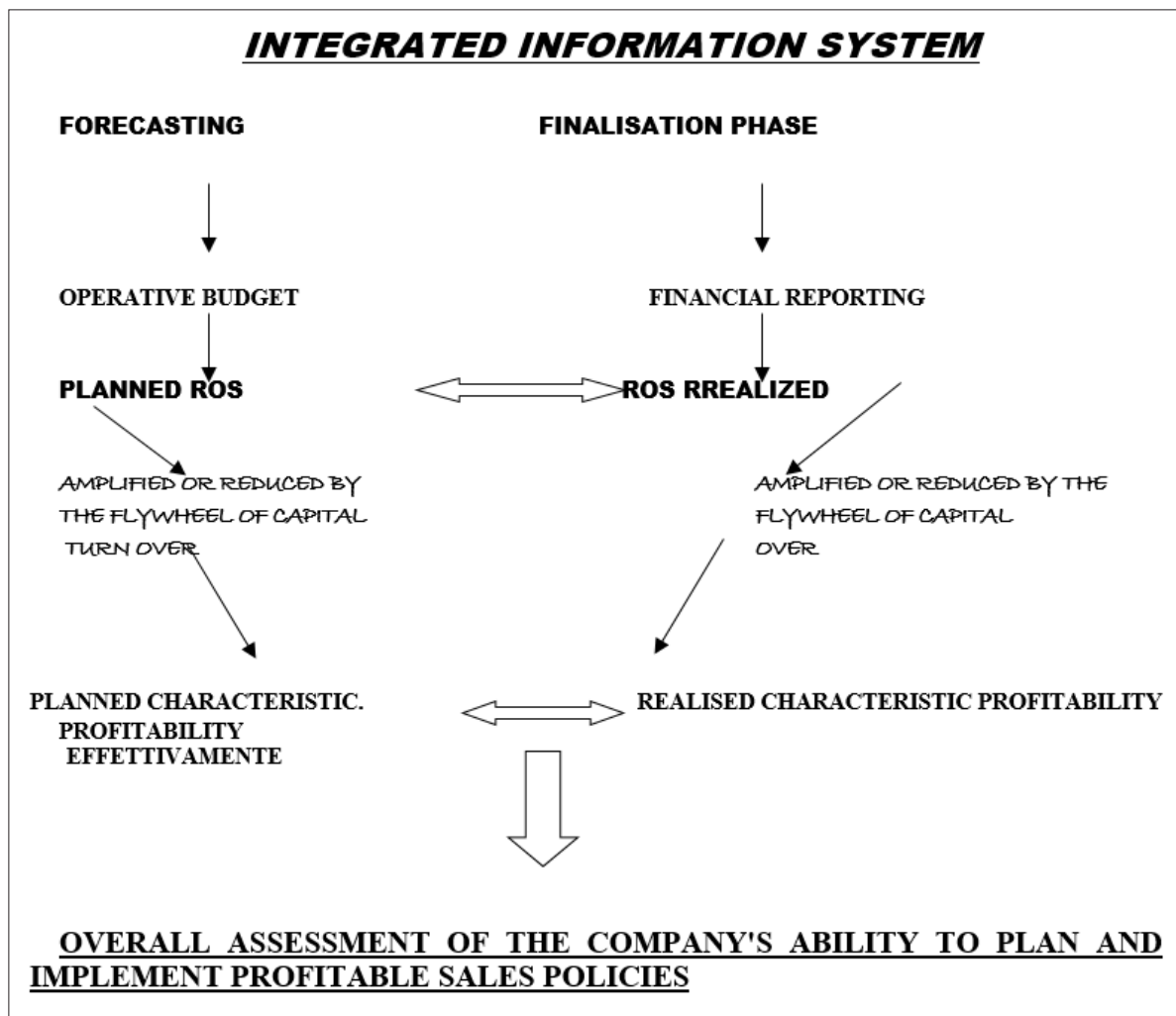
When evaluating the planned company policy, summarised in the operating and general company budgets, analysing the return on sales represents a fundamental step. Such an analysis without the final control phase (understood as verification of achieved results) is ineffective. For this reason, the comparison between planned ROS and ROS realised is necessary for management actions and company sales policies to be thoroughly examined and analysed. It should emphasise that the effect on characteristic profitability (ROI) of sales profitability is amplified or reduced by the trend in the rotation of Capital Invested in Characteristic Management (derived from the ratio of Characteristic Revenues/Capital Invested in Typical Management). In this paper, the focus is on the analysis of the

return on sales. Therefore, the rotation of Capital Invested in Typical Operations will only be mentioned as it is inter-connected to ROS but not explored in depth in terms of analysing the component elements that give the index a particular trend.

Comparison Between Planned Ros and Ros Actually Realised

Another element to highlight is that, in this work, we are acting within the framework of the so-called integrated information system, i.e. the system in which all company accounting data output is interconnected. In this perspective, there is no logical separation between the control system and the balance sheet analysis as each aggregate/index/flow/ is interrelated with all other values, income and financial/monetary.

Table 3: Comparison of Planned and Actual Ros Within an Integrated Information System



The comparison between planned targets and achieved results, in terms of sales profitability, should be completed by comparing the planned ROS with the realised index and, perhaps above all, by analysing changes in revenues. These changes include:

- (a) The change in revenue price
- (b) The change in sales mix
- (c) The change in sales volume.

Since we do not intend to deal with this issue here but rather focus on the return on sales expressed in terms of profitability and the creation of cash flows, it is not possible to analytically delve into the issue of variations, on which we refer to the reader to works aimed at analysing this topic. To determine these variations, quantitative values are needed that cannot find it in financial reporting. For these variations to be determined, it is necessary to flank the financial reporting analysis with the so-called management control, i.e. the system that analyses the company by 'cells' and 'micro-cells' (e.g. sectors, departments, products, sub-products, etc.).

Here, we limit ourselves to highlighting the need to compare the planned ROS and the realised ROS. This is the only way to understand the company's ability to achieve its objectives. In addition to this, a time-based analysis of the ratios is indispensable. The trend of the ratios shows the company's ability to make sales as profit makers. The study of the movement makes it possible to understand whether this ability is increasing or decreasing. The trend must be analysed for at least three years as fewer years would provide insignificant results.

Operational determination of ROS: Undertaking Ladybird and Four-Leaf Clover Ltd

To analyse why a certain upward or downward trend characterises the return on sales (ROS), it is necessary to develop a system of indicators that explain the causes of this trend and the factors influencing the profitability mentioned above.

To this end, a business case was developed by considering the balance sheet date of an unlisted, medium-sized US food company. Since the data provided are subject to confidentiality rights as they derive from scientific considerations that are unobjectionable but not required by law, it changed the name of the company to Ladybird and four-leaf clover Ltd. from now on:

Table 4: Non-Reclassified Balance Sheet Years N-1, N and N+1 Company Ladybird and Four-Leaf Clover Ltd

ASSETS	31/12/N-1	31/12/N	31/12/N+1	LIABILITY AND EQUITY	31/12/N-1	31/12/N	31/12/N+1
SECURITIES	200.000	449.280		BANKS	1.790.990	1.539.150	8.256.480
INVENTORIES	3.383.780	3.557.500	4.326.340	PROVISION FOR DOUBTFUL ACCOUNTS	155.660	82.280	109.500
INDUSTRIAL LAND	918.880	948.880	948.880	SEVERANCE PAY FUND	960.550	975.520	1.150.500
CASH	10.067	12.930	14.276	TAX PAYABLES	56.000	30.320	304.080
FURNITURE	279.000	212.100	449.920	DEPRECIATION PROVISION	780.900	813.920	1.076.580
BANKS	500.699	0	6.828.320	DEB. PAYABLES V/ COLL.	950.680	510.660	255.340
INSTALLATIONS	804.966	823.414	870.240	ADVANCE PAYABLES FROM CUSTOMERS	30.120	506.580	746.850
CUSTOMERS	6.395.580	3.607.480	2.755.280	PAYABLES FOR WITHHOLDINGS	23.000	0	36.044
FINANCIAL RECEIVABLES	45.000	101.460	182.390	SUPPLIERS	895.850	2.329.780	3.334.260
VAT RECEIVABLES	123.000	85.160	143.440	OTHER PAYABLES	780.990	1.189.180	877.160
CONSTRUCTION LEGAL	7.620	7.620	7.620	FINANCIAL PAYABLES	450.000	1.356.790	551.200
PARTICIPATIONS	60.987	32.780	80.620	RES. STATUTORY	460	460	460
CREDITS V/COLL.	468.980	16.880	3.392.430	EQUITY	6.000.000	2.298.000	2.298.000
ACCRUED INCOME	56.900	85.340	126.814	RES. LEGAL	17.590	18.460	19.588
CREDITS DIV. SHORT-TERM	680.890	1.655.040	343.240	RES. EXTRAORDIN.	56.000	1.314	22.692
FORWARD TO SUPPLIERS	850.890	442.920	288.450	RES. REVALUATION	208.560	208.560	208.560
CRED. FINANCIAL	660	660	660	NET PROFIT	465.259	22.580	351.746
NON-IND. LAND	200.000	578.220	385.480	ACCRUED LIABILITIES	860.890	746.320	900.060
ADVANCE ON SEVERANCE PAY	5.600	12.210	11.800	EQUITY FUTURE INCREASE FROM SHAREHOLDERS BANKS			657.100
TOTAL	14.483.499	12.629.874	21.156.200	TOTAL	14.483.499	12.629.874	21.156.200

It should bear the following information in mind:

- it will repay financial receivables in 10 years
- receivables from affiliates are due in 3 years and are financial
- accrued income is due in two years and relates to interest income
- non-industrial land is earmarked as follows: in the first financial year, 192,740 were sold within three months, the remainder not earmarked for sale. In the second year: the land is not intended for sale
- advances to commercial suppliers relate to contracts that will be successful
- a refund of input VAT is claimed. The due date for a refund: 5 years
- controlling interests are not intended for sale
- customers are due at 190 days
- advances on severance pay relate to seasonal staff

- advances from customers relate to finished products and are inherent to contracts that will complete successfully
- other payables have a short-term portion of 500,000 in both years
- financial payables have an annual repayment quota of I financial year 1,000,000, II 151,200
- accrued expenses are two-yearly and relate to interest expenses
- suppliers are due 30 days, 60 days, and 180 days.
- the severance pay fund is characterised by a short-term portion of 10% (in both financial years)
- payables to affiliated companies (of a non-financial nature) have an annual repayment quota: in the first financial year of 400,000, in the second financial year of 100,000
- financial receivables have a maturity of 90 days.
- interest income relates 10% to securities; the remaining amount is from active bank accounts

Table 5: Non-Reclassified Profit And Loss Account Financial Years N And N+1 Enterprise Ladybird And Four-Leaf Clover Ltd

COSTI	31/12/N	31/12/N+1	RICAVI	31/12/N	31/12/N+1
TAXES	67.880	312.280	OTHER INCOME	195.760	112.352
IN. INVENTORIES RAW MAT.	3.383.780	3.557.500	PROFIT ON DISPOSAL	185.760	365.372
WAGES	1.499.860	1.684.640	NON OPERATING INCOME	99.494	182.420
CONTIGENT COSTS	19.820	53.900	INTEREST INCOME	108.990	534.160
COMMISSIONS	1.166.500	2.240.400	SALES	15.359.280	22.443.460
TECHNICAL SALARIES	2.043.466	2.548.640	INVENTORIES RAW MAT	3.557.500	4.326.340
RAW MAT. PURCHASE	7.468.780	10.902.870			
SALES EXPENSES	333.820	585.030			
POSTAGE & TELEPH. COSTS	135.660	192.080			
ADVERTISING	335.100	985.880			
TRAINING AND ADD..	2.840	9.540			
CONSULTING THEC.	240.610	284.860			
EMOLUMENTS TO DIRECTOR	14.170	75.760			
MARKET RESEARCH.	32.500	36.516			
COST EXCHANGE	105.736	261.000			
LEGAL AND CONS. EXPENSE.	111.880	178.160			
REPRESENTATION COSTS.	79.660	74.960			
ENERGY	178.812	193.480			
FINANCE CHARGES	467.590	893.900			
MAINTENANCE	5.010	7.820			
LEASING TECH.	321.230	350.860			
INDUSRRIAL COST	366.980	760.600			
DATA PROC. CENTRE	45.180	34.880			
NON TECH. PROVISIONS.	369.940	521.260			
GEN. COST	518.480	565.840			
PROVISION FOR BAD DEBT	36.980	32.022			
AMORTISATION AND DEP.	131.940	267.680			
COSTS	19.484.204	27.612.358			
NET PROFIT	22.580	351.746			
TOTAL	19.506.784	27.964.104	TOTAL	19.506.784	27.964.104

Non-Reclassified Profit and Loss Account

Useful information for the reclassification of the profit and loss account:

- postal expenses are incurred by the administrative department
- miscellaneous income does not belong to typical operations
- salary breakdown: 60% production, 35% administration, 5% commercial.

Let us assume that we want to investigate the profitability of sales in years N and N+1.

To carry out this analysis, a complete reclassification of the profit and loss account according to the integrated information system is necessary:

Table 6: Reclassified Profit and Loss Account Ladybird and Four-Leaf Clover Ltd

Caratteristico	31/12/N	31/12/N+1
Characteristic revenues	15.359.280	22.443.460
Revenues	15.359.280	22.443.460
Costo del venduto (Cost of Sale)	12.001.504	16.124.594
Consumption fo raw materials	7.295.060	10.134.030
Wages	899.916	1.010.784
Technical salaries	2.043.466	2.548.640
Connsultings tech.	240.610	284.860
Energy	178.812	193.480
Maintenance	5.010	7.820
Leasing tech.	321.230	350.860
Indsutrial costs	366.980	760.600
General costs	518.480	565.840
Amortisation and deprec.	131.940	267.680
Gross Profit	3.357.776	6.318.866
Administrative costs	1.284.281	1.676.264
Wages	524.951	589.624
Postal & tel. costs	135.660	192.080
Training and add.	2.840	9.540
Emuluments to diretors	14.170	75.760
Legal and cons. amm.	111.880	178.160
Representation costs	79.660	74.960
Data proc. Centre	45.180	34.880
Depreciation non tech.	369.940	521.260
Sales costs	1.979.893	3.964.080
Wages	74.993	84.232
Commision	1.166.500	2.240.400
Sales costs	333.820	585.030
Advertising	335.100	985.880
Marketing research	32.500	36.516
Provisions for doubtful accounts	36.980	32.022
Research costs	0	0
Overhead cost	0	0
Total characteristic costs	15.359.280	22.443.460
Total Characteristic revenues	15.265.678	21.764.938
Gross Oprating profit (GOP) – Operating profit from characteristic operations	93.602	678.522
Not charactetistic		
Asset management revenue	10.899	53.416
Interest income on securities	10.899	53.416

Asset management costs	0	0
Financial management reveuues	98.091	480.744
Interest income on banck	98.091	480.744
Operating profit (OP)	202.592	1.212.682
Financial management costs	573.326	1.154.900
Exchenage rate gains	105.736	261.000
Finance charges	467.590	893.900
Non-characteristic revenues by definition	481.014	660.144
Other income	195.760	112.352
Profit on disposal	185.760	365.372
Non operating income	99.494	182.420
Non-charactetistic costs by definition	19.820	53.900
Contingest costs	19.820	53.900
Reddito ante imposte	90.460	664.026
Tax costs	67.880	312.280
Tac	67.880	312.280
Non-charactetistic revenues	590.004	1.194.304
Non-characteristic costs	661.026	1.521.080
Net profit	22.580	351.746

Based on these values, it is possible to identify the ROS in years N and N+1:

Table 7 : Determination ROS years N e N+1

		N	N+1
Return on sales (ROS)	Gross operating profit (GOP)	$\frac{93.602}{15.359.280} = 0,609\%$	$\frac{678.522}{22.443.460} = 3,023\%$
	Characteristic revenues		

As can be seen, the trend of the ROS of the company Ladybird and four-leaf clover Ltd in the years N and N+1 is increasing and shows an increase of more than 500%. Although it also remained at a low level in financial year N+1, there is no denying the significant improvement in sales profitability.

Determination of % I A And I B Useful For Understanding Ros Trends

For the economic analysis of sales to be helpful for the purpose of identifying the strengths and weaknesses in the profitability of the company's policies enabling sales to produce GOP, it is necessary to proceed to the determination of two 'families' of percentages.

% I: within this "family", the reference value (100%) is the typical sales revenue

% II: within these percentages, on the other hand, the parameter against which the values must be percentages is the total area costs.

Within the % I, it is also appropriate to identify the so-called % I a and % I b. The % I a's remember the percentage of the five area cost totals concerning characteristic revenues net of returns, discounts and rebates. These percentages indicate the area(s) that caused the ROS trend. It is evident that a complete analysis also

analyses the areas with contrary ROS trends to highlight all the strengths and weaknesses of the five sub-managements according to which the characteristic costs are divided.

The % I b represents, on the other hand, the percentage of the individual characteristic costs, again assuming typical company revenues as 100%. The analysis of the % I b allows the identification of the specific costs that caused the ROS trend.

It is evident from the above that:

- 1) the sum of the % I b of an area coincides with the % I a of that area;
- 2) and the sum of the % I a, necessarily, corresponds to the total of the % I b.

It is evident that the difference between 100% and the sum of the % I a (or % I b) identifies the ROS itself (as it represents the GOP as a percentage of sales, i.e. the profitability of the sales index).

The I percentages allow us to understand the reasons for the ROS trend and will enable us to identify, in an analytical manner, the strengths and weaknesses of the five characteristic management areas that have allowed, through the performance of their activities, the achievement of the characteristic revenues indicated in the profit and loss account.

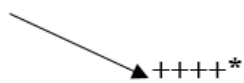
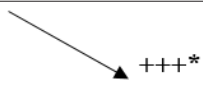

Concerning the company Ladybird and four-leaf clover Ltd, the analysis of % I a leads to the following considerations:

Table 8: Percentages I a

	31/12/N		31/12/N+1	
Characteristic Revenues	15.359.280	100,000%	22.443.460	100,000%
Cost of Sale	12.001.504	78,138%	16.124.594	71,845%
Administrative costs	1.284.281	8,362%	1.676.264	7,469%
Commercial costs	1.979.893	12,891%	3.964.080	17,663%
Research and development costs	0	0,000%	0	0,000%
Overhead costs	0	0,000%	0	0,000%

An analysis of the above values shows that the performance of the five characteristic areas with respect to typical revenues can be summarised as follows:

Table 9: Assessment of the Five Cost Areas of Core Business Activities

Characteristic management areas	Percentage development of total area costs in relation to sales	Judgement trend
Cost of Sale		Reduction of 6 percentage points to 78.13%. Extremely favourable trend showing recovery of efficiency
Administrative costs		Reduction of almost 1 percentage point to 8.36%. Favourable trend showing recovery of efficiency
Commercial costs		Increase of 5 percentage points to 12.89%, which highlights the implementation of commercial policies that, at least in the short term, have only created cost increases and not at least a corresponding increase in revenues. Negative judgement.
Research costs	Non-existence cost	
Overhead cost	Non-existence cost	

* legend: the direction of the arrow indicates the trend of the total cost area. The number of + or - identifies, in an extremely synthetic manner, the judgement on the trend of the analysed value and therefore, indirectly, of the management of the typical cost area as a percentage of total typical revenues.

From the above, it is clear that the improvement in ROS depends, first and foremost, on the efficiency recovered in the production area and, albeit to a lesser extent, in the administrative area. Despite the negative performance of the sales area, ROS shows a highly positive trend, at least in relative terms compared to year N, as the negative direction of total sales costs compared to revenues has been more than absorbed by the positive production performance and administrative areas.

At this point, however, to understand, in an analytical manner, what the specific causes of these trends were, it is necessary to determine the % I b showing the direction of the individual costs with respect to the total characteristic revenues.

Percentage breakdown of all characteristic costs compared to typical operating revenues

Table 10 : Percentages I b

	31/12/N		31/12/N+1	
Characteristic Revenue	15.359.280	100,000%	22.443.460	100,000%
Cost of Sale	12.001.504	78,138%	16.124.594	71,845%
Consumption fo raw materials	7.295.060	47,496%	10.134.030	45,154%
Wages	899.916	5,859%	1.010.784	4,504%
Technical salaries	2.043.466	13,304%	2.548.640	11,356%
Connsultings tech.	240.610	1,567%	284.860	1,269%
Energy	178.812	1,164%	193.480	0,862%
Maintenance	5.010	0,033%	7.820	0,035%
Leasing tech.	321.230	2,091%	350.860	1,563%
Indsutrial costs	366.980	2,389%	760.600	3,389%
General costs	518.480	3,376%	565.840	2,521%
Amortisation and deprec.	131.940	0,859%	267.680	1,193%
Administrative Cost	1.284.281	8,362%	1.676.264	7,469%
Wages	524.951	3,418%	589.624	2,627%
Postal & tel. costs	135.660	0,883%	192.080	0,856%
Training and add.	2.840	0,018%	9.540	0,043%
Emuluments to diretors	14.170	0,092%	75.760	0,338%
Legal and cons. amm.	111.880	0,728%	178.160	0,794%
Representation costs	79.660	0,519%	74.960	0,334%
Data proc. Centre	45.180	0,294%	34.880	0,155%
Depreciation non tech.	369.940	2,409%	521.260	2,323%
Sales Costs	1.979.893	12,891%	3.964.080	17,663%
Wages	74.993	0,488%	84.232	0,375%
Commision	1.166.500	7,595%	2.240.400	9,982%
Sales costs	333.820	2,173%	585.030	2,607%
Advertising	335.100	2,182%	985.880	4,393%
Marketing research	32.500	0,212%	36.516	0,163%
Provisions for for doubtful accounts	36.980	0,241%	32.022	0,143%
Research Costs	0	0,000%	0	0,000%
Overhead cost	0	0,000%	0	0,000%

To facilitate the analysis, items showing a positive trend are delivered in bold, while costs with a negative trend are highlighted in italics.

From the analysis of the %, I b, it can be seen that:

- 1) the favourable cost-of-sale trend depends on the percentage reduction of all costs. Exceptions are miscellaneous industrial costs and technical depreciation, which show slight increases;
- 2) the positive trend in the administration area depends on the reduction of all costs with one exception: auditors' and directors' fees, which show a slight increase;
- 3) the negative trend in commercial costs is attributable to the direction in selling expenses and advertising, which show a percentage increase. It should be noted that, even in this area, all other negative income components show a favourable trend.

The overall judgement of the analysis of % I a and % I b allows us to state that a global restructuring of costs is taking place in the company, which has led to a generalised recovery of efficiency in all the micro-sectors identified by the various costs. This circumstance is extremely positive in that it can be reasonably assumed that the favourable trend of production and administration costs can continue, further, over time with the well-founded hope that this trend will also affect the commercial area since, apart from sales and advertising expenses, all other costs of this management sector show favourable trends even if, within an area that, globally analysed, is characterised by an unfavourable profit trend.

Determination of % Ii: Identification of Implementation of Strategy Changes in The Five Characteristic Cost Areas

The % II's cannot, however, in any way help to develop the type of analysis described above because, having as reference the total area costs, it is never possible for their trend to provide important information helpful in understanding the trend in sales profitability. The % II analysis, on the other hand, is very useful for identifying the implementation of possible changes in area policy and strategy.

In the presence of a weight 'weight' inversion between two or more percentages, one can hypothesise a shift of policy implemented in the area under study. The highlighting, for example, of a reduction in % II of wages and a concomitant increase in % II of external consultancy could lead one to hypothesise outsourcing of specific company processes.

Let us analyse the % II of the company Ladybird and four-leaf clover Ltd:

Characteristic costs as a percentage of total area costs

Table No 11: Percentages II

	31/12/N		31/12/N+1	
Cost of Sale	12.001.504	100,000%	16.124.594	100,000%
Consumption fo raw materials	7.295.060	60,785%	10.134.030	62,848%
Wages	899.916	7,498%	1.010.784	6,269%
Administration Costs	2.043.466	17,027%	2.548.640	15,806%
Connsultings tech.	240.610	2,005%	284.860	1,767%
Energy	178.812	1,490%	193.480	1,200%
Maintenance	5.010	0,042%	7.820	0,048%
Leasing tech.	321.230	2,677%	350.860	2,176%
Indsutrial costs	366.980	3,058%	760.600	4,717%
General costs	518.480	4,320%	565.840	3,509%
Amortisation and deprec.	131.940	1,099%	267.680	1,660%
Administration Costs	1.284.281	100,000%	1.676.264	100,000%
Wages	524.951	40,875%	589.624	35,175%
Postal & tel. costs	135.660	10,563%	192.080	11,459%
Training and add.	2.840	0,221%	9.540	0,569%
Emuluments to diretors	14.170	1,103%	75.760	4,520%
Legal and cons. amm.	111.880	8,711%	178.160	10,628%
Representation costs	79.660	6,203%	74.960	4,472%
Data proc. Centre	45.180	3,518%	34.880	2,081%
Depreciation non tech.	369.940	28,805%	521.260	31,097%
Sales Costs	1.979.893	100,000%	3.964.080	100,000%
Wages	74.993	3,788%	84.232	2,125%
Commision	1.166.500	58,917%	2.240.400	56,518%
Sales costs	333.820	16,861%	585.030	14,758%
Advertising	335.100	16,925%	985.880	24,870%
Marketing research	32.500	1,642%	36.516	0,921%
Provisions for for doubtful accounts	36.980	1,868%	32.022	0,808%
Costi di ricerca e sviluppo	0	0,000%	0	0,000%
Overhead cost	0	0,000%	0	0,000%

Analysing % II is much more complex than for % I a and I b. It is necessary to have management support to verify whether or not the hypotheses identified have merit. To identify possible changes in strategy within each area, it is necessary to determine:

- 1) one cost percentage that increases and another that shows a reduction
- 2) verify that there can be interchangeability between the two costs
- 3) realise the two previous points simultaneously.

In the company Ladybird and four-leaf clover Ltd, the analysis of % II, supplemented by interviews with company management, led to the following conclusions.

- sales area: there was a change in policy in that commissions and sales expenses were replaced with advertising in year N+1;

-administration area: the reduction in salaries accompanied by an increase in non-technical depreciation and amortisation shows a change in strategy: some of the staff were replaced by IT structures that perform the work previously performed by employees. In addition, after a discussion with management, it could be stated that there was another change in strategy: the reduction in salaries with a concomitant increase in administrators' payments was attributable to a change in the division of high-level administrative tasks between employees and administrators. All budgetary analyses were delegated to the administrators and removed from the employees' competencies. As a result of this, there was a percentage reduction concerning the total area as some resigned or retired employees were not replaced as the administrators absorbed their competencies;

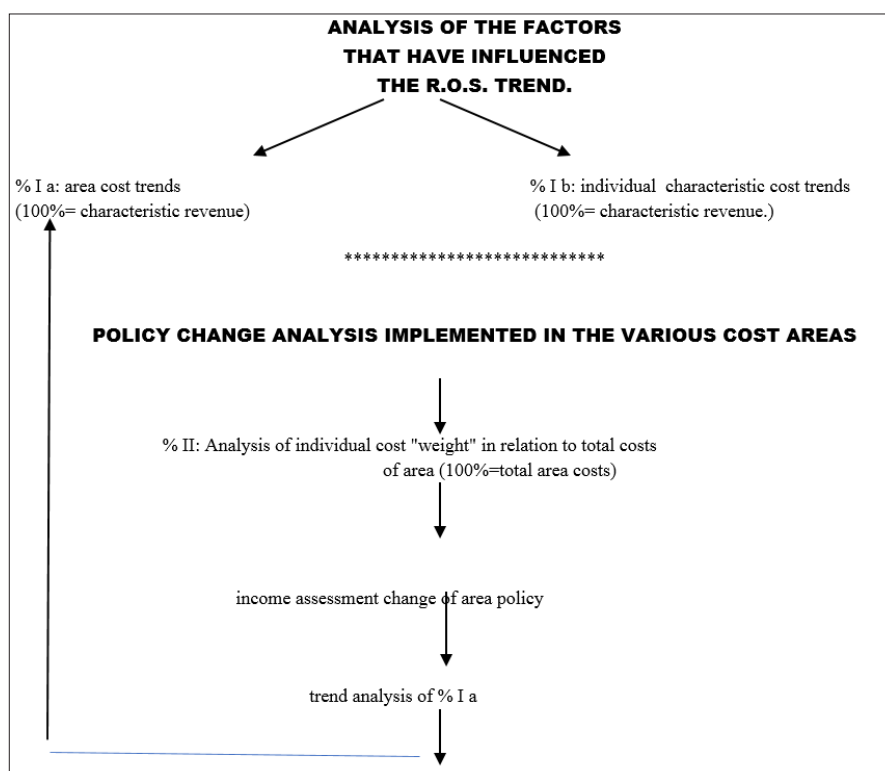
- production area (cost of sale): the decrease in leasing fees and the increase in depreciation show a change of policy in the management of long-term tangible assets: in the company Ladybird and four-leaf clover Ltd, leased assets were replaced, albeit minimally, with owned facilities. Since the management had confirmed that the miscellaneous industrial costs also included external consultancy and processing, the reduction of wages and the concomitant increase in various industrial costs could be identified as a change in strategy: the replacement of employees with outsourcing.

Management is interested in understanding whether the policy change, on a global level, had favourable or unfavourable earnings consequences. At this point, the question arises as to how it can

evaluate the new policy economically. To evaluate the economic impact of the policy changes shown by the % II analysis, it is necessary to analyse the trend of the % I as these show the existing proportion between area costs and total characteristic revenues. Based on the % I a trend, it can affirm that the changes in the strategy of the production (cost of sale) and administration areas have given positive income results (reduction of the % I a), while the change in strategy implemented in the commercial area has produced negative consequences in terms of ROS (the % I an of the commercial area has increased, highlighting a negative income trend) and has therefore reduced the profitability of sales (and, indirectly, the overall profitability of the company).

To conclude, this brief examination of the operational tools helps analyse the components of ROS. It is worth emphasising that, due to the inherent and unachievable limitations of balance sheet and/or budget values, results are measured on the basis of the data set out in the documents under analysis. It is possible, for example, that, following the breakdown of budgets referring to financial years N and N+1, it is concluded that a hypothesised policy change in a specific area causes a negative impact on the company's planned profitability. It is obvious how such a conclusion does not consider, for obvious reasons, what, hypothetically, could occur in the financial years following the period N+1. It cannot, therefore, rule out that the results of potential policy changes will develop results in financial years after those under analysis. This, however, is not a limitation of the indices considered here but rather a characteristic element of the study of the balance sheet and/or budget data. Therefore, these considerations must t into account in order to be able to make an overall judgement on possible changes in corporate policy. It is undeniable, however, that the analysis of the I % I represents the tool that allows the profitability assessment of the policies implemented by the company on the data of the financial years to which the balance sheets and/or budgets refer and studied through the analysis of the % II.

Table 12: Analisi Dei Fattori Che Influenzano L'andamento Del Ros



Limits of the Profit Analysis of the 'Return on Sales': Financial and Monetary Analysis of the 'Return on Sales'

Although carried out in an analytical manner as described above, the profitability analysis of sales cannot be said to be sufficient for the overall understanding of the 'return' on core earnings. If the deepening of the 'return' on sales were to end with the analysis of ROS and % I a and I b, with the completion of % II, incorrect and misleading conclusions could be drawn.

In the case of Ladybird and four-leaf clover Ltd, for example, based on the data illustrated up to this point, one would be inclined to affirm that the return on sales appears to be incredibly increasing and that, consequently, the overall judgement on sales and the costs that have produced them cannot but be highly favourable, without the presence of any particular shadows except for the unfavourable profitability of the commercial sector which, on the contrary, should be the driving area of revenues.

But, as we shall see in the following pages, the situation is not as flourishing as it may appear at the end of this in-depth profitability analysis.

The control of the sales 'return' cannot be said to be complete if an in-depth examination of the financial and monetary dimension of revenues is missing to supplement the income analysis. The analysis of sales profitability represents, without doubt, an indispensable element of knowledge so that it can implement the overall economic analysis of the company for a critical in-depth examination of every area connected with company profitability. While this aspect is of fundamental importance, it reveals its deficiency in terms of the overall analysis of the company's situation. Examining, from a financial and monetary perspective, the various aspects of company management is an indispensable step for managers to control the consequences of their every act/action effectively. Any operation generally involves more than one management aspect, and it is precise that carrying out a mere income analysis appears deficient and reductive.

In this regard, it should be emphasised how, in the corporate operating environment, economic analysis is often erroneously considered predominant, concerning any other in-depth analysis, with the consequence that, frequently, companies find themselves having to deal with financial and liquidity crises due to an evident lack of analysis of the monetary/financial aspects of the operations carried out by company management.

Financial analysis, as well as income analysis, must be performed both at the planning stage and at the final reporting stage. An in-depth financial analysis carried out only at the planning stage or only at the final reporting stage would represent an analysis with reduced significance and lacking managerial usefulness since a practical financial analysis envisages

- 1) the investigation of the existence of a financial/financial-monetary balance identified at the forecast stage;
- 2) the analysis of the balance above actually achieved and monitored on final data;
- 3) the comparison between what was planned and what was achieved.

The absence of even one of the above steps results in a "misleading" and, consequently, fallacious financial analysis.

The inter-dependence between income values and data relevant from a financial and monetary point of view is inherent in the

accounting system adopted in our country. The analysis of the correlations that can identify between negative/positive income items and financial/monetary values allows a complete understanding of the financial situation, understood in a global sense that the company must manage at the planning stage or face at the final accounting stage. The comparison between the two areas (ex-ante and ex-post) allows a judgement to be made on the degree to which the financial balances the company set out to achieve have been achieved.

In the ex-ante phase, the study of financial equilibrium is carried out through the so-called financial planning, which identifies, in substantial terms, the degree of the financial feasibility of the company's economic projects. An economic budget is only acceptable if it is correlated with a balanced financial budget. Without such integration and balance harmony, it will reject the planning outright. The presence of only one 'management harmony' (income or financial), in the absence of the other, in the medium term, causes, in most cases, the imbalance of the area that it previously balanced. This makes a preliminary analysis of the financial feasibility of economically acceptable plans a sine qua non for the general business budget to be accepted and shared by company management.

From a financial point of view, it must also analyse the 'return' of sales revenues from a financial/monetary as well as an income point of view using an instrument that allows, on the one hand, the verification of the existence of a planned balance and, on the other hand, the possibility of a comparison between planned financial/monetary data and realised financial/monetary values.

Such a figure can be represented by a ratio comparing sales with their return expressed, this time, in financial rather than income terms. The analysis of such a value makes it possible to define a judgement on the financial aspect of the data included in the economic budget and to compare a specific figure that summarises the financial balance identified at the planning stage and a value, just as specific, that highlights, at the final accounting stage, the actual realisation of such a balance.

Since the financial output of sales is represented by cash flow, the ratio measuring the financial return of sales must be structured as follows:

$$\text{Financial/monetary return on sales} = \frac{\text{Cash flow}}{\text{Sales revenue net of returns, discounts and rebates}}$$

Determining the index identified above requires the precise definition of the concept of cash flow, which, as is well known, can take on different connotations depending on the flow concept taken as the basis for dynamic financial analysis. Although flow concepts can be varied, we can state that, for business analysis, the two main and most significant concepts are as follows:

Characteristic Financial Flow Expressed in Monetary Terms

The most relevant notion of valuable flow for analysing a company's financial dynamics is, without a doubt, connected to the concept of liquidity understood as a synonym for the idea of change in cash and active bank. Indeed, the writer considers this aggregate more significant than other liquidity aggregates, which, at least in theory, could include other accounting items such as bank overdrafts. For an analysis of the financial situation, it is

considered appropriate to consider the passive bank as a debt of a financial nature, comparable, for example, to a mortgage or other loan from third parties. For this reason, it is considered preferable not to include the passive bank in the liquidity aggregate concerning which the cash flow calculation is made. It is evident that if the flows are studied in terms of liquidity, the analyst's focus will only be on those movements that have created changes in the cash and active bank.

At present, this is the only concept of cash flow that, on an operational level, is meaningful since both international accounting standards (IAS 7 Cash Flow Statement) and the Italian national accounting standards issued by the Italian Accounting Standards Board (Accounting Standard No. OIC 10 Cash Flow Statement), have decreed that the only notion of cash flow of managerial interest is monetary. Therefore, the flow emanating from the performance of core business activities can only be expressed in terms of liquidity.

$$\text{Monetary return on sales} = \frac{\text{Characteristic monetary cash flow}}{\text{Sales revenue net of returns, discounts and rebates}}$$

Characteristi Cash Flow Expressed in Financial Terms

This cash flow concept is outdated to accounting developments. Suppose one wishes to determine a broader financial flow than monetary flow, i.e., trade receivables and payables. In that case, deciding on the so-called net working capital flow is necessary. This is generally calculated with reference only to items related to the performance of core business activities and, consequently, defined as net working capital in the strict or characteristic sense. When flows are studied in terms of working capital, the analyst's focus is only on movements that have created changes in characteristic net working capital, i.e. short-term items arising from the company's typical business activity.

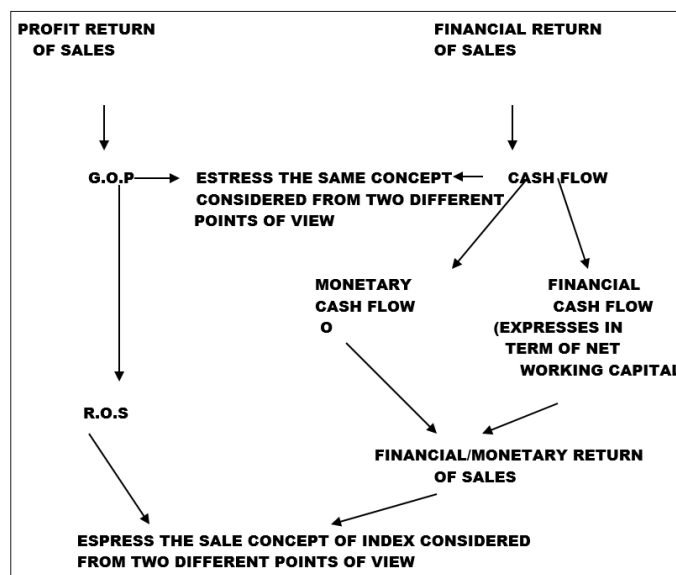
Since working capital focuses on short-term assets and liabilities, it is evident that the characteristic net working capital is made up of all items inherent to the typical activity marked by maturities, collection or payment of a current or short-term nature. In simplified and synthetic terms, it can be stated that the Net Working Capital (NWC) is formed by the sum of cash, trade receivables and inventories net of trade payables.

It has already been pointed out that developments in accounting have overtaken this flow of Net Working Capital characteristic. It has been noted that the financial flow, resulting exclusively from the increase in trade receivables, does not possess information capabilities that can help the operatives improve management efficiency and effectiveness. For example, many receivables and a significant flow expressed in terms of this item highlight a situation that is only favourable since management must be based, above all, on the creation of monetary inflows or, in any case, sources well over requirements. This is why liquidity flows have completely replaced characteristic net working capital flows. Suppose, however, the person conducting the analysis fully understands the real significance of flows expressed in financial terms. In that case, it is possible that from an in-depth analysis of these dynamic values, the analyst can deduce helpful information for decision-making and management purposes. It is for this reason that, while being aware that, at present, the only flows recommended by national (OIC 10 Statement of Cash Flows) and international (IAS 7 Cash Flow Statement) accounting standards for external communication are those of cash/liquidity, it is considered useful to make a brief mention also of financial flows determined according to a broader concept of corporate liquidity alone. Such an analysis aims to correctly interpret the value of interest, carefully avoiding attributing incorrect meanings to the cash flows determined in the accounts based on the impact that such matters have created on the characteristic net working capital.

Characteristic Monetary Cash Flow and Gop

Cash flow thus represents the flow, monetary or financial, from the performance of the typical business activity. Wanting to make a comparison with purely income values, it can say that cash flow identifies the monetary or financial aspect of income from typical operations (GOP). Consequently, cash flow represents the financial or monetary side (depending on whether the parameter is liquidity or characteristic net working capital) of the income flow related to the performance of the company's characteristic activity. Consequently, the ROS and the index derived from the contrast between characteristic financial or monetary flow and typical revenues identify two sides of the same coin. Both focus on the same issue, which, however, in one case is analysed according to income criteria (ROS) and in the other according to a broader financial perspective (characteristic NWC flow) or restricted to the monetary aspect only (characteristic monetary cash flow).

Table 13 : Comparison of GOP and Financial and Monetary Cash Flow



Cash Flows and Revenue-Related Cash Flows: Inter-Relationships

As we have already had to point out, doctrine, practice, and now also national and international accounting standards agree in considering cash flows prevailing, from an informative point of view, over those expressed in terms of net working capital, so much so that both national and international accounting standards no longer address the issue of flows described in terms of NWC. Despite this, and even though the former is more common than the latter, to correctly determine the ratios for measuring the financial return on sales, it is necessary to fully understand the interconnections between the two types of values concerning business dynamics. Only a perfect understanding of the interrelationships between cash flows and characteristic net working capital flows allows the correct interpretation of the data determined in the analysis to measure the impact of sales on the company's overall financial situation.

To facilitate the calculation of the values mentioned above, it is appropriate to highlight the connections between the two notions of characteristic cash flow (financial and monetary). The first concept is often referred to as monetary cash flow or cash flow in the narrower sense. As we have already pointed out, cash flow can be understood as the flow of typical operations expressed in monetary or financial terms. On the other hand, the cash flow associated with characteristic operations defined in terms of net working capital is known as cash flow in the broader sense (or described in financial terms). Since the characteristic net working capital includes cash (and active bank), the transition between the two types of cash flow must take this value into account. The change from financial to cash flow can be made by algebraically adding to the first value, either the characteristic NWC without cash or the characteristic NWC including cash adjusted, in turn, by the change between initial cash and bank and final cash and bank.

These concepts can summarise as follows:

Table No 14: Financial Cash Flow and Monetary Cash Flow

FINANCIAL CASH FLOW	↔	FINANCIAL CASH FLOW
+/- Δ CHARACTERISTIC NWC		+/- CHARACTERITIC NWC
+/- Δ CASH		WITHOU CASH
MONETARY CASH FLOW		MONETARY CASH FLOW

The above considerations make it possible to illustrate a different method of determining cash flow from the one referred to up to this point.

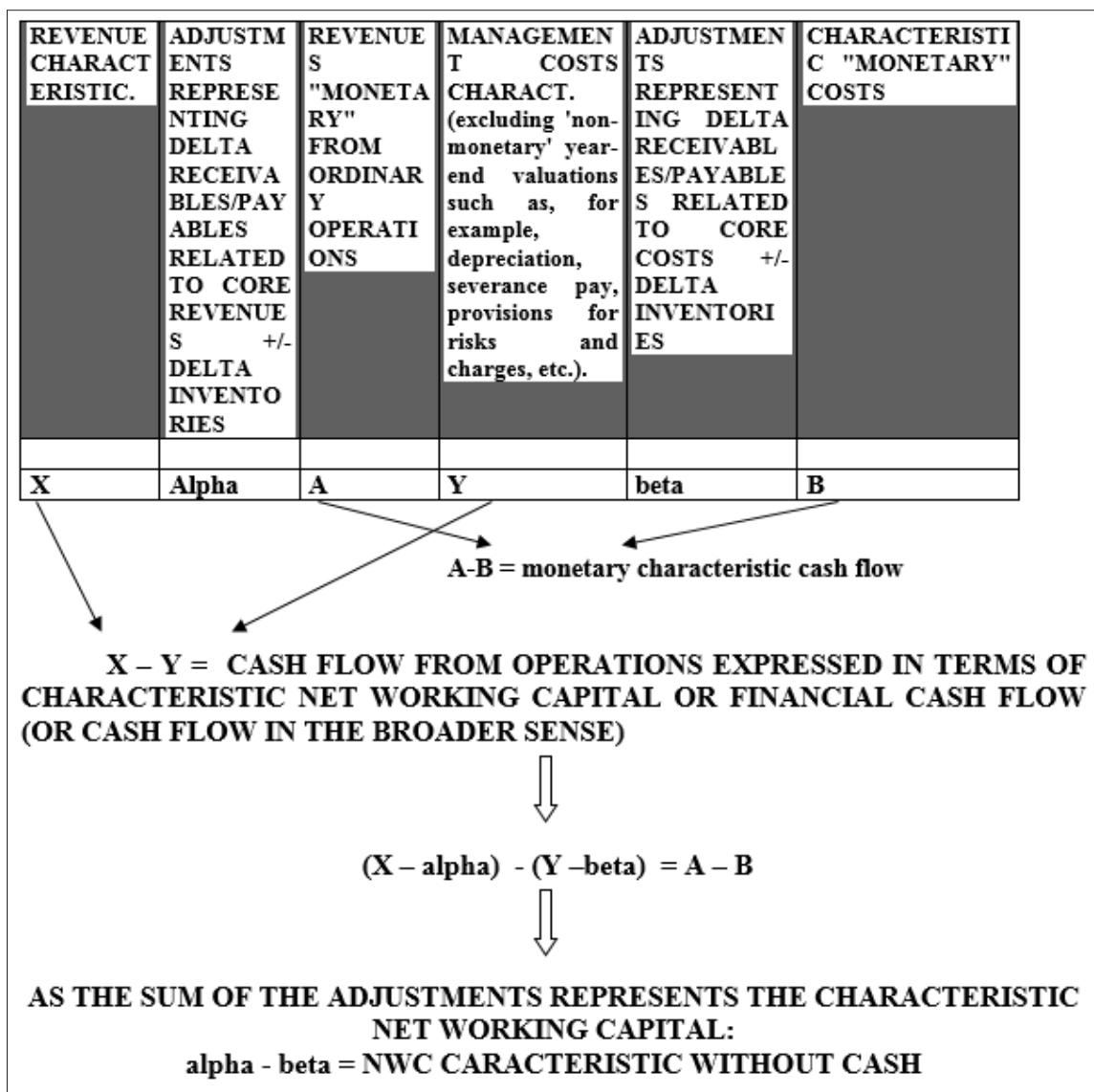
In the preceding pages, the cash flow generated by typical operations has always been considered a value determined through the summation of 'monetary' or 'financial' costs and revenues. In such a logic, the cash flow of typical operations represents, in substance, the result of the aggregation of positive and negative income components expressed respectively in monetary terms, if the flow to be determined is monetary, or identified in financial terms if the cash flow of interest is the financial flow of typical operations in the broader sense.

However, cash flow can also be determined by a calculation technique that considers the inter-relationships existing between characteristic net working capital, cash flow and operating income. Due to the identifiable inter-relationships between accounting values, the sum of characteristic operating revenues corresponds to the algebraic sum of 'cash' revenues and corresponding adjustments by accounting and mathematical definition. In the same way, total core business costs equal the sum of monetary costs and related adjustments. This implies that it can determine the sum of typical operating revenues expressed in monetary terms either directly by considering the 'monetary' revenues and costs or by algebraically adding the corresponding adjustments to the typical operating revenues and costs. The sum of typical revenues and expenses expressed in 'monetary' terms identifies the characteristic monetary cash flow (or cash flow in the narrower sense). The sum of the above typical operating revenues and expenses gives rise to the determination of the characteristic cash flow expressed in net working capital. The adjustment items, taken together, represent the characteristic net working capital.

As shown above, it is, therefore, possible to state that the cash flow represents the algebraic sum of the flow of characteristic operations expressed in financial terms and the characteristic net working capital.

Table 15: Inter-Relationship Between Positive and Negative Income Components and Monetary and Financial Cash Flows

Generalisation of this principle leads to the following mathematical formulation:

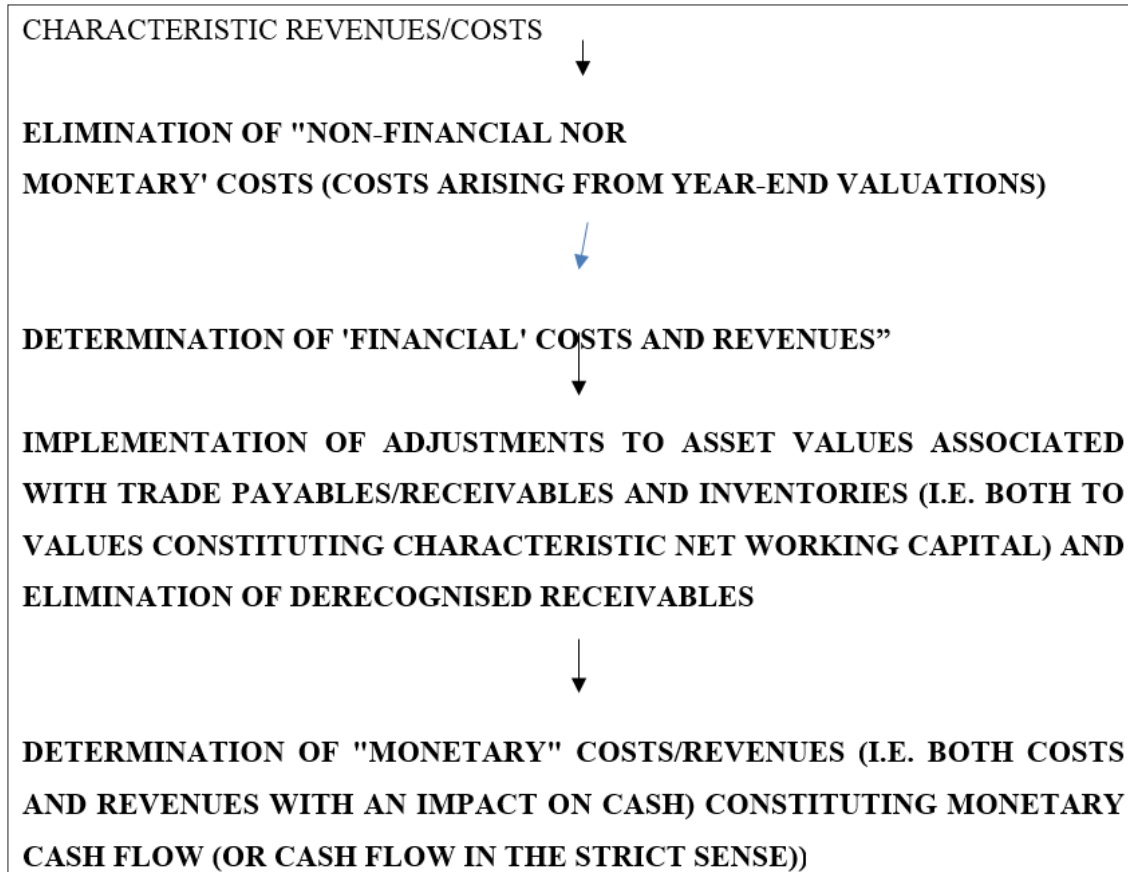


Shifts from GOP to Financial or Monetary Cash Flow

At this point, it is necessary to ask what connection there is between financial cash flow expressed in net working capital and operating income from characteristic operations (GOP). The financial flow as a dynamic element impacting the characteristic net working capital (cash flow in the broad or financial sense) is represented by the costs and revenues connected with the characteristic business operations from which, however, all typical negative income components that do not influence cash, trade receivables/payables and inventories are excluded. Therefore, costs arising from year-end valuations are not considered in the context of financial cash flow, which, on the contrary, must be deducted from GOP.

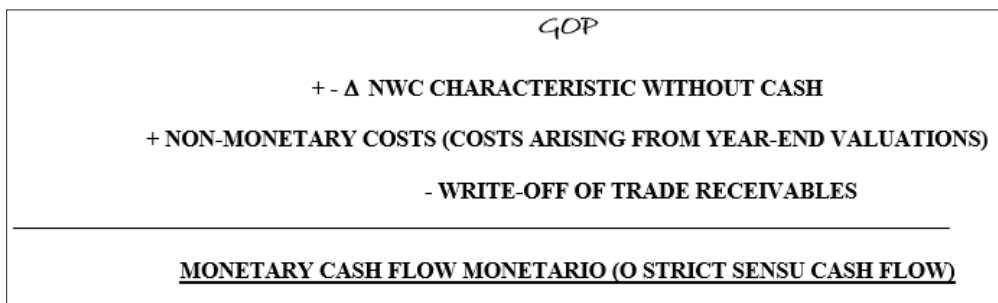
To summarise, if one wishes to understand the steps leading to the calculation of cash flow from GOP, one can summarise the principle in these terms:

Table 16: Transition from Typical Costs and Revenues to Cash Flows



As a result of the interconnections that can be identified between GOP, financial cash flow and monetary cash flow made explicit in the above diagram, it is possible to generalise the principle in these terms:

Table 17: Transition from GOP to Characteristic Monetary Cash Flow



The last logical step is necessary to understand the methodology that, indirectly, leads to the calculation of the cash flow starting from a notion of income that which allows us to determine the cash flow of the characteristic management expressed in terms of liquidity considering, as an initial data, the balance sheet profit.

Since the profit for the year is obtained by algebraically adding to the GOP all capital, financial, non-characteristic by definition and tax costs and revenues, it is evident that, if the starting value were the income for the year, the monetary cash flow can be determined by adding to this value, all non-characteristic costs and revenues and any non-monetary costs resulting from year-end valuations.

It is possible to summarise this principle with this simple accounting formula:

Table 18: Transition from Net Profit to Characteristic Monetary Cash Flow

NET PROFIT	
+	
+ NON-MONETARY COSTS (COSTS ARISING FROM YEAR-END VALUATIONS	
+ FINANCIAL, CAPITAL, NON-RECURRING BY DEFINITION AND TAX COSTS	
- -FINANCIAL, CAPITAL, NON-RECURRING BY DEFINITION REVENUES	
-	
- WRITE-OFF OF TRADE RECEIVABLES	
+/- Δ CHARACTERISTIC NWC WITOUT CASH	
<hr/>	
MONETARY CHARACTERISTIC CASH FLOW	

Ratios Analysing the ‘Return on Sales’ Expressed in Financial and Monetary Terms

In conclusion of this brief examination of the ways of determining cash flow, understood in the financial sense or expressed in monetary terms, it can be stated that the control of the financial return on sales can be implemented through the use of the following two ratios:

Table 19: Financial Return Finanziario on Sales

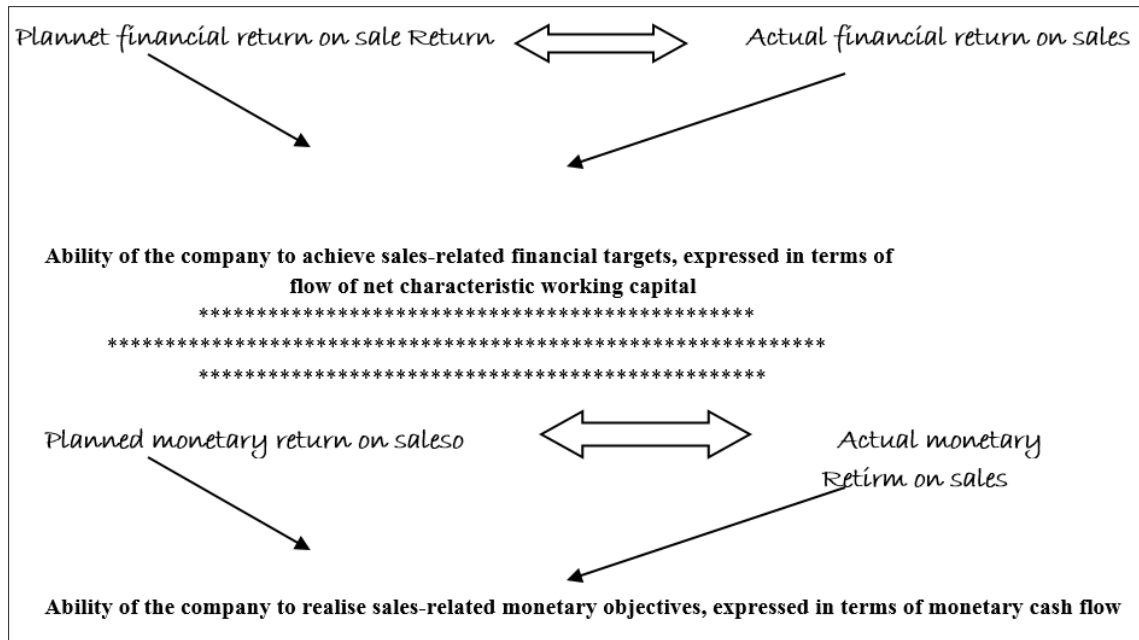
FINANCIAL RETURN ON SALES	
	Financial Cash flow espresses in terms of NWC
Financial return on sales (in terms of NWC flows = -----	
	Characteritic Revenues

Table 20: Return Monetario Delle Vendite

MONETARY RETURN ON SALES	
	Monetary cash flow
monetary return on sales =	<hr/>
	Characteritic Revenues

By comparing the planned financial/monetary return with the index determined ex-post on final data, the degree of achievement of the financial and monetary targets realised, by the company management, as a result of the implementation of the sales policies set out in the company programmes, is evident.

Table 21: Comparison of Planned and Actual Financial and Monetary Return on Sales



Analysis of Monetary ‘Return on Sales’ in Ladybird and Four-Leaf Clover Ltd

Since the most valuable information is deduced from the development of monetary flows and considering the circumstance that accounting standards no longer comment on NWC flows, the analysis of the “return on sales” expressed in terms of flows in the enterprise Ladybird and four-leaf clover Ltd will be carried out only based on the development of monetary cash flows.

To make a complete judgement on the ability of sales to produce profitability and cash flows, we will complement the ROS analysis carried out above with the determination and interpretation of the trend of the index, comparing characteristic cash flow and typical revenues.

The first step in performing such an analysis is determining the typical cash flow. As also pointed out in IAS 7 Cash flow statement and Italian National Accounting Standard No. 10 Cash Flow Statement, it can calculate cash flows by applying the direct or indirect method. This paper will use the direct form as it is considered to be more transparent and more informative. To determine the characteristic cash flow, we will, therefore, algebraically add together the receipts from typical revenues and the payments associated with the costs of characteristic operations. It is evident that this calculation requires that the following be disregarded

- (a) elements extraneous to typical business activity;
- (b) non-monetary costs;
- (c) non-monetary revenues.

It must determine the receipts of typical revenues and payments associated with the costs of typical operations by adjusting the revenues and costs of interest with the balance sheet values that affected the amount received or paid. These balance sheet values result from the difference between the amounts at the beginning and the end of the year under analysis. For this reason, in the table of the non-reclassified balance sheet, the values at 12/31 of year N-1 have been shown, representing the figures at 1/1 of year N.

The two administrative periods that will be considered are the financial years N and N+1, i.e. the years about which the ROS analysis was carried out.

Table 22: Determinazione Del Cash Flow Monetario Caratteristico es. N e n+1 Impresa Ladybird and Four-Leaf Clover ltd

	Receipts year N (incoming flows)	Payments year N (outgoing flows)	Cash flow mon. car.year N	Receipts year N+1 (incoming flows))	Payments year N+1 (outgoing flows)	Cash flow mon. car.year N+1
.RECEIPTS FROM TYPICAL REVENUES	18.513.480*			23.531.128*		
SALARIES		1.499.860			1.684.640	
COMMISSIONS		1.166.500			2.240.400	
SALARIES TEC.		2.043.466			2.548.640	
PURCHASES OF ..RAW MAT...E		6.066.900**			9.999.240**	
SALES EXPENSES		333.820			585.030	
POSTAGE EXPENSES TEL.		135.660			192.080	
ADVERTISING		335.100			985.880	
TRAINING. AND ADD.		2.840			9.540	
CONSULTANCY TECH.		240.610			284.860	
EMOLUM. ADMIN.		14.170			75.760	
MARKET RESEARCH		32.500			36.516	
LEGAL & CONS. EXPENSES		111.880			178.160	
REPRESENTATION EXPENSES		79.660			74.960	
ENERGY		178.812			193.480	
MAINTENANCE		5.010			7.820	
LEASING TECN.		321.230			350.860	
IND. DIVERSIES		366.980			760.600	
DATA PROCESSING CENTRE DATA PROCESSING		45.180			34.880	
GEN. COSTS		518.480			565.840	
monetary characteristic CASH FLOW .			5.014.822			2.721.942

.Legend

* the flow of collections derives from the sum of sales revenues, Δ customers, Δ advances from customers and the write-off of receivables through the allowance for doubtful accounts

** the flow of payment of raw materials derives from the sum of raw material purchases, Δ trade suppliers and Δ advances to trade suppliers.

The determination of the characteristic cash flow allows the determination of indices for the years N and N+1 derived from the contrast between cash flow and typical revenues. This index shows the ability of the company's revenues to generate cash flow.

Table 23: Index of Sales' Ability to Generate Monetary Characteristic Cash Flow

Ratio	Formula	Year N	Year N+1	Summary judgement on the performance of the ratio
Index of sales' ability to generate monetary characteristic cash flow	Monetary Characteristic Cash flow	$\frac{5.014.822}{15.359.280} = 32,65\%$	$\frac{2.721.942}{22.443.460} = 12,12\%$	↙ Very negative trend
	Characteristic Revinese			

Only the calculation of the index mentioned above can investigate the ability of sales to create cash inflows, which are the lifeblood of business operations. An analysis of the trend of the ratio that highlights the capacity of sales to produce cash flow shows how, from year N to year N+1, there was a considerable deterioration of this capacity (from 32.65% to 12.12%). Suppose the analysis of ROS indicates a notable improvement at the income level. In that case, further investigation through the index comparing the characteristic cash flow with sales shows a significant worsening in the company's ability to realise cash flows through characteristic sales revenues. This is highly negative, as the dynamic financial situation of the company is affected significantly negatively by such a cash flow trend.

Conclusions

This case study demonstrates how the analysis of sales 'income return' through ROS is indispensable but insufficient. Suppose such an analysis is not supplemented by determinations of monetary and financial flows interconnected with sales through the performance of the characteristic activity. In that case, the risk is to express a judgement on the return on sales that is not meaningful, misleading and, consequently, erroneous.

The analysis of the "return on sales" using the ROS and the deepening percentages I a, I b, and II are, therefore, only the first step in a study of the ability of company sales to support company management.

But suppose this step is not followed by an in-depth financial-monetary analysis showing the ability of revenues to realise characteristic cash flow and, therefore, cash inflows. In that case, the study can say ultimately. Moreover, an even more dangerous circumstance, such an incomplete analysis lays the groundwork for making judgements on the 'return on sales as a whole, which are erroneous, misleading and, consequently, extremely dangerous for the company's decision-making and management process that is based on the data of the in-depth 'return' derived from characteristic revenues [1-114].

References

1. Adelberg AH (1979) A Methodology for Measuring the Understandability of Financial Report Messages, *Journal of Accounting Research* 17: 565-592.
2. Adelberg AH (1983) The accounting syntactic complexity formula: a new instrument for predicting the readability of selected accounting communications. *Accounting and Business Research*, summer 162-175.
3. Adelberg AH, Razek JR (1984) The Cloze Procedure: A Methodology for Determining the Understandability of Accounting Textbooks. *The Accounting Review* 59: 109-122.
4. Albrecht WS, d Sack RJ (2001) *Accounting Education: Charting the Course Through a Perilous Future*, Accounting Education Series 16. American Accounting Association.
5. Alexander D, Britton A, Jorissen A (2007) *International financial reporting and analysis*, Thomson.
6. Alexander D (1993) A European true and fair view? *European accounting review* 2.
7. Alexander D, Schwencke HR (1997) Accounting changes in Norway: a description and analysis of the transition from a continental towards an anglo-saxon perspective on accounting. 20th Annual Congress of the European Accounting Association. Graz, Austria.
8. Alexander D, Schwencke HR (2003) Accounting change in Norway, *European Accounting Review* 12: 549-566.
9. Alexander D, Jermakowicz E (2006) A true and fair view of the principles/rules debate, *Abacus* 42.
10. Alexander D, Nobes C (2013) *Financial accounting: an international introduction*, Pearson.
11. Ankarath N, Mehta KJ, Ghosh TP, Alkafaji YA (2010) *Understanding IFRS fundamentals: international financial reporting standards*, John Wiley and Son.
12. Avi MS (2017) in *Management accounting volume II. Cost analysis*, EIF-e.book
13. Avi MS (2018) Understandability in Italian Financial Reporting and jail: a link lived dangerously, *European Journal of Economics, Finance, & Administrative Science* 99: 30.
14. Ballwieser W, G Bamberg MJ, Beckmann H, Bester M, Blicke R, et al. (2012) *Agency theory, information, and incentives*. Springer Science & Business Media.
15. Baines A, Langfield-Smith K (2003) Antecedents to Management Accounting Change: a Structural Equation Approach, *Accounting, Organizations and Society* 28: 675-698.
16. Barth ME (2008) Financial Reporting Transparency. *The Journal of Accounting, Auditing, and Finance* 23: 173-190.
17. Barth ME (2014) Measurement in Financial Reporting: The Need for Concepts, *Accounting Horizons* 28: 331-352.
18. Barret E, Fraser LB (1977) Conflicting roles in budgeting for operations. *Harvard Business Review* 137-146.
19. Baskerville RF, Rhys H (2014) A Research Note on Understandability, Readability and Translatability of IFRS. *Accademic Paper*.
20. Beest F, Braam G, Boelens S (2009) Quality of Financial Reporting: measuring qualitative characteristics. NiCE Working Paper109-108.
21. Benston GJ, Bromwich M, Litan RE, Wagenhofer A (2006) *Worldwide financial reporting: The development and future of accounting standards*. Oxford University Press.
22. Boer G (2000) Management Accounting Education: Yesterday, Today and Tomorrow. *Issues in Accounting Education* 15: 313-321.
23. Bunce P, Fraser R, Woodcok L (1995) Advanced budgeting: a journey to advanced management system. *Management Accounting Research* 6: 253-265.
24. Burchell S, Clubb C, Hopwood A, Hughes J, Nahapiet J (1980) The roles of accounting, organizations and society, *Accounting, Organizations and Society* 5: 5-27.
25. Burchell S, Clubb C, Hopwood AG (1985) Accounting in its social context: Towards a history of value added in the United Kingdom. *Accounting, Organizations and Society* 10: 381-413.
26. Cadez S, Guilding C (2008a) An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting. *Accounting, Organizations and Society* 33: 836-863.
27. Chenhall RH (2008) Accounting for the Horizontal Organization: A Review Essay. *Accounting, Organizations and Society* 33: 517-550.
28. Chloe Y, Kan C (2021) Budget depreciation: when budgeting early increases spending, *Journ of consumer research* 47: 937-958.
29. Cristea SM, Saccon C (2008) Italy between applying national accounting standards and IAS/ IFRS, in *Romanian Accounting Profession's Congress* (Bucharest: CECCAR).
30. Covalleski M, Dirsmith M, Samuel S (1996) Managerial Accounting Research: the Contributions of Organizational and Sociological Theories, *Journal of Management Accounting Research* 8: 1-35.

31. Covalleski MA, Evans JH III, Luft JL, Schields MD (2003) Budgeting research: Three theoretical perspectives and criteria for selective integration., *Journal of Management Accounting Research* 15: 3-49.
32. Deatherage RH (2021) Security on a Budget, in *Security Operations*. Taylor and Francis Group.
33. Delvaille P, Ebbers G, Saccon C (2005) International financial reporting convergence: evidence from three continental European countries. *Accounting in Europe* 2: 137-164.
34. De Franco G, Kothari SP, Verdi RS (2011) The Benefits of Financial Statement Comparability. *Journal of Accounting Research* 49: 895-931.
35. Di Pietra R, McLeay S, Riccaboni A (2001) Regulating Accounting within the Political and Legal System. *Contemporary Issues in Accounting Regulation*, Chapter 3: 59-78.
36. Doxey CH (2021) *The controller's Toolkit*. Wiley.
37. Ekholm B, Wallin J (2011) The Impact of Uncertainty and Strategy on the Perceived Usefulness of Fixed and Flexible Budgets. *Journal of Business Finance and Accounting* 38: 145-164.
38. Epstein MJ, Manzoni JF, Dávila A (2005) *Performance Measurement and Management Control: Innovative Concepts and Practices* . Emerald Books 20.
39. Epstein MJ, Manzoni JF (2010) *Performance Measurement and Management Control : Superior Organizational Performance*. in *Studies in Managerial and Financial Accounting* Emerald Books 14.
40. Ewer Sid R (2007) Transparency and Understandability. But for Whom? *The CPA Journal*; New York 77: 16-22.
41. Frow N, Margisson D, Odgen S (2010) Continuous budgeting: Reconciling flexibility with budgetary control. *Accounting, Organizations and Society* 35: 444-461.
42. Ghandour D (2021) Analytical review of the current and future directions of management accounti and control system. In *European Journal of Accounting, Auditing and Fncance Research* 9: 42-53.
43. Gharairi AM (2020) Management control and performance. *International Journal of Management* 11: 2013-2023.
44. Godfrey JM, Chalmers K (2007) *Globalisation of Accounting Standards*, Edgar Elgar.
45. Haller A (2002) Financial accounting developments in the European Union: past events and future prospects. *European Accounting Review* 11: 153-190.
46. Haller AP, Walton B, Raffournier B (2003) *International accounting*. Cengage Learning EMEA.
47. Haller A, B Eierle (2004) The adaptation of German accounting rules to IFRS: a legislative balancing act. *Accounting in Europe* 1: 27-50.
48. Hope J, Fraser R.(1997) Beyond budgeting... Breaking through the barrier to the third wave. *Management Accounting* 75: 20-23.
49. Hope J, Fraser R. (2000) Beyond budgeting. *Strategic Finance* 82: 30-35.
50. Hope J, Fraser R (2003) Who needs budgets? *Harvard Business Review* 81: 108-115.
51. Hopwood AG (1972) An Empirical Study of the Role of Accounting Data in Performance Evaluation. *Journal of Accounting Research* 10: 156-182.
52. Hopwood AG (1973) An accounting system and managerial behavior. Lexington Books.
53. Hopwood AG (1974) Leadership Climate and the Use of Accounting Data in Performance Evaluation. *The Accounting Review* 49: 485-495.
54. Hopwood AG (1976) *Accounting and human behavior*. Prentice Hall.
55. Hopwood A (1987) The archeology of accounting systems, *Accounting, organizations and society* 12: 207-234.
56. Hopwood AG, Peter Miller (1994) *Accounting as social and institutional practice*. Cambridge University Press 24.
57. Hopwood AG (1999) Situating the practice of management accounting in its cultural context: an introduction. *Accounting Organizations and Society* 24: 377-378.
58. Hopwood AG (1983) On trying to study accounting in the context in which operates. *Accounting, Organizations and Society* 8: 287-305.
59. Hopwood AG (1990) Ambiguity, Knowledge and Territorial Claims: Some Observations on the Doctrine of Substance over Form. *British Accounting Review* 1: 79-87.
60. Hopwood AG (1990) Accounting and the pursuit of efficiency. *Accounting, Auditing & Accountability Journal* 1: 238-249.
61. Hopwood AG (2000) Understanding financial accounting practice. *Accounting, Organizations and Society* 25: 763-766.
62. Hopwood AG (2007) Whither accounting research? *The Accounting Review* 82: 1365-1374.
63. Hopwood AG, Chapman CS, Shields MD (2007a) *Handbook of management accounting research* 1.
64. Hopwood AG, Chapman CS, Shields MD (2007b) *Handbook of management accounting research* 2.
65. Hopwood AG (2008) Changing Pressures on the Research Process: On Trying to Research in an Age when Curiosity is not enough. *European Accounting Review* 17: 87-96.
66. Hopwood AG (2009) Accounting and the environment. *Accounting, Organizations and Society* 34: 433-439.
67. Hopwood AG (2009) The economic crisis and accounting: Implications for the research community. *Accounting, Organizations and Society* 34: 797-802.
68. Hopper A, Burns J, Yazdifar M (2004) Management accounting education and training: putting management in and taking accounting out, *Qualitative Research in Accounting and Management* 1: 1-29.
69. Horngren CT, Sundem GL, Stratton WO (2013) *Introduction to Management Accounting*, Pearson.
70. Jonas GJ, Blanchet J (2000) Assessing Quality of Financial Reporting. *Accounting Horizons* 14: 353-363.
71. Jensen MC (2001) Corporate budgeting is broken – let's fix it. *Harvard Business Review* 89: 94-101.
72. Johannessen JA (2021) *Continuous change and communication in knowledge management*. Emerald Publishing. 73.
73. Jones M, Smith M (2014) Traditional and alternative methods of measuring the understandability of accounting narratives. *Accounting, Auditing & Accountability Journal* 27: 183-208.
74. Kaplan RS, Anderson S (2007) Time-driven activity-based costing. A simpler and more powerful path to higher profits. Harvard business school press.
75. Lewandoski R, Goncharuk AG, Deforowsky JJ (2020) Ideology, trust, and spirituality: A framework for management control research in industry 4.0 era, *The futur of Management Industriy 4.0 and Digitalization* 72-91.
76. Libby T, Lindsay M (2010) Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research* 21: 56-75.
77. Katz B (2019) *The Acquisition Budget*, Routledge.
78. Kuhnle A, Kaiser JP, Theiss F, Stricker NN, Lanza G (2021) Designing and adaptive production control system using reinforcement learning. *Journal of Intelligent Manufacturing* 32: 855-876.
79. Miller GJ, Hildreth WB, Rabin J (2019) *Performance-Based*

- Budgeting, Routledge.
80. Mintzberg H, Qatrs JA (1985) of strategies, deliberate and emergent. *Strategic Management Studies Journal* 6: 157-172.
 81. Moisello AM (2021) ABC:evolution, problems of implementation and organizational variable, *American Journal of Industrial and Business Management* 2: 55-63.
 82. Morton JR (1974) Qualitative Objectives of Financial Accounting: A Comment on Relevance and Understandability. *Journal of Accounting Research* 12: 288-298.
 83. Mouritsen J, K Kreiner (2016) Accounting, decisions and promises. *Accounting, Organizations and Society* 49: 21-31.
 84. Morrel J (2018) *How to Forecast: a Guide for Business*. Routledge.
 85. Nillson S (1997) Understandability of Narratives in Annual Reports. *Journal of Technical Writing and Communication* 27: 361-384.
 86. Nobes CW, Aisbitt S (2001) The True and Fair Requirement in Recent National Implementations 31: 83-90.
 87. Nobes CW, M Gee, A Haller (2010) The Influence of Tax on IFRS Consolidated Statements. *Australian Accounting Review* 7: 97-122.
 88. Nobes CW (2013) The continued survival of international differences under IFRS. *Accounting and Business Research* 43: 83-111.
 89. Nobes C (2016) Towards an Assessment of Country Effects on IFRS Recognition Decisions and Measurement Estimations. Paper, Venezia.
 90. Nobes C, Parker R (2016) *Comparative International Accounting*, Pearson.
 91. Nobes CW, Stadler C (2015) The Qualitative Characteristics of Financial Information, and Managers Accounting Decisions: Evidence from IFRS Policy Changes. *Accounting and Business Research* 45: 572-601.
 92. Obaidat AN (2007) Accounting Information Qualitative Characteristics Gap: Evidence from Jordan, *International Management Review* 3: 26-32.
 93. Oderlheide D (2001) *Transnational Accounting*, Macmillan, London.
 94. Onushchenko SV, Berezhna AY, Filonych (2021) Budget Mechanism: Methodological Approach to and the Practice of Budget Decentralization. *The Problems of Economy* 47: 107-122.
 95. Patel C, Day R (1996) The influence of cognitive style on the understandability of a professional accounting pronouncement of by accounting students. *The British Accounting Review* 28: 139-154.
 96. Rankin M, Stanton P, McGowan S, Ferlauto K, Tilling M (2012) *Contemporary Issues in Accounting*. Milton, Qld, Wiley & Sons.
 97. Samuelson LA (1986) Discrepancies between the roles of budgeting. *Accounting, Organizations and Society* 11: 35-45.
 98. Schoen W (2004) International accounting standards – a ‘starting point’ for a common European taxbase. *European Taxation* 44: 426-440.
 99. Schorck EM, Lefebvre HL (2021) *The good and the bad news about quality*. CRC Press
 100. Simons RS (1995) *Lever of Control*. Harvard Business School Press.
 101. Slighy N, Taffurelli V, Iber Mm, Doyle AS (2021) *Budgeting Lesson and Stories, in Growth, Creativity and Collaboration: Great Vision on a Great Lake*, Routledge
 102. Smith M, Taffler R, (1992) Readability and Understandability: Different Measures of the Textual Complexity of Accounting Narrative. *Accounting, Auditing & Accountability Journal* 5.
 103. Smith M (2021) Who controls the past... controls the future. *Public History Review* 28: 90-105.
 104. Steven M. Flory T, Phillips J, Maurice Jr, Tassin F (1992) Measuring readability: A comparison of accounting textbooks. *Journal of Accounting Education* 10: 151-161.
 105. Schwaiger WSA (2015) The REA Accounting Model: Enhancing Understandability and Applicability. *International Conference on Conceptual Modeling* 566-573.
 106. Van der Stede WA (2000) The relationship between two consequences of budgetary controls, budgetary slack creation and managerial short term orientation. *Accounting, Organizations and Society* 25: 609-622.
 107. Wagenhofer A (2003) Accrual-based compensation, depreciation and investment decisions. *European Accounting Review* 12: 287-309.
 108. Wagenhofer A (2006) Management accounting research in German-speaking countries. *Journal of Management Accounting Research* 18: 1-19.
 109. Wagenhoferb A, Göxa RF (2009) Optimal impairment rules. *Journal of Accounting and Economics* 48: 2-16.
 110. Wagner J, Petera P, Popesko B, Novák P, Šafr K (2021) Usefulness of the budget: the mediating effect of participative budgeting and budget-based evaluation and rewarding. *Baltic Journal of Management*.
 111. Webster T, Yee G (2021) *Web based energy information and control systems*. River Publisher.
 112. Wildavsky A (2017) *Budgeting and Governing*. Routledge.
 113. Zeff SA (2013) The objectives of financial reporting: a historical survey and analysis. *Journal of Accounting and Business Research* 43: 262-327.
 114. Yuthas K, Rogers R, Dillard JF (2002) Communicative Action and Corporate Annual Reports. *Journal of Business Ethics* 41: 141-157.

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