



FINANCIAL RATIOS: CONSIDERATIONS OF THEIR RELEVANCE TO CORPORATE FINANCIAL ANALYSIS AND AN IN-DEPTH LOOK AT THE MAJOR ERRORS OFTEN MAR THESE RATIOS

Prof. Maria Silvia Avi¹

¹*Full Professor in Business Administration, Management Department- Ca'Foscari Venezia, Italy*

Abstract

This article focuses on financial ratios, a topic that is often considered obsolete. This leads many scholars and companies to underestimate the danger of incorrect calculations and interpretations of these ratios. Sometimes, in some articles and books, it can be perceived how the author, while addressing the issue of a company's financial situation, considers Financial ratios as obsolete analysis tools and proposes the use of much more sophisticated and complex instruments for financial analysis. This behaviour is to be stigmatised because we know that more refined and complex instruments must supplement financial ratios for a company's financial analysis to be complete. However, we disagree with considering Financial ratios as obsolete instruments. Further investigations may be performed alongside these ratios, but these ratios can never be replaced by any complex and, perhaps, more structured financial tool. And it should be noted that underestimating the importance of financial ratios frequently leads to the quantitative determination of incorrect values and the interpretation of data, even if determined correctly, that is entirely misleading and far removed from the reality that the ratios are intended to portray. For the writer, therefore, financial ratios are not only not obsolete but represent the starting point of a financial analysis that provides company management with indispensable information on the development of the financial situation of the company to which they belong. Analysis of a company's financial situation is not feasible except by comparing specific data with other values. Absolute values do not allow one to judge the 'trend of the company's financial situation. For this reason, it is well-known that particular ratios are used to understand whether the enterprise enjoys excellent health or has more or less severe problems financially. Often the determination of these ratios starts from, by some scholars and by many companies, using aggregates, unsuitable for the analysis to be complete and correct. In some instances, it is also noticeable how ratios are determined whose informational value is practically null. As a result, a calculation of them is an interpretation that can be downright misleading regarding the situation being experienced, at a given instant, the enterprise under analysis. And it should be noted how using ratios alone is insufficient to carry out a financial analysis point. The completion of proportions with dynamic analysis is essential, and therefore, for this reason, the preparation of a cash flow statement should be considered indispensable completion of purely financial ratios.

Keywords

Financial Indexes, Financial Index Limits, Errors in Financial Indexes

1) Introductory considerations on financial ratios¹

Understanding, in a correct, exhaustive and analytical manner, the financial condition in which the company operates represents a sine qua non-condition for the entrepreneurial management to maximise efficiency and effectiveness in both the financial and profit sphere.

¹ To facilitate reading, I have decided not to include in the text, except in exceptional cases, the names of the scholars who have dealt with the subject under analysis. I have opted not to indicate all the terms of the scholars in the text because this would have meant a continuous interruption of the reading of the complete sentence in which I express my thought. References are placed at the end of the article

Consistently analysing the final data of the latest available financial statements, or better still, carrying out an in-depth study of the latest approved financial statements (it is advisable to always carry out the analysis on at least five financial statements) is necessary, though not sufficient, condition for management to make rational decisions that are fully aware of the impact that such actions will have on both financial and profitability. This must follow by comparing actual data and planned values, not at absolute values but through quotients. Our focus will be exclusively on the financial sphere of the company.

Knowing how to carry out a correct balance sheet analysis is often considered an "obsolete" operation; consequently, everything related to this information system is dangerously undervalued.

Often, commercial motivations drive the creation of tools that implicitly place balance sheet analysis as an element of secondary importance in the corporate information sphere.

Nothing can be more deviant and dangerous. The lack of a proper analysis of the final data ineluctably prevents the creation of an information system that helps to improve managers' decision-making.

Knowledge of the 'starting' strengths and weaknesses is an indispensable element so that all subsequent steps (planning, control, etc.) can be developed consonantly.

The analysis of the balance sheet or, as has already been pointed out, of the most recent balance sheets (studying the trend of values is more significant than dwelling on punctual data from a single financial year) can never be considered an 'outdated' or 'obsolete' step or, even worse, one that can be 'replaced with more refined tools'.

Every value can be studied through various 'magnifying glasses', and everyone must try to improve the classical study tools. However, other information tools cannot replace the financial analysis of final balance sheets. The task of scholars is to improve the information system output of the analysis, certainly not to identify means that suppress it or render it practically unusable due to the superficiality with which the study is carried out.

In this work, as the reader can see in the following pages, ample space will be devoted to an in-depth study of the analysis tools considered 'classic'. What distinguishes us from other authors is that, for the writer, the term 'classic' has a positive value, unlike some scholars who, to allow the dissemination of fanciful, as much as dangerous, theories, consider this locution as a synonym for 'outdated, obsolete and therefore, no longer usable'.

In every company, everything is reflected in the accounting data of the balance sheet. Every policy, every action, and every decision is, in reality, evaluated based on the impact it has, in the long term, on the company's balance sheet, financial and income figures. Even social policies, or social responsibility policies, are nowadays considered valid precisely because they often represent the obligatory path to maximise company income in the medium and long term.

Therefore, studying and analysing budget results must be considered the founding element of any information system. Without this necessary step, any analysis tool/tool will lose its theoretical/pragmatic meaning and value.

At this point, it is appropriate to observe further the correct use of the analysis tools that are the subject of our study: financial ratios. For clarity, the following pages will illustrate the various indicators, aggregates, flows, and financial ratios that are indispensable to gain an in-depth understanding of the company's financial/equity situation in a 'sequential' manner. Each valuable element for the analysis will be analysed analytically, separately from the other indicators. In each part of this work, the correlations that can identify between the various aggregates and values will, of course, be emphasised, but for the sake of communication needs and to make every consideration made regarding the multiple aggregates/indicators/flows easily intelligible, the explanation of the various analysis tools will have to be made individually. Each element should be studied separately from the others, but only because the simultaneous systemic description of all the indicators would create the logic of construction/interpretation of the specific data extremely complex to understand. The analytical explanation of each index/data/flow/aggregate individually considered, therefore, serves exclusively to communicate, in a straightforward manner, the meaning of the value under study. After this logical/didactic passage, it will be easy for anyone to understand all the links that can identify between the various accounting determinations that determine the financial ratios, which will be the subject of in-depth analysis in the following pages.

Financial and asset analysis of the enterprise requires the performance of two types of complementary studies that complement each other.

Indeed, absolute values lose their informational value if they are not compared with amounts related to them. For this reason, the integrated system of analysis is implemented, in part, through indicators that compare corresponding data. In the first instance, it is advisable to proceed to the identification of ratios determined based on the results of the balance sheet (and sometimes some data from the income statement).

The distinction between financial/equity insight and the study of corporate profitability is a necessary didactic exemplification to explain the unique tools used in the integrated analysis system. It should note that distinguishing sharply financial analysis from income analysis does not make sense since every financial reporting data is interrelated with every other value in that document. The detailed understanding of the company's situation, therefore, requires that, in the light of the explanations below concerning the individual ratios/flows/aggregates, the analyst succeeds in giving an overall picture of the company's conditions which, necessarily, must be implemented

through the communication of the inter-connections identifiable between the indicators and aggregates used to carry out the study on financial reporting and to lay the foundations for corporate planning.

For the reasons stated above, it is not even possible to subdivide, precisely, financial ratios from so-called capital ratios. Therefore, we will speak of financial/equity analysis to highlight, even from a purely terminological point of view, how separating the two types of research is impossible.

The study of financial/equity conditions must, subsequently, be analyzed in light of the so-called income ratios, which, because of the intrinsic connections to the balance sheet data, cannot fail to have connotations of a financial nature.

In the following pages, however, we will delve only into financial ratios in the complete and absolute awareness that the complex analysis tool considered here involves a systemic interpretation of each ratio/flow/aggregate output of the information process.

In light of these considerations and with the limitations outlined above, it can say that corporate financial/equity analysis must be implemented through the determination and interpretation of two sets of tools that necessarily, complement each other. The calculation of a group of financial/equity ratios must be followed by the identification of cash flows which will discuss in more detail in the next section. Ratios provide the static situation, as it refers to a given instant. At the same time, functional flows highlight elements of dynamic analysis, that is, both concerning a period, variously identified according to the information needs of corporate management.

Financial analysis using ratios takes its starting point from the following consideration: income and expenditures, as well as asset elements of use and source, distinguished by similar characteristics, must be in balance. Based on this simple consideration, indicators can be identified that, concisely provide interpretative elements about the financial/equity structure of the enterprise.

To avoid errors in "interpretative decoding" of the ratios, it is preferred not to subdivide them by "area." We often read about the division between ratios that analyze the short and long-term, etc.. Such segmentation can, however, be dangerous as it is too limiting to interpreting the quotient. The writer, therefore, prefers to limit himself to listing the leading indicators of a financial/equity nature, illustrating, in an analytical manner, for each ratio, the formula, the method of determination, the managerial usefulness in the context of static financial/equity analysis, the logic of construction and the meaning of the quotient, and any benchmarks helpful in understanding the presence of imbalances between uses and sources.

As noted earlier, each consideration reported on ratios should be supplemented and complemented by a series of reflections on the dynamic financial situation, which aims to delve into the balance/balance ratios existing between income and expenditures through the determination of particular flows referring to a given time period. Therefore, the indicators below must be interpreted simultaneously as the analytical tools covered in the next section. Only in this way can the study of the financial situation be said to be complete and exhaustive.

In the following pages, the following ratios will be analyzed:

- current ratio
- quick ratio
- long asset coverage ratio
- ratio of coverage of long-term assets by sources of wealth internal to the company
- ratios of composition of invested capital
- ratios of composition of sources
- degree of capital depreciation
- ratios of ability to create and maintain wealth
- ratio of indebtedness
- ratio of intensity of short-term bank financing
- ratio of intensity of total financing
- ratio of gross income coverage capacity
- ratio of capacity of capital to create cash flows
- ratios of financial sustainability of growth
- ratio of average duration of loans
- ratios of average duration of debts

In conclusion, it should note a critical consideration about correctly interpreting the ratios. Each observation below must be contextualized in the context of the specific financial reporting under study. It may therefore happen, in particular, upon the occurrence of a given hypothesis that it cannot share the meditation points reported in this paper concerning specific business realities.

For example, it is intended to refer to the case in which a ratio results "out of parameter." In light of what is presented in the following pages, it can say that the situation is not balanced. However, it could happen that the value of the ratio is not significant because of the presence, in the balance sheet, of an "extraordinary" item. Assume, for example, that for December 31 alone, there is an abnormal amount in the bank account, an amount

that, after a couple of days, is duly invested in highly profitable forms of capital. The analysis of the data of the balance sheet, closed on December 31, shows, as is evident, an abnormal situation and, consequently, any observation on the ratios determined based on these accounting values must be contextualized and must keep in mind the particular condition that came about, accounting-wise, on the day of closing the accounts. One possibility to curb these situations could be the calculation of average values which reflect the position, not punctual on a specific day, but "average" among several accounting data. Some authors suggest always calculating the average between the values on the first day of the fiscal year and the data entered on the last day of the administrative period. In reality, such a calculation does not solve the problem. Therefore, to have a meaningful figure, one should identify an average that considers monthly values. Such a determination, however, requires the preparation of a balance sheet (and, for some ratios, an income statement) at the end of each month. In the writer's opinion, preparing such a document, if not impossible, is extremely difficult. Therefore, the correct way is the "contextualized" interpretation of the indicators: those analyzing the data must be aware of whether or not the values contained therein are significant. In case some values contained in the balance sheet are of "extraordinary" amount or are "transitory", the analyst must point out this situation and, necessarily, must be able to make a judgment on the basis, simultaneously, of the analysis of the "abnormal" punctual data and the values that, after a few days, those accounts assume.

2) Analysis of financial ratios essential for enterprise financial analysis

CURRENT RATIO

$$\text{Current ratio: } \frac{\text{Short-term}}{\text{Short-term liabilities}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable ←
 Very useful
 Useful
 With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The current ratio is the best operational tool to monitor short-term financial balance. It seems evident that such stability should be deepened by contrasting total short-term items and debt with a similar maturity.

First, it can monitor short-term balance by comparing absolute values. This comparison makes it possible to show whether short-term requirements are in harmony with sources having the same maturity characteristics. In this hypothesis, the differential figure arising from the juxtaposition of short-term assets and liabilities is called the availability margin.

From the juxtaposition of absolute values comes the determination of the so-called availability margin, which, depending on the assumptions, can take on negative or positive values. The presence of a negative availability margin is a symptom of financial imbalance. In contrast, as will be seen in the following pages, the determination of a positive availability margin does not guarantee the presence of short-term financial balance and, consequently, consistency between short-term sources and needs. This is because financial balance requires a higher value of current assets than the amount of current liabilities. On this specificity, we refer the reader to the next page.

However, the comparison of absolute values does not identify a "nimble" tool because, on the one hand, it prevents an inter-temporal comparison. On the other hand, it does not allow a judgment to be made because each figure assumes significance only when compared with different values. It is for this reason that, even for financial analysis, instead of using comparisons of absolute values, it is helpful to calculate ratios which, by contrasting inter-related values with each other, allow, by definition, the study of inter-temporal trends. The quotient that transforms the availability margin into an indicator is called the current ratio or current ratio, a quotient that thus contrasts short-term assets with short-term liabilities.

From a superficial analysis of the items, one might assume that the short-term balance is guaranteed by substantial equality of the two amounts. However, this is not true because, within the short-term assets, two items that are "anomalous" concerning all other things are identifiable: inventory and short-term assets and short-term liabilities. All the items of the short-term assets and short-term liabilities(except the warehouse and the short-term assets patrimonial) are characterized by the circumstance that the collection or payment does not require, in the

usual way, any activity on the part of the company. Upon maturity, the value is transformed into an outflow and income. In this regard, it should note that accounts receivable, precisely to adjust the historical value to the actual amount expected to be collected, are already shown net of the allowance for doubtful accounts. Regarding inventory and short-term assets patrimonial, on the other hand, transforming the item into cash requires contractual and sales activity that could encounter unforeseeable difficulties.

For this reason, a short-term static balance is guaranteed if the current ratio amounts to about 1.5-2. In the Italian situation, there is a tendency toward the lower value, a circumstance that nevertheless guarantees a more than satisfactory static equilibrium. Regarding these "benchmarks," it should emphasize that they cannot be considered "discriminating values," that is, amounts above which balance is guaranteed and below which, on the other hand, the financial imbalance is present. The following example can clarify what has just been stated:

From a superficial analysis of the items, one might assume that the short-term balance is guaranteed by substantial equality of the two amounts. However, this is not true because, within the short-term assets, two items that are "anomalous" concerning all other things are identifiable: inventory and short-term assets short-term liabilities. All the items of the short-term assets and short-term liabilities(except the warehouse and the short-term assets patrimonial) are characterized by the circumstance that the collection or payment does not require, in the usual way, any activity on the part of the company. Upon maturity, the value is transformed into an outflow and income. In this regard, it should note that accounts receivable, precisely to adjust the historical value to the actual amount expected to be collected, are already shown net of the allowance for doubtful accounts. Regarding inventory and short-term assets patrimonial, on the other hand, transforming the item into cash requires contractual and sales activity that could encounter unforeseeable difficulties.

For this reason, a short-term static balance is guaranteed if the current ratio amounts to about 1.5-2. In the Italian situation, there is a tendency toward the lower value, a circumstance that nevertheless guarantees a more than satisfactory static equilibrium. Regarding these "benchmarks," it should emphasize that they cannot be considered "discriminating values," that is, amounts above which balance is guaranteed and below which, on the other hand, the financial imbalance is present. The following example can clarify what has just been stated:

Assume that we have calculated the current ratio in the Kangaroo firm and the Mipili firm for five years:

Company Kangaroo: 2,3 - 2,1 - 1,5 - 1,3 - 1,3

Company Mipili 0,6 - 0,8 - 1,1 - 1,3 - 1,3

If the above parameter could be considered a discriminating value, in the fifth year, the financial judgment of the two enterprises should be equal.

Instead, the intertemporal analysis of ratios shows a tendency for improvement in the Mipili enterprise and a precarious balance in the Kangaroo enterprise. In the two enterprises, therefore, the judgment is entirely different because, for most financial and income ratios, it must analyze by considering, simultaneously:

- 1) possible benchmarks;
- 2) inter-temporal trends in the business environment.

From the above observations, it can be understood how the benchmark can change if the amount of inventory and short-term assets patrimonial is extraordinarily high or particularly low. In the former case, equilibrium is ensured if the ratio reaches or even exceeds the benchmark of 1.5. Whereas, in the presence of minimal inventories and no short-term assets private assets in terms of value, the firm is in financial equilibrium even if the ratio is much lower than the benchmark of 1.5.

Finally, it is clear that in the total absence of inventories and short-term capital assets, the benchmark can undoubtedly be considered unity.

However, the correct interpretation of the ratio cannot be separated from the broader consideration of corporate financial policy. Assume, for example, that the current ratio stands at a trending value of 8 (a rare but not impossible event to find in particular corporate situations). The mere consideration of a ratio above 1.5 could mistakenly lead to a more than an upbeat assessment of the financial crisis. Assume that the excess short-term assets are due to the presence of bank balances not invested in a profitably congruous manner. The judgment on the economic situation should, in this specific case, be revised, or rather, the analyst should point out an abnormal situation: the perfect balance between current future income and future current expenditures in the simultaneous presence of financial imbalance due to an excess of short-term assets compared to the amount of debts with a current maturity. If, for example, this situation resulted from an inappropriate investment policy (or rather, the lack of an actual investment policy), the company's financial situation should be stigmatized, even in a ratio well above the benchmark.

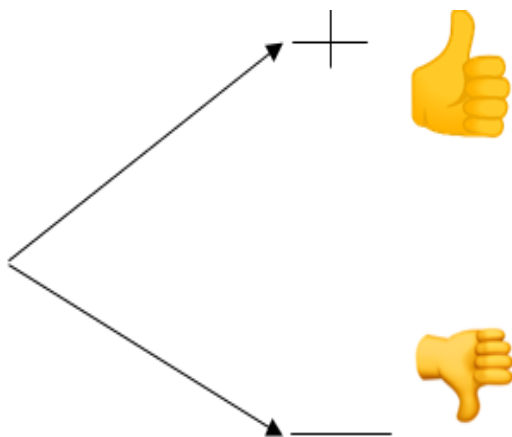
BENCHMARKS

From the above, it can say that financial balance is ensured if the current ratio reaches the following values:

- 1) enterprise, in whose financial reporting there are inventories and short-term assets patrimonial: 1.5 (a value approaching 2 in the presence of very high stocks and short-term investments patrimonial or, on the contrary, coming 1 if these items are of the limited amount)
- 2) firm in whose financial reporting there are no inventories and short-term assets patrimonial assets: 1

JUDGMENT TREND RATIO

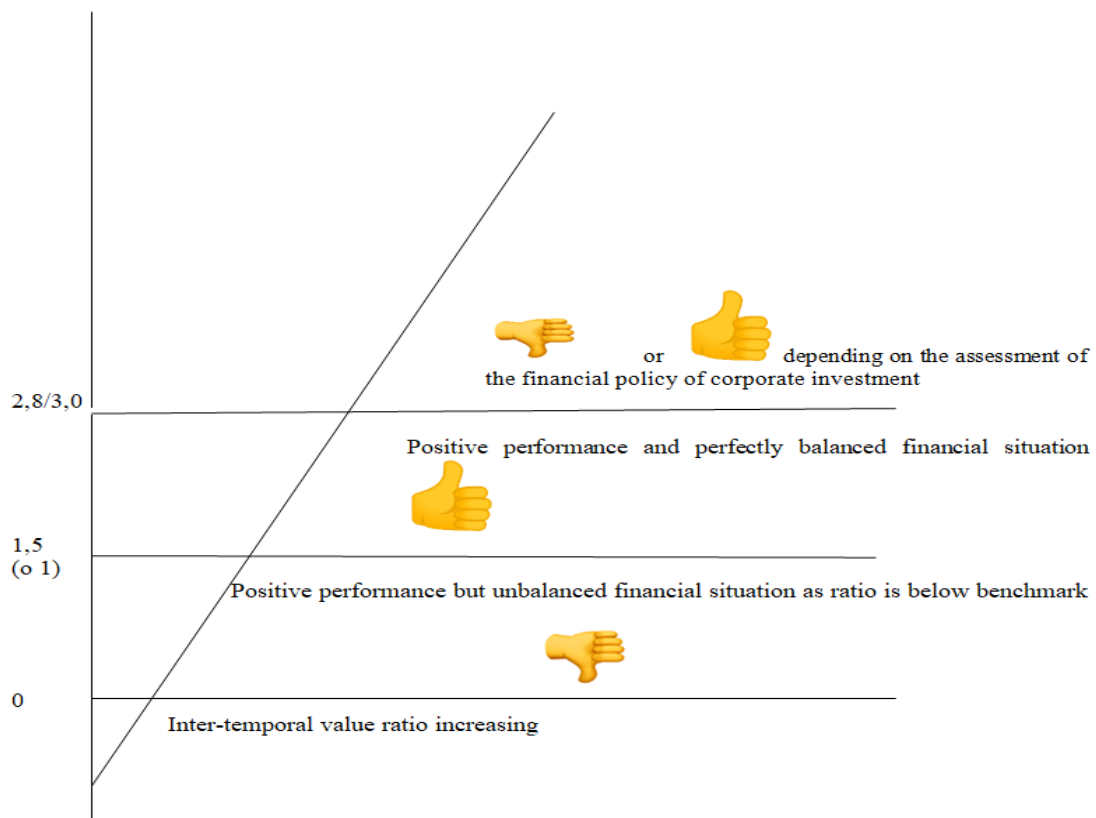
In general terms, it can say that if the ratio increases, the financial balance is strengthened; on the other hand, if the ratio shows a decrease, the financial situation, at least in inter-temporal terms, shows signs of worsening.



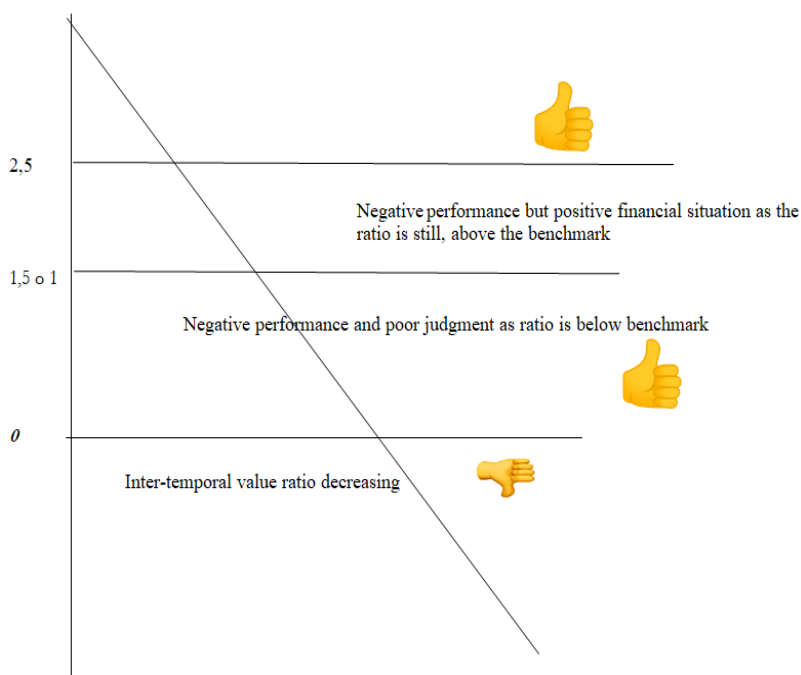
In summary terms:

However, the visual symbols highlighted above should be complemented by considerations regarding the comparison between the ratio trend, the value of the benchmark, and references related to good financial policy. In summary, the assessment of the ratio trend can summarize as follows:

However, a positive trend in the presence of an excess of short-term assets compared to total short-term liabilities. The possible presence of an investment in cash or other short-term assets is decidedly excessive. Possible "financial imbalance"-although the financial situation does



not identify payment/collection problems caused by unprofitable forms of short-term investment (e.g., excessive bank deposits). The problem is not widespread but present in companies with little inclination toward long-term investment and highly undecided about the final destination of the assets themselves. In such a company, the financial policy, although in the presence of perfect balance, is to be evaluated negatively.



Negative trend but a positive financial situation as the ratio is above the benchmark. Such a trend could be considered positive if it resulted from an intervention to scale back non-interest-bearing short-term investments whose high amount was due to "uncertainties" about the ultimate destination of sums momentarily invested in short-term forms of investment that were not particularly attractive in terms of profitability.

QUICK RATIO

Total liquidity (i.e., immediate liquidity + deferred liquidity))

Current ratio:
$$\frac{\text{Total liquidity (i.e., immediate liquidity + deferred liquidity))}}{\text{short-term liabilities}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable ←
- Very useful
- Useful
- With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

While the current ratio is the best useful operational tool to monitor the short-term financial balance, this ratio is insufficient to provide a comprehensive and exhaustive view of the short-term financial situation of a static type. The current ratio must, for this purpose, be flanked and complemented, at the level of interpretation, by the liquidity indicator derived from the contrast between total liquidity (immediate + deferred liquidity) and short-term liabilities.

Concerning this indicator, balance can be monitored, in the first instance, by comparing absolute values. In this hypothesis, the differential figure that arises from the contrast between total liquidity (immediate + deferred) and short-term liabilities is called the liquidity (or treasury) margin. This comparison makes it possible to show whether liquidity needs are in balance with sources having similar short-term maturity characteristics.

As is the case with the availability margin, the interpretation of the figure is undoubtedly facilitated by considering the value, not as the result of the algebraic sum of two absolute values but by their ratio. The ratio obtained by comparing total liquidity and short-term liabilities comprehensive is called the liquidity indicator or quick ratio (or acid test).

The quick ratio, unlike other ratios, is translated into English with a term that is very explanatory of its meaning: quick ratio. Using the word quick implies an analysis of the most easily liquid items within the short-term assets. Since inventories and short-term assets represent the less liquid items, the substantial difference between the two ratios of availability and liquidity lies in the respective presence and absence of these values in the numerator. It can identify the "benchmark" for the quick ratio in the 0.7-0.8 level. This ratio also applies, of course, to the considerations made above for the current ratio benchmark.

There is a case in which the above parameters completely lose their value. This is the case where the enterprise has no inventory and short-term assets patrimonial assets. In this hypothesis, it is evident how the ratios of availability and liquidity, except for the presence of advances to trade suppliers, are perfectly equal.

In the absence of inventory, advances to trade suppliers, and short-term assets patrimonial assets, it is evident how the financial balance is guaranteed only by the achievement of the unity of the ratio determined.

If, on the other hand, advances to trade suppliers, inventories, and short-term capital assets are present, the liquidity and availability ratios would show differences in that while advances, capital assets, and ending stocks are not included in the former, all items are present in the current ratio. If this situation occurs, it is acceptable for the quick ratio, even in the absence of inventories, short-term assets, patrimonial assets and advances to trade suppliers, to be less than unity. In that case, however, the quick ratio must be greater than unity because, otherwise, the firm could not be said to be in short-term (static-type) financial equilibrium.

As pointed out in the current ratio, excess liquidity over total short-term liabilities may be considered pathological in particular cases. Should, for example, the quick ratio exceed, by far, the value of 1.6- 2.0, the apparent "financial super balance" could conceal problems of financial policy and investment. Compared to total short-term liabilities, the accumulation of excess liquidity could be a symptom of the inability to invest adequately, the sources emanating from the company's operating cycle—situation, the latter, not frequent among companies but evident in particular business realities.

Therefore, the increase in the ratio is positive as long as there is no excess liquidity, in which case it is necessary to rethink the company's investment policy.

BENCHMARKS

From the above, it can be said that financial balance is ensured if the quick ratio reaches the following values:

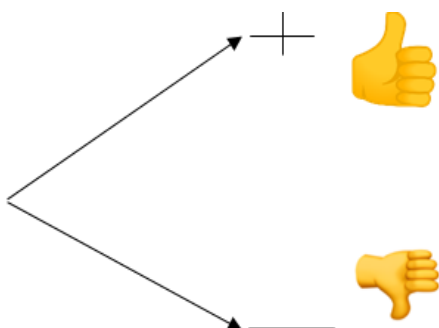
- 1) enterprise, in whose financial reporting there are stocks and short-term assets patrimonial,: 0.7 - 0.8 (a value that approximates to 1 if, in the financial statements, there are stocks and short-term assets patrimonial)
- 2) enterprise in whose financial reporting there are no stocks and short-term assets patrimonial:

JUDGMENT TREND RATIO

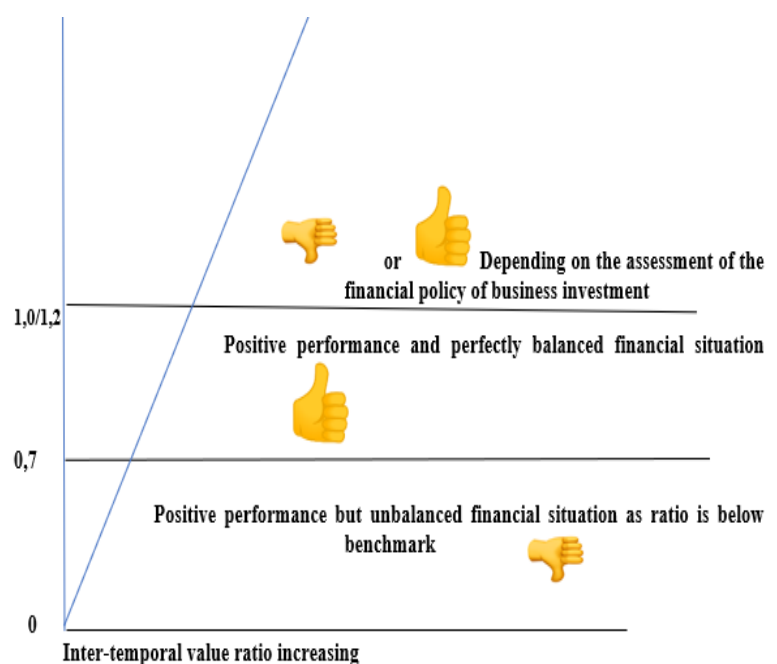
In general terms, it can be said that if the ratio increases, the financial balance is strengthened; on the other hand, if the ratio shows a decrease, the financial situation, at least in inter-temporal terms, shows signs of worsening.

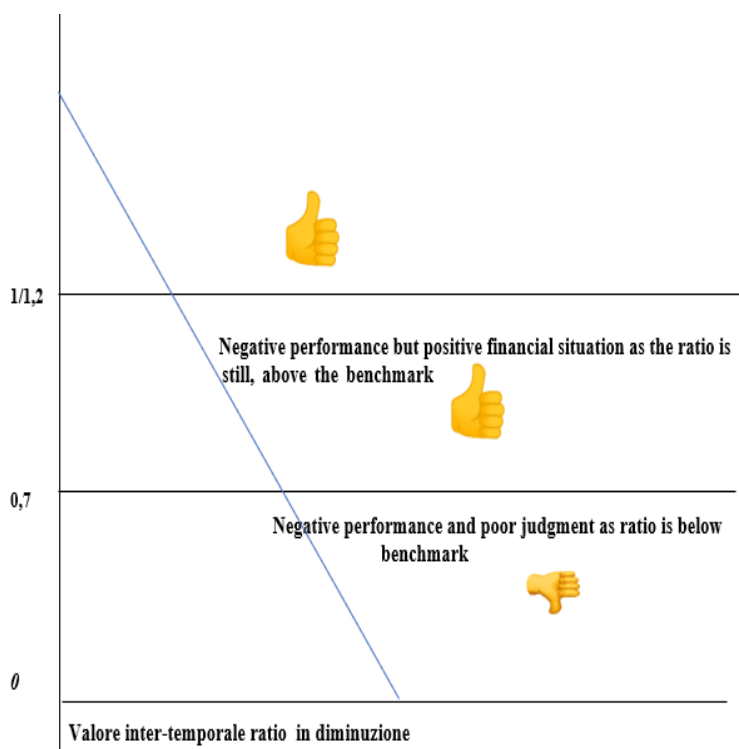
In summary terms:

However, the visual symbols highlighted above should be complemented by considerations regarding the comparison between the ratio trend, the value of the benchmark, and references related to good financial policy. In summary, the assessment of the ratio trend can summarize as follows:



positive trend in the presence, however, of excess liquidity. The possible existence of investments in significantly excessive bank accounts. Possible "financial imbalance"- even in the presence of a financial situation that does not identify payment/collection problems caused by unprofitable short-term investment forms. Status is not widespread but present in companies with little inclination to long-term investment and highly undecided about the final destination of the assets themselves. In such a company, although in perfect balance, the financial policy is evaluated





Negative trend but a positive financial situation as the ratio is well above the benchmark. Such a performance could be considered positive if it resulted from an action to scale back non-interest-bearing short-term investments whose high amount was due to "uncertainties" about the ultimate destination of sums momentarily invested in short-term forms of investment that were not particularly attractive in terms of profitability.

LONG-TERM ASSET COVERAGE RATIO

Long-term asset coverage ratio :
$$\frac{\text{Long-term liabilities+ equity}}{\text{Long-term assets}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable ←
- Very useful
- Useful
- With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The long-term asset coverage ratio identifies the ratio used for long-term financial position analysis. Long-term balance is ensured if the sources maturing beyond the year after the year being closed have an "compatible" amount with total uses having similar characteristics. The comparison that must be made to analyze the long-term financial position requires contrasting the amount of long-term assets with total long-term sources or both with the sum of long-term liabilities+ equity. Such a comparison shows whether the long-term liabilities are balanced with the sources with the same maturity characteristics. Comparing the absolute values of the above aggregates gives rise to the determination of the so-called structure margin, which, depending on the assumptions, can take negative or positive values. The presence of a negative structure margin is a symptom of financial imbalance. In contrast, as will be seen in the following pages, the determination of a positive structure margin shows a situation marked by substantial consistency between sources and short-term needs. Since reclassified financial reporting presents a balance between sources and requirements, it is evident how, in the absence of stand-alone items, the availability margin is equivalent in amount and sign to the structure margin. This means that in the presence of a positive structure margin, the firm will have an availability margin of the same positive amount. On the other hand, if the short-term situation were unbalanced and marked by a negative availability margin, the long-term position would also show a negative structure margin of an equal amount. It is evident how such considerations do not apply in the presence of stand-alone debit or credit items. Suppose stand-alone items appear in either section of the reclassified balance sheet. In that case, the financial reporting breakeven is also ensured by the amount of these values, with the consequence that the sum of short-term assets+ long-term assets does not equal the total short-term liabilities+ long-term liabilities+ shareholders' equity. The availability

margin cannot coincide with the structure margin in such circumstances.

The so-called long-term asset coverage ratio monitors long-term static financial balance. This ratio, identified by long-term liabilities+ shareholders' equity to long-term assets, shows what portion of the long-term assets has been financed from sources marked by maturity characteristics similar to the covered requirements. Also, in the analysis of long-term financial position, the development of a quotient is preferred to in-depth comparisons of absolute values to aid the interpretation of data.

The ratio should always be more significant than unity because a value less than 1 implies long-term asset financing with short-term sources: a circumstance that, from a financial point of view, is a symptom of obvious imbalance. If, however, the ratio exceeds unity, the company can be considered balanced. The optimal ratio should reach a value of about 1.25.

Regarding the judgment of the indicator trend, it can say that an increase is always positive. At the same time, a decrease in the quotient can be judged negatively only if the indicator's value falls below unity. However, suppose there is a decreasing trend in the presence of ratios greater than one. In that case, the judgment on the long-term financial situation remains positive even if a "reduction in positivity" can be pointed out.

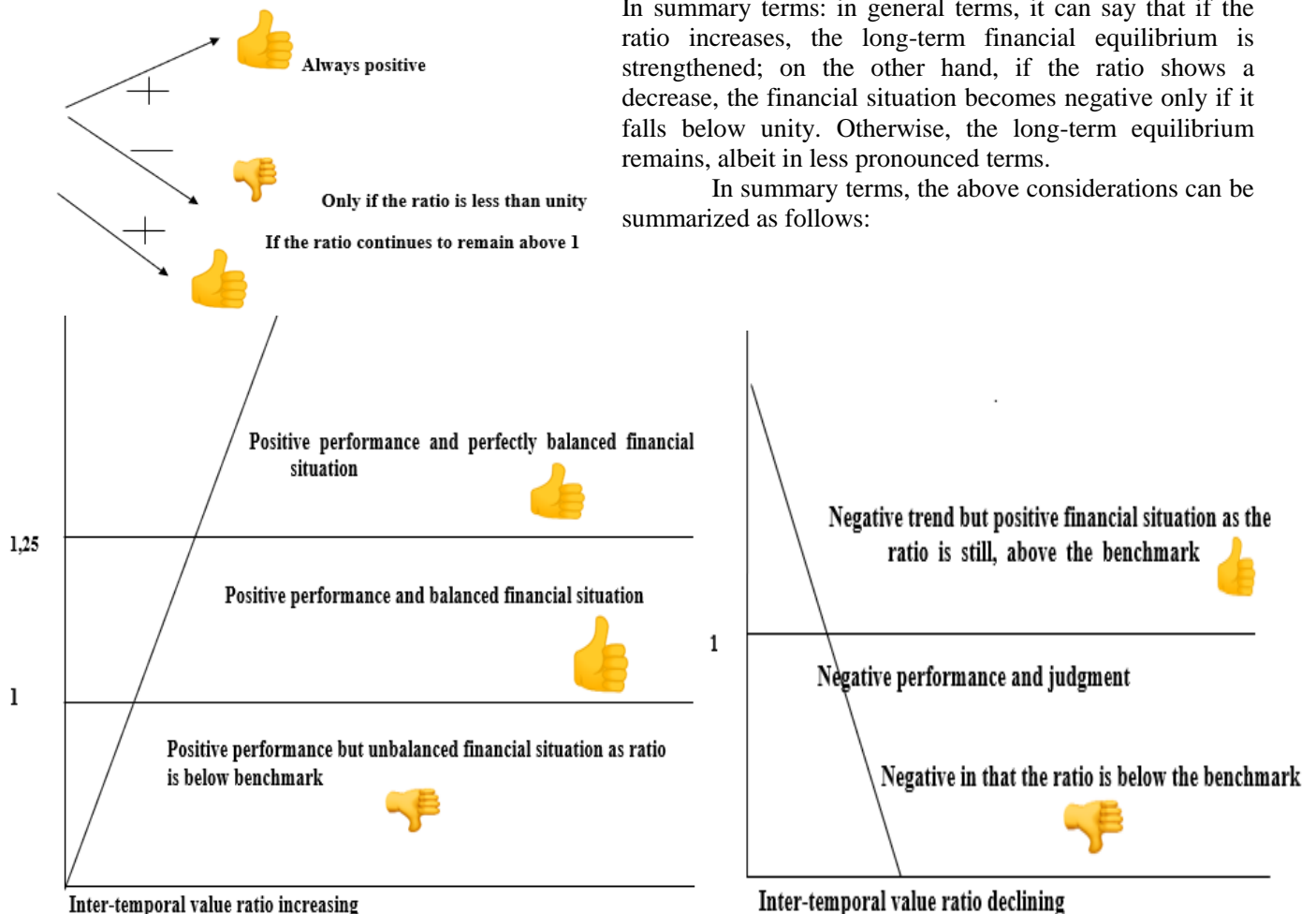
BENCHMARKS

From the above, it can be said that the long-term financial balance is ensured if the long-asset coverage ratio is greater than or equal to unity.

JUDGMENT TREND RATIO

In summary terms: in general terms, it can say that if the ratio increases, the long-term financial equilibrium is strengthened; on the other hand, if the ratio shows a decrease, the financial situation becomes negative only if it falls below unity. Otherwise, the long-term equilibrium remains, albeit in less pronounced terms.

In summary terms, the above considerations can be summarized as follows:



RATIO OF LONG-TERM ASSET COVERAGE WITH ONLY SOURCES OF WEALTH INTERNAL TO THE COMPANY

**Ratio of long-term asset coverage
With only sources of wealth internal**

$$\text{To the company} : \frac{\text{Equity}}{\text{Long-term assets}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable
- Very useful
- Useful
- With reduced usefulness ←

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The ratio of coverage of long-term assets using the firm's internal wealth identifies the ratio by which it is intended to investigate what part of the long-term assets has been financed with equity.

This ratio is intended to monitor the partial long-term balance, i.e., whether it refers exclusively to the consistency between the amount of long-term needs and total sources with similar maturity characteristics identifying the firm's wealth.

Such "balance" is monitored by contrasting equity with long-term assets. In the writer's opinion, although this ratio is a widespread object of calculation in various information systems, determining such a value can be counter-productive. Indeed, one sometimes reads that the ratio analyzed here helps assess long-term equilibrium. Such a statement is incorrect and misleading. Certainly, to think that a company can finance all long-term uses exclusively with equity items appears to be a limiting assumption that automatically excludes the usefulness of long-term sources such as mortgages, bonds, etc..

It is unnecessary to dwell on this to understand how this assertion must be rejected and, consequently, how the ratio analyzed here, if not correctly interpreted, may lead to incorrect judgments.

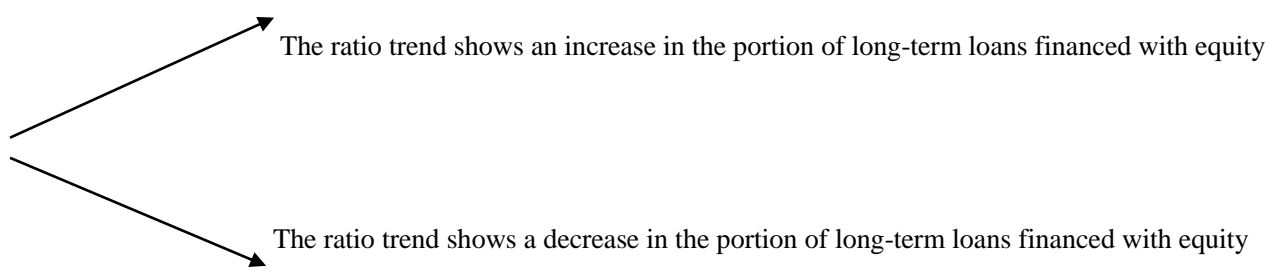
Generally speaking, it can say that from the contrast between equity and long-term assets, it is possible to derive, solely and exclusively, information about the part of the long-term uses financed from the company's sources. Nothing else can deduce from the interpretation of this ratio. For this reason, the ratio of hedging long-term assets with only sources of the firm's own internal wealth is believed to has minimal usefulness in the context of the analysis of the financial position of enterprises.

BENCHMARKS

From the above, it can be said that no benchmark can be identified that can be used for the purpose of analyzing the financial situation of companies.

JUDGMENT TREND RATIO

In general terms, it can say that an increase in the ratio identifies an increase in the portion of long-term loans financed from the company's sources. A decrease in the ratio, on the other hand, shows a decrease in that proportion. In either case, it is impossible to make definitive judgments about the company's financial/equity position based merely on the interpretation of this ratio.



RATIOS DI COMPOSIZIONE DEL NET ASSETS

$$\begin{aligned} & \text{Short-term assets} \\ \text{Asset elasticity ratio: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Immediate Liquidity + Deferred Liquidity} \\ \text{Liquid elasticity ratio: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Inventories} \\ \text{Immediate Liquidity + Deferred Liquidity: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Short-term patrimonial assets} \\ \text{Ratio of elasticity of capital assets: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Long-term assets} \\ \text{Asset rigidity ratio: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Long- term material assets} \\ \text{Long-material asset rigidity ratio: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Long-term intangible assets} \\ \text{Rigidity ratio of 'long term intangible assets.: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{'long -term credit assets} \\ \text{Rigidity ratio of 'long credit assets: } & \frac{\text{-----}}{\text{Net Assets}} \\ & \text{Long-term capital assets} \\ \text{Long-term asset rigidity ratio capital: } & \frac{\text{-----}}{\text{Net Assets}} \end{aligned}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable
Very useful
Useful ←
With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF RATIOS

The study of the composition of net assets in the company is motivated by the quest to determine the degree of elasticity of the management put in place by the management through the analysis of the structure of the assets that go to make it up.

The objective of these ratios is to measure the weight, expressed in percentage terms, of the micro-aggregates of the assets concerning the net assets, thus succeeding in assessing whether the asset-financial structure of the company can cope with management in disturbed environmental conditions.

In this sense, it is possible to say that management elasticity represents the firm's ability to adapt quickly and easily to a new environment. Conversely, we refer to management rigidity if the enterprise cannot quickly adapt to changing environmental conditions.

The elasticity of management can thus be seen as the ease for the enterprise to replace factors of production with those that are more appropriate to meet new management needs to remain competitive against other enterprises.

At the operational level, it is possible to identify multi-year factors of production, constituting long-term assets, as having the most significant impact in determining the degree of firm rigidity. On the contrary, the financial reporting items comprising the short-term asset represent uses that make management more elastic. This is why the composition ratios are distinguished into "flexibility" or "rigidity" ratios depending on whether the item being decentralized concerning net assets is part of short-term or long-term assets.

Companies generally address the risk of excessive "entanglement" of management by replacing rigid inputs with similar elastic uses (think, for example, of the case of a company that decides to outsource certain production phases to other companies, thus avoiding, in this way, the need to equip itself with specialized plants). This is a circumstance that, as can be easily guessed, depends not only on capital/financial considerations but also on determinations of a purely income-related nature.

The ratio of asset elasticity contrasts total short-term assets with net assets and expresses the percentage weight assumed by inputs that will translate into income within the next fiscal year relative to total assets. In contrast, the asset rigidity ratio highlights the impact of loans that will turn into liquid assets beyond 365 days on total assets. In the absence of stand-alone items, the sum of the two ratios assumes a value of one (100 per cent when percentual) because the two indicators are inversely proportional.

To further deepen the analysis, it was deemed valid to consider not only the study of short-term assets of long-term assets but also the sub-aggregates that comprise them. Such analytical considerations, therefore, allow the analyst to make more meaningful judgments regarding the structure of the net assets and their possible evolution over time.

BENCHMARKS

Generally, it is possible to state that a firm's ability to adapt to business and environmental changes is more remarkable with the higher the elasticity ratio and, thus, the lower the rigidity ratio. However, there are no standard benchmarks when analyzing the data. Instead, it must assess the specific business situation appropriately: logically, a service company has a higher degree of asset elasticity than a company that, on the contrary, operates in the industrial sector. The analyst must therefore adjust his judgment by considering the trend of ratios over time concerning the industry values in which the company operates. Only in this way will he be able to highlight the degree of asset rigidity that is functional to the type of activity carried out by the company being analyzed. It should also note that values differing from those of the sector highlight not so much pathological or dangerous situations in place but rather a greater potential risk for the company of being unable to reorganize itself quickly as the environmental situation changes.

JUDGMENT OF THE PERFORMANCE OF RATIOS

Based on the considerations made in the previous point (benchmarks), one can understand how one cannot associate a positive or negative judgment with a given trend in asset composition ratios. Each consideration will have to be developed considering the specific company situation, the direction of asset composition within the relevant industry, and the trend of the various ratios.

SOURCE COMPOSITION RATIOS

$$\text{Ratios of elasticity of sources: } \frac{\text{short-term liabilities}}{\text{total debt + equity}}$$

$$\text{Ratios of rigidity of sources: } \frac{\text{Long-term liabilities + equity}}{\text{total debt + equity}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable
- Very useful
- Useful
- With reduced usefulness ←

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF RATIOS

Similar to what has already been seen concerning the composition ratios of net assets, it is possible to make similar reasoning about the liability side of the balance sheet reclassified according to the financial criterion. In this regard, it can determine the elasticity and liability rigidity ratios.

The liability elasticity ratio contrasts short-term liabilities the total liabilities, including stand-alone items. In contrast, the liability rigidity ratio considers at the numerator the sum of long-term liabilities term and equity and at the denominator the total liabilities, including stand-alone items.

A source structure that prefers a certain rigidity of sources implies a situation in which the firm can enjoy greater cash availability from granting loans that will be repaid in the medium to long term to cover the needs generated by operations.

Conversely, an elastic liability structure could lead to cash asynchronies occurring if revenues do not match expenditures at a given instant.

Such indicators, which can also be determined in percentage terms, are of little use unless placed in contrast to the composition of assets. For this reason, the writer believes they have limited potential for use within the integrated business analysis/programming system.

BENCHMARKS

There are no standard benchmarks for the two ratios. As noted in the previous point, any consideration must be developed by interpreting, at the same time, the composition of the balance sheet assets.

JUDGMENT ON THE PERFORMANCE OF RATIOS

On the basis of the considerations made in the previous point (BENCHMARKS) it can be understood how one cannot associate a judgment, positive or negative, with a given trend in source composition ratios. Any consideration will have to be developed keeping in mind the specific company situation, the trend of the various ratios, and, above all, the composition of the balance sheet assets .

DEGREE OF ASSET AMORTIZATION AND DEPRECIATION

Amortization and depreciation

Degree of amortization and depreciation: -----

$$\frac{\text{long asset tangible AL Tangible (gross book value net of land) + long asset Intangible (gross book value)}}{\text{-----}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable
 Very useful
 Useful
 With reduced usefulness ←

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF RATIOS

The study of this ratio provides insight, to a very superficial extent, into the degree of "seniority" of tangible and intangible long-term assets.

The juxtaposition of total accumulated depreciation and the total gross book value of tangible (net of land) and long-term intangible assets shows, in percentage terms, how much the depreciated value of investments with multi-year use amounts to. A shallow analysis leads to the assertion that a high amount of this ratio corresponds to a considerable "seniority" of the use of the assets. According to this reasoning, the closer the ratio is to unity (or 100 per cent if percentualized), the greater the ageing from multi-year asset use.

The writer believes that this quotient, although much cited by the doctrine and always present in analyses, has highly reduced usefulness because its correct interpretation is linked to a series of methodological observations in the absence of which the judgment made based on the value reached by the ratio can be very misleading concerning the reality analyzed.

Just think of two particular considerations. It is well known that gross book value and accumulated depreciation must be eliminated from the accounts upon "physical" exit from the enterprise. As long as the asset is in the company, the two values must remain in financial reporting even if their amounts offset each other. Assume

the frequent cases of obsolete assets no longer used by the enterprise whose disposal would incur high costs. When these assumptions occur, the value is technically present in financial reporting, but the two items no longer correspond to any user or usable assets. The ratio measuring the degree of depreciation of invested assets is the higher the amount of the two accounts relative to the total value of the assets. Given this determination, one would be inclined to say that the fixed assets are marked by high seniority. If, on the other hand, the fully depreciated asset were eliminated from the firm's economy, the ratio would take reduced values, showing lower seniority of the multi-year assets in use by the firm.

Example:

Assume that a company has multi-year assets with a gross book value of 110 and accumulated depreciation amounting to 101. Assume that there is an asset in the enterprise, historical value 100, fully depreciated, no longer in use that appears in financial reporting only because the enterprise does not want to bear the cost of disposal. In reality, the ratio analyzed here amounts to 0.92 (92%). If, on the other hand, the company had disposed of the asset, the book values would be as follows: total historical value 10, accumulated depreciation 1. In that case, the ratio would reach 0.10 (10%). It is evident how, on a superficial level, the two realities appear entirely different. Indeed, it might seem that, in the first case, the company has assets with high seniority, while in the second case, the company owns "almost new" assets. It seems clear that in the presence of assets no longer in use at the company, the first-mentioned determination is misleading because the value, although present in the balance sheet, no longer belongs to the company's economy. This circumstance clarifies that the ratio interpretation is not trivial and straightforward.

A second consideration relates to the possibility that some assets are depreciated straightforwardly without recognising accumulated depreciation. Again, the presence of such assets may determine the ratio analyzed here as misleading.

In conclusion, therefore, it can say that the ratio that should show the degree of asset depreciation must be the subject of careful analysis to avoid misunderstandings that are highly misleading to understand the business reality being investigated and analyzed.

BENCHMARKS

For this ratio, there can be no standard benchmarks

JUDGMENT ON THE PERFORMANCE OF THE 'RATIO

These ratios should be evaluated as part of the overall analysis. Any consideration of any changes must be combined with a careful examination of how the ratio itself is calculated, otherwise incorrect assessments of the company's situation will be expressed

RATIO OF WEALTH CREATION AND RETENTION CAPACITY

$$\text{Ratio of wealth creation and retention capacity: } \frac{\text{Share capital}}{\text{Equity}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable
- Very useful
- Useful
- With reduced usefulness ←

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

Consideration of the amount of this ratio shows the degree to which the company can strengthen its capitalization through the creation of new wealth with its subsequent allocation to reserves. The ratio analyzed notes the weight assumed by share capital within shareholders' equity. The ratio measures the proportion between the share capital amount and total shareholders' equity.

The lower the ratio, the more significant the gap between the amount of share capital and total shareholders' equity. This gap can only be due to reserves--capital or earnings--and income for the year ending. High funds indicate the company's ability, on the one hand, to create new wealth over time through the formation of profits and through the ex-novo creation of capital wealth and, on the other hand, to maintain this potential

within itself. The mere formation of new wealth, if not supported within the company through provision and non-distribution of reserves, has no impact on the quotient because the earning of profits without subsequent condition and the recognition of capital reserves with the subsequent immediate distribution of the same do not increase equity.

The high discrepancy between the two values is, therefore, related to the company's ability to create new wealth and maintain it within the business economy.

The ratio assumes a value of 1 when there is a perfect coincidence between share capital and equity. When such a situation occurs, it is evident that no amount has been set aside to reserves, which results, among other things, in the absence of protection of capital from any erosion resulting from operating losses.

If, on the other hand, the ratio assumes a value greater than 1, a situation is highlighted in which the share capital has already been attacked by losses, a symptom that, as is evident, demonstrates the existence of a pathological condition of management that has already entered, to all intents and purposes, the bankruptcy phase.

A firm that, on the contrary, shows a ratio much lower than one that, over time, decreases further highlights, on the other hand, a situation in which the firm's capitalization shows a favourable increase.

However, the study of this indicator must be meticulous since changes in it may depend on several causes. Consider, for example, the case where there is a transfer of reserves to share capital: this operation has the impact of increasing the ratio and apparently could be interpreted as an adverse event. However, in substance, this operation (all other things being equal) is completely neutral since no capital composition changes have occurred. Or, suppose that, in a given year, a considerable increase in share capital was implemented precisely to capitalize the company to a greater extent. To understand the impact of this operation, consider the following case:

capital stock	100
reserves	300

equity	400

$$\text{Ratio } 100/400 = 0.25$$

If a capital stock increase of 1000 was made, the values would be changed as follows:

social capital	1100
reserves	300

Equity	1400

$$\text{Ratio } 1100/1400 = 0.78$$

It is clear that an increase in this ratio, connected with the greater weight, in proportional terms, of share capital concerning total equity, does not depend on the lesser ability to maintain within the company new wealth created but is connected with the operation of increasing share capital. Circumstance, the latter, can only be evaluated positively as it improves the direct capitalization of the company.

This simple example makes it clear that the interpretation of the ratio is not as straightforward as, on superficial analysis, it might seem.

BENCHMARKS

The minimum level of the soundness of share capital is guaranteed if the ratio takes a value equal to 1, when equity is represented by share capital alone. Therefore, the ratio should always assume values less than unity to ensure the soundness of share capital. Apart from this consideration, it is not possible to identify benchmarks to ascertain the existence of any balances related to net asset items.

JUDGMENT ON RATIO PERFORMANCE

The considerations made in the previous points make it clear how dangerous it is to associate a "standard" judgment with a particular ratio trend. Therefore, the writer believes it is more appropriate not to correlate certain conclusions with a given ratio trend to avoid incorrect and misleading interpretations.

DEBT RATIO

$$\text{Debt ratio} : \frac{\text{Net assets}}{\text{Equity}}$$

$$\text{Debt ratio} : \frac{\text{Debt}}{\text{Equity}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable ←
 Very useful
 Useful
 With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

Overall, the enterprise's financial balance must be monitored using a ratio that emphasises the relationship between the enterprise's wealth and total debt. This ratio is referred to as the "debt ratio" because it highlights the ratio of corporate debt to equity, either directly or indirectly (depending on the formula used).

The debt ratio can take on various "formulations."

In this paper, we will highlight the two most common formulas. A first determination of the debt ratio can be found by relating total Net Assets to the amount of equity. Since Net Assets can be financed only by equity or debt, the denominator of this ratio indirectly shows the company's degree of indebtedness. To ensure balanced financial reporting, low Net Assets imply the presence of high debt while, conversely, high Net Assets are compatible with low debt. For this rationale, there is no accurate benchmark. It is possible to say that if the indicator is around a value of 4, financial balance is usually ensured. On the other hand, higher values must be interpreted in light of the intertemporal trend of the ratio, which shows the development over several financial years of the debt itself.

A second formulation of the ratio, which is more straightforward but less widely used, involves contrasting total corporate debt (derived from the sum of short-term and long-term liabilities) with shareholders' equity.

From an analysis of this ratio, it is evident how its value is related to the firm's financial health. A high ratio implies a sizeable relative amount (relative to net worth) of debt. It is possible to say that if the indicator stands at a value of about 3, financial equilibrium is usually ensured.

However, the above parameters should be considered with extreme caution. An analysis of multiple balance sheets shows that, on the market, there are companies with much higher rates that continue to live and operate despite this. There is no doubt, however, that the further one moves away from the values indicated as "benchmarks," the greater the risk of financial default.

A final consideration should be made regarding the admittedly uncommon assumption that the debt ratio reaches shallow values. Small amounts of debt are often found in tiny and family businesses (including large and medium-large ones). Upon such a circumstance, the company's financial situation can always be optimal even if, in the presence of too small an amount of indebtedness, the company shows inadequate exploitation of its creditworthiness and, consequently, of its ability to develop.

BENCHMARKS

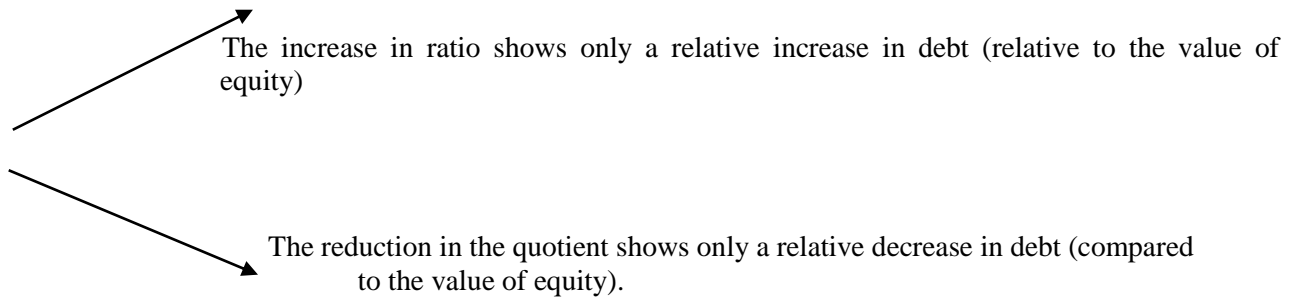
From the above, it can be said that overall financial balance is ensured if the debt ratio reaches the following values:

- 1) if the net assets/equity formula is opted for, the ratio is appropriate not to exceed the value of 4
- 2) if the total debt/equity formula is opted for, the ratio should not exceed the value of 3.

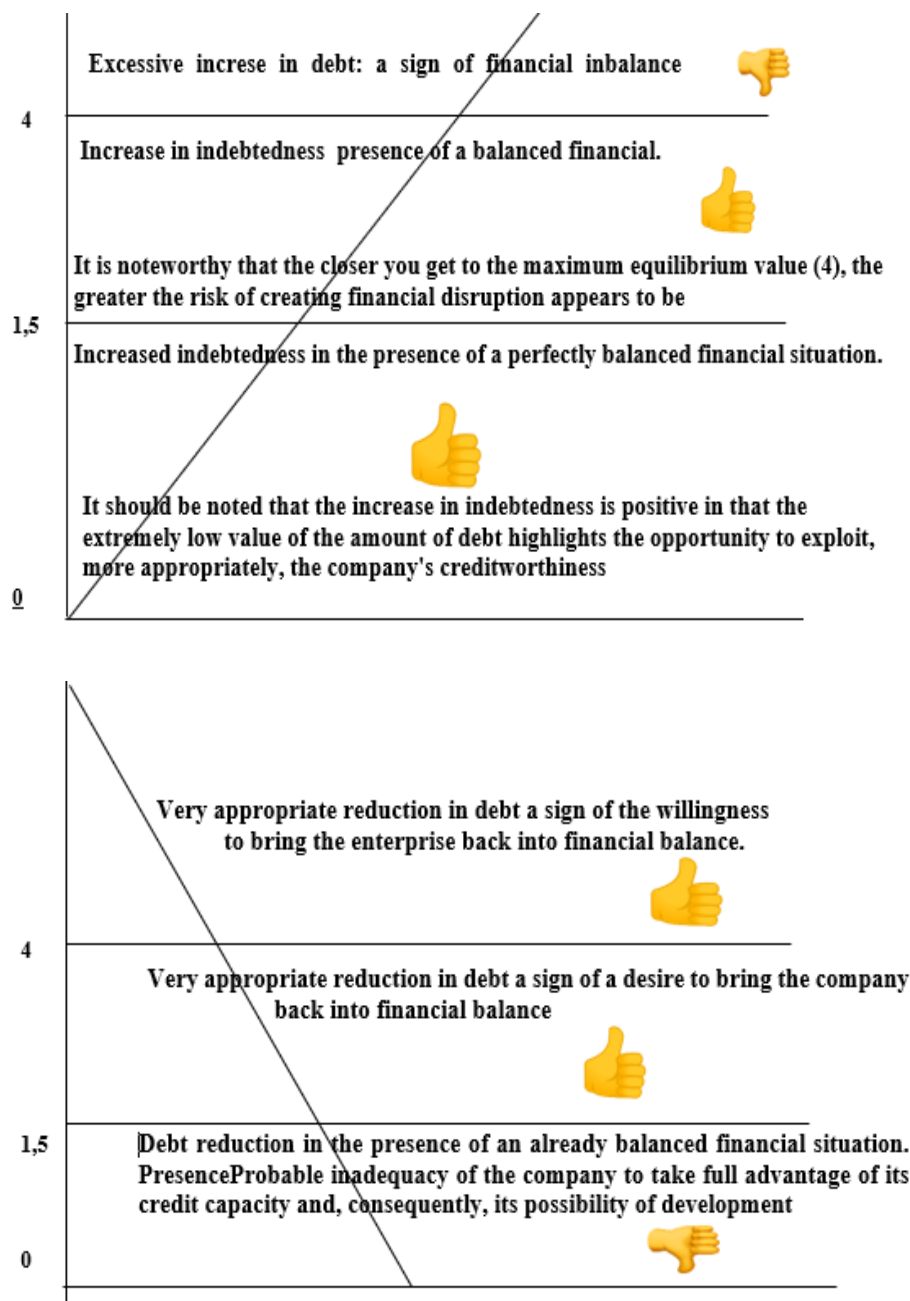
Assuming higher values, it is possible to say that the farther the ratio is from the above parameters, the greater the risk of financial default..

JUDGMENT TREND RATIO

In general terms, no judgments, positive or negative, can be made on the mere consideration of the ratio trend. From the analysis of the ratio trend, it is only possible to state that:



However, what has been highlighted above should be complemented by considerations regarding the comparison between the ratio trend, the value of the benchmark, and references related to good financial policy. In summary, the assessment of the ratio trend can summarize as follows (for simplicity, reference is made to the net assets/equity ratio with related benchmarks):



SHORT-TERM BANK FINANCING INTENSITY RATIO

$$\text{Short term bank financins intensity ratio} = \frac{\text{short-term payables to banks}}{\text{characteristic revenues}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable
- Very useful
- Useful
- With reduced usefulness ←

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The short-term bank financing intensity quotient identifies a ratio used to assess the degree of short-term borrowing from banking institutions that the company "requires" to achieve a given amount of core revenues. Sometimes, the ratio used is the reciprocal of the above quotient: in this hypothesis, the ratio would indicate how many times the company, through revenues, can repay the banks' short-term loans. Such a reading leads to the assertion that a reduction in core revenues should be considered a source of financial strain on banks. Those who use this indicator generally assume that the benchmark should be less than 15 per cent.

As the reader may have noticed, we have attributed reduced usefulness to this ratio because the ratio underestimates a very relevant financial element, i.e., the "liquidity of revenues." Indeed, revenues represent positive income components that almost never collimate with the cash flow emanating from them. Considering this ratio as a valuable element of financial analysis runs the risk of downplaying the circumstance that revenues themselves do not provide any information about the cash inflows the firm has had or is due to have.

Therefore, the interpretation of this ratio must be carried out in conjunction with indicators that measure the "financial" aspect of sales.

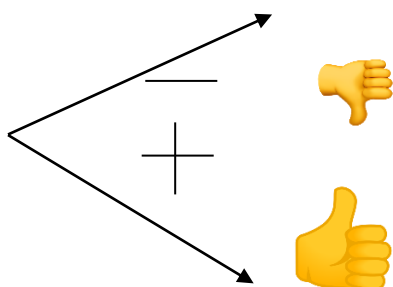
BENCHMARKS

Those who use this indicator generally assume that the benchmark should be less than 15%. As highlighted above, interpreting this ratio requires the simultaneous analysis of the financial aspect of sales.

JUDGMENT TREND RATIO

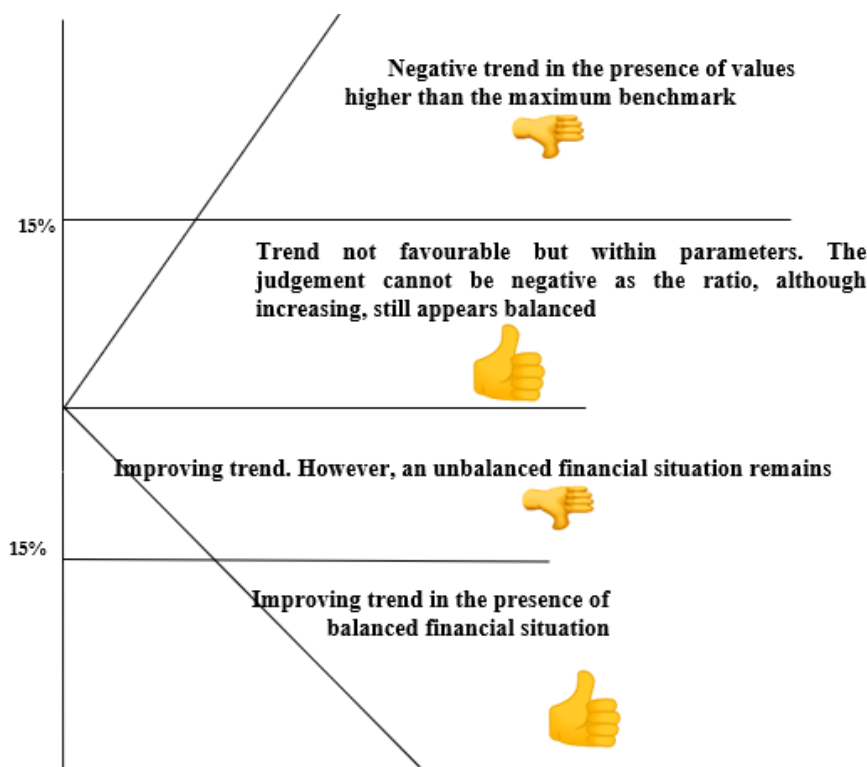
In general terms, it can say that if the ratio decreases, the financial balance is strengthened; on the other hand, if the ratio shows an increase, the financial situation, at least in inter-temporal terms, shows signs of worsening.

In summary terms:



The negativity of the ratio is related to the achievement of a value of 15%

However, the visual symbols highlighted above should be complemented by considerations regarding comparing the ratio trend and the benchmark value. In summary, the assessment of the ratio trend can be summarized as follows.:



RATIO OF OVERALL FUNDING INTENSITY

$$\text{Ratio of overall funding intensity : } \frac{\text{net financial position}}{\text{equity}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable ←
- Very useful
- Useful
- With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

This ratio is part of the set of ratios that assess the balance between debt and the company's wealth. In addition to the ratios illustrated above, analysts usually determine the ratio that compares the net financial position and the company's total equity to have an overall view of the financial situation. This indicator takes on various definitions. In this text, we have used the best-known term: total financing intensity ratio.

To understand the meaning of this ratio, it is necessary to define what is commonly referred to as the 'net financial position'.

This margin is derived from the following summation:

- long-term liabilities-financial
- + short-term liabilities-financial
- immediate liquidity
- readily liquid securities, included in short-term or long-term assets.

As can be seen, the net financial position, calculated as the difference between financial liabilities (short-term and long-term) and immediate liquidity (including readily liquidable securities), identifies the amount of financial liabilities net of assets that could be liquidated and used immediately for repayment.

This ratio is widely used in financial analyses by banks giving, and granting credit lines to companies.

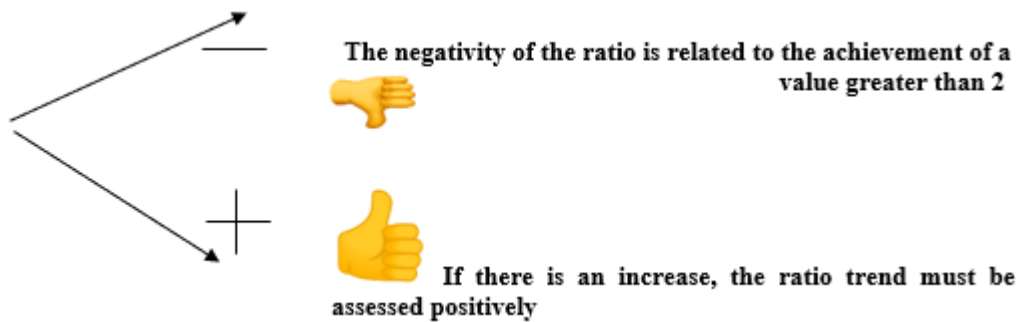
Analysts using this ratio indicate in the value of 2 the maximum level that the ratio should reach. Higher amounts indicate a less than the perfectly balanced financial situation that, at least in probabilistic terms, could lead to liquidity tensions.

BENCHMARKS

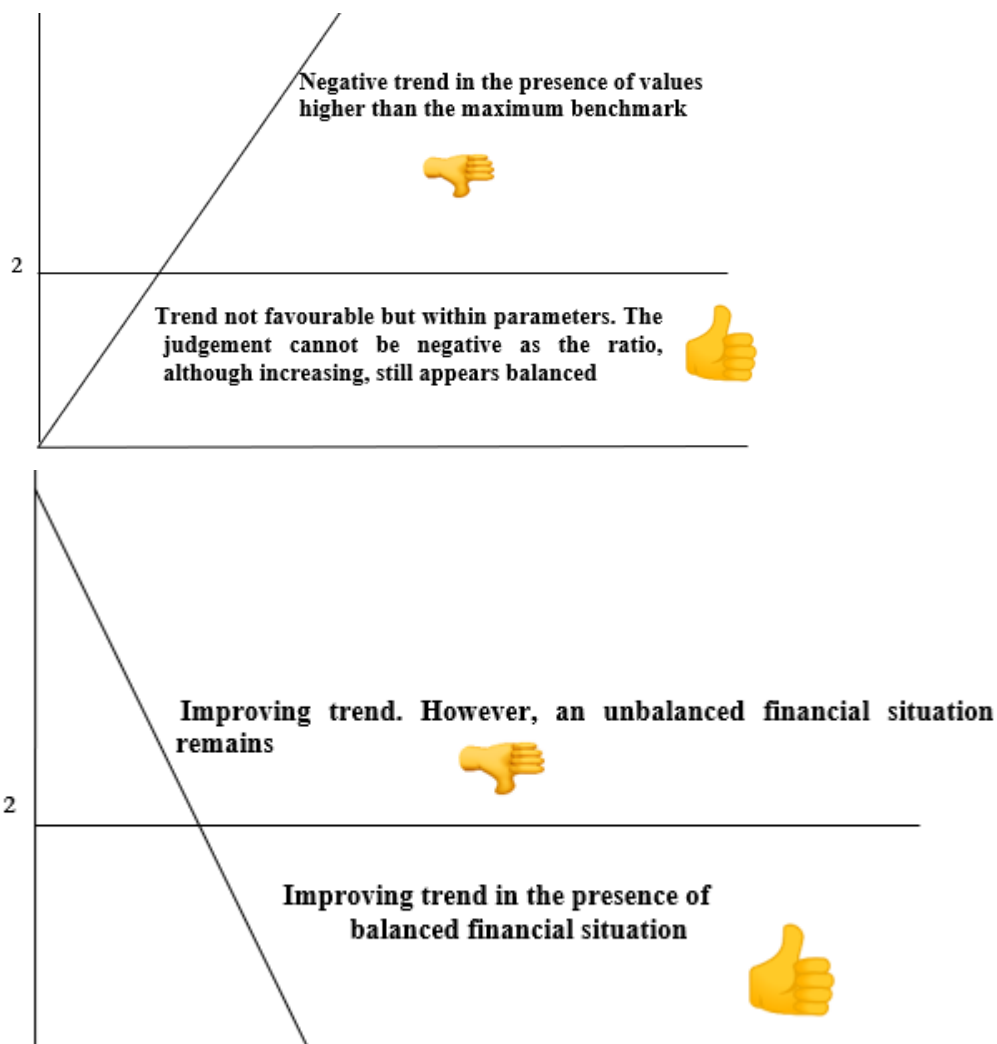
Those who use this indicator generally assume that the maximum reference value should be 2. Higher values are interpreted as symptoms of potential financial imbalance.

JUDGMENT TREND RATIO

In general terms, it can say that if the ratio decreases, the financial equilibrium strengthens; if, on the other hand, the ratio shows an increase, the financial situation, at least in inter-temporal terms, shows signs of worsening. In summary terms:



The visual symbols highlighted above should, however, be complemented by considerations regarding the comparison of the ratio trend with the value of the benchmark. In summary, the assessment of the ratio trend can be summarised as follows:



GROSS INCOME COVERAGE RATIO

$$\text{Gross income coverage ratio: } \frac{\text{Net financial position}}{\text{EBITDA}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable
 Very useful ←
 Useful
 With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

This ratio completes the analysis of the previous ratio. Like the ratio defined as 'total financing intensity', the gross income coverage ratio also places the net financial position at the numerator of the quotient. As we have already pointed out, this aggregate identifies the total financial debt (regardless of maturity) net of assets that could be liquidated and used immediately to repay negative equity components. The ratio analysed here compares the net financial position with an income figure that identifies earnings before the deduction of interest expense, taxes, depreciation and amortisation (EBITDA). Again, to understand how EBITDA is calculated and interpreted, the reader is referred to the section on this earnings aggregate (§ 3.2.3).

The indicator under study is determined to understand the company's ability to meet its financial debts, net of immediately liquid assets, through the achievement of characteristic income components (before depreciation and amortisation), investments and financial assets.

The higher the ratio, the greater the possibility of financial default. In most analyses, a situation where the ratio does not exceed a value of 5 is considered balanced.

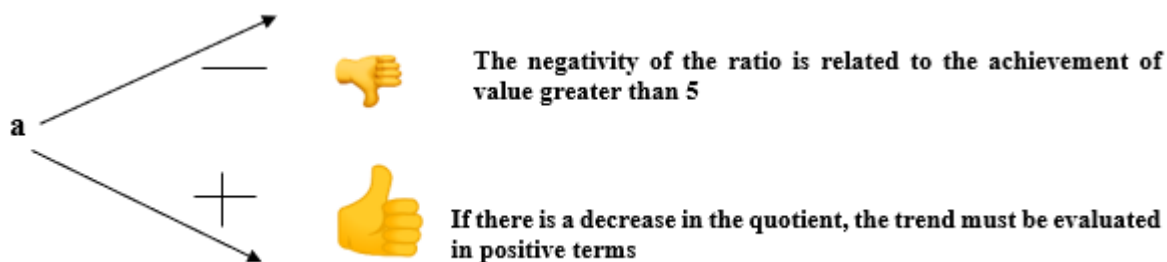
BENCHMARKS

Those who use this indicator generally assume that the maximum reference value should be 5. Higher values are interpreted as symptoms of potential financial imbalance

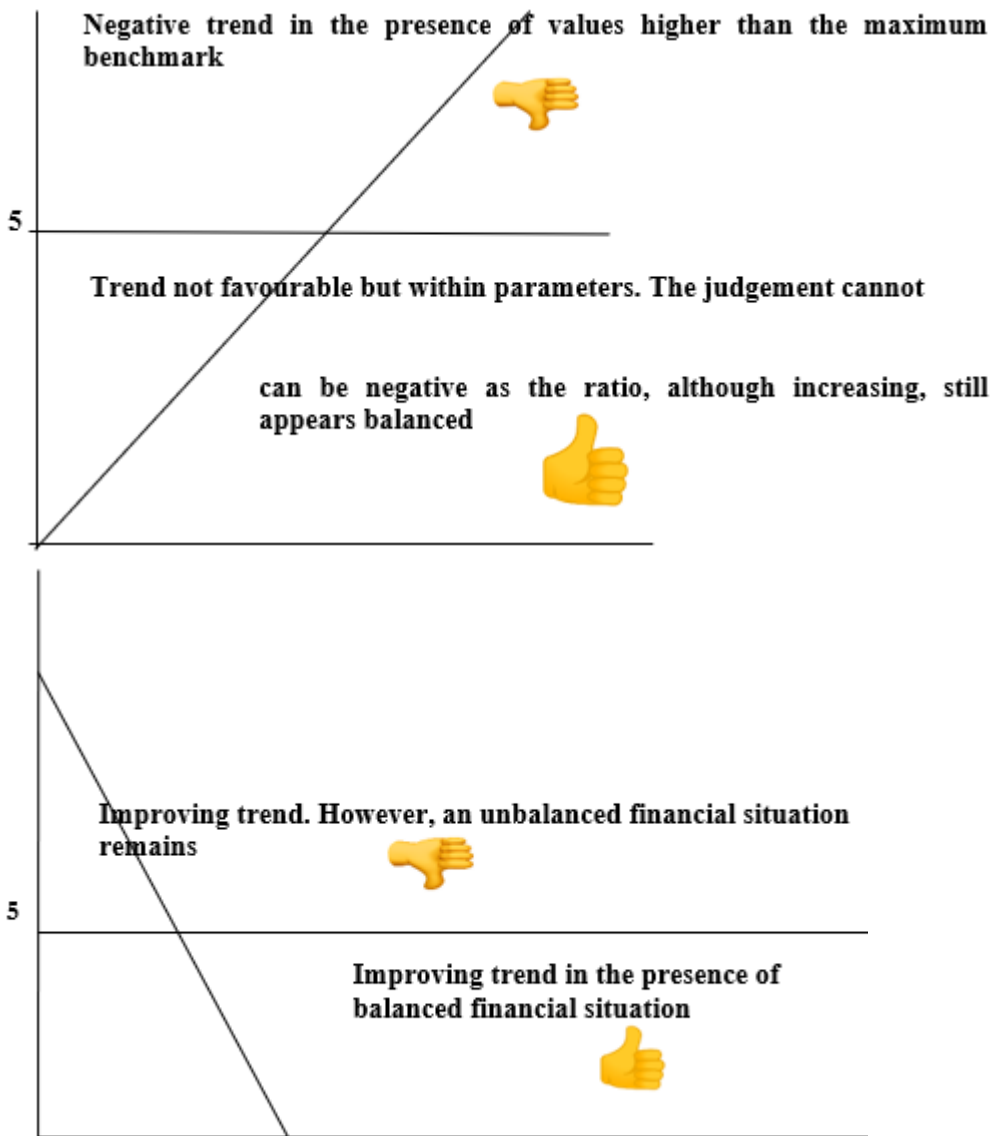
JUDGMENT TREND RATIO

In general terms, it can say that if the ratio decreases, the financial equilibrium strengthens; if, on the other hand, the ratio shows an increase, the financial situation, at least in inter-temporal terms, shows signs of worsening.

In summary terms:



The visual symbols highlighted above should, however, be complemented by considerations regarding comparing the ratio trend with the benchmark's value. In summary, the assessment of the ratio trend can summarise as follows:



RATIO OF CAPITAL CAPACITY TO CREATE CASH FLOW

Ratio of capital capacity to create cash flow $\frac{\text{Cash flow expressed in terms of Net Working Capital}}{\text{Expressed in terms of Net Working Capital : Net Assets}}$

Ratio of capital capacity to create cash flow $\frac{\text{Cash flow expressed in monetary terms}}{\text{Expressed in monetary terms : Net Assets}}$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

- Indispensable ←
- Very useful
- Useful
- With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The correct interpretation of this ratio requires knowledge of cash flow. To make the logic of this ratio understood, it can state that the characteristic cash flow represents the financial flow connected with the company's typical

operations. Cash flow can take on two dimensions: one connected to the concept of the 'financial aspect in the broad sense', the other concerning the purely liquid dimension of the characteristic income components that form the starting point for the flow calculation. Concerning this specific subject, we refer the reader to § 4.2, in which we will illustrate, in an analytical manner, the methods of calculation and operational commentary of the aggregate that appears in the numerator of the ratio being examined.

In extreme synthesis (and with the risk of oversimplifying a complex notion), one can consider that the characteristic cash flow expressed in financial terms, understood in the broad sense, identifies the summation of the part of the typical costs and revenues that impact, directly, on the net working capital in the strict sense, i.e. on the total trade receivables + inventories - trade payables.

Instead, the characteristic cash flow expressed in monetary terms represents the cash flow (or active bank) emanating from typical operations. While, for example, a cost fully transformed into trade debt enters, for all intents and purposes, into the calculation of financial cash flow, a similar negative income component with no cash/banking impact would have no relevance in determining cash flow expressed in monetary terms.

Although some analysts still use the ratio that compares financial cash flow with Net Assets, most scholars and practitioners consider such an indicator almost irrelevant. They focus exclusively on the ratio that places the cash flow from operations (or characteristic cash flow expressed in monetary terms) at the numerator. The reader is referred to the following section for a more in-depth study of the reasons for the lack of theoretical and pragmatic relevance of the financial cash flow (as well as for an analytical investigation of how the monetary cash flow is determined).

The ratio that contrasts the cash flow characteristic monetary with the Net Assets must reach, as a minimum, a value equal to 3 because lower amounts highlight a state of financial distress intended as a reduced ability to create cash flows compared to the amount of the Net Assets.

A ratio with a value greater than four guarantees optimal balance.

BENCHMARKS

Due to the conformation of the ratio, it is not possible to identify a benchmark for the ratio that places, at the numerator, the characteristic cash flow expressed in financial terms.

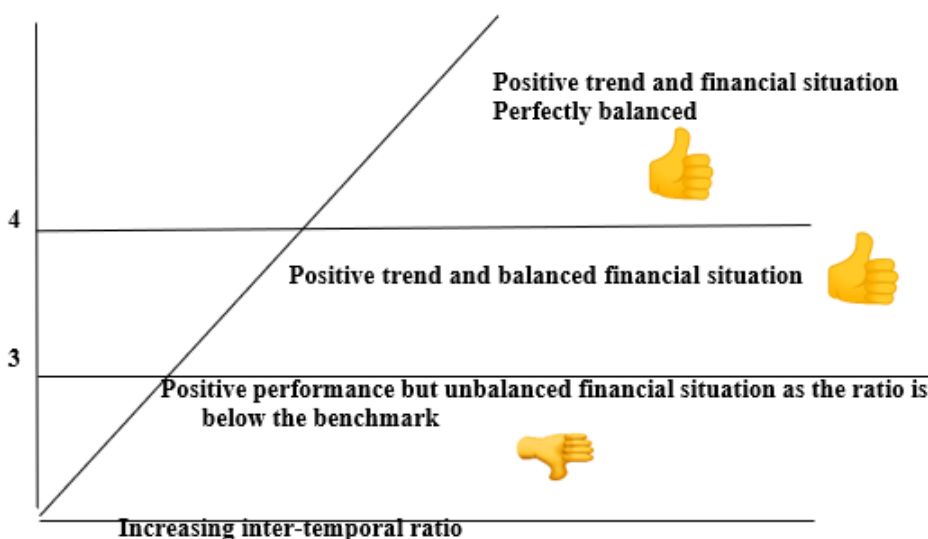
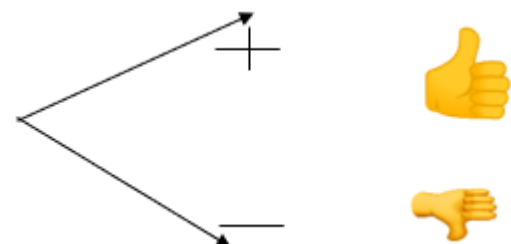
The acceptable benchmark for the ratio, on the other hand, which results from contrasting the characteristic monetary cash flow with the Net Assets, is 3. The situation can be considered perfectly balanced if the ratio reaches 4.

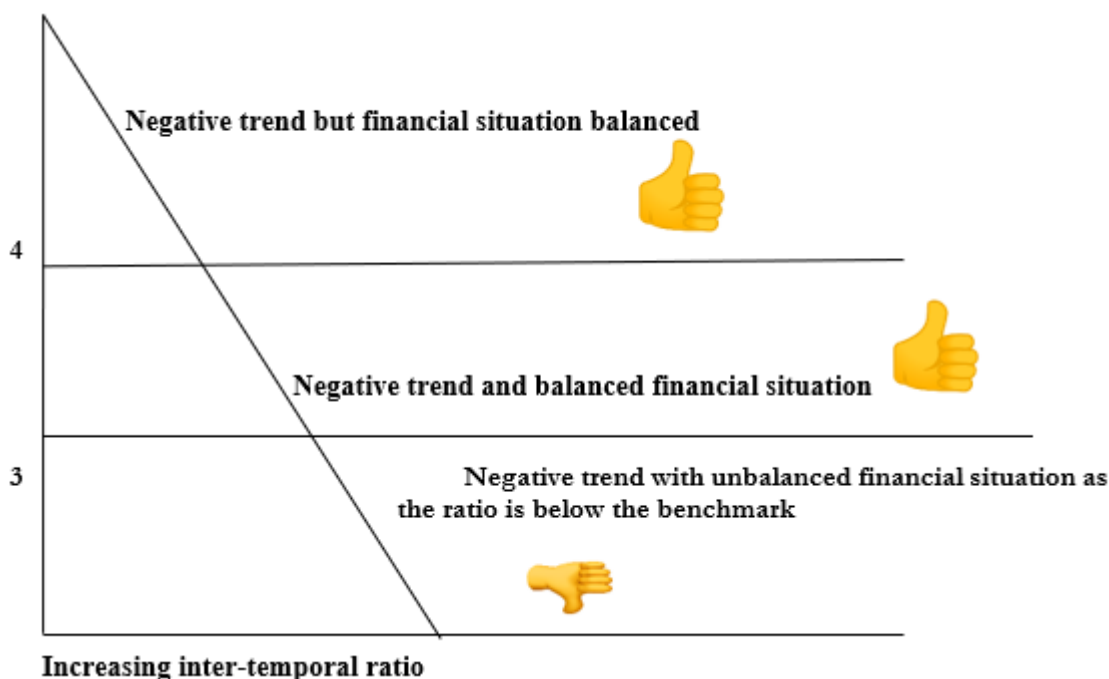
JUDGMENT TREND RATIO

In general terms, it can be said that if the ratio increases, the financial equilibrium strengthens, if, on the other hand, the ratio shows a decrease, the financial situation, at least in inter-temporal terms, shows signs of worsening.

In summary terms:

The visual symbols highlighted above should, however, be complemented by considerations regarding comparing the ratio trend with the benchmark's value. In summary, the assessment of the ratio trend can summarise as follows:





FINANCIAL SUSTAINABILITY RATIOS OF GROWTH

Net assets net of debt free of explicit financial charges

Capital intensity ratio: _____
 Characteristic revenues

Cash flow caratteristico espresso in termini di liquidità

Ratio di autofinanziamento vendite: _____
 Characteristic revenues

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

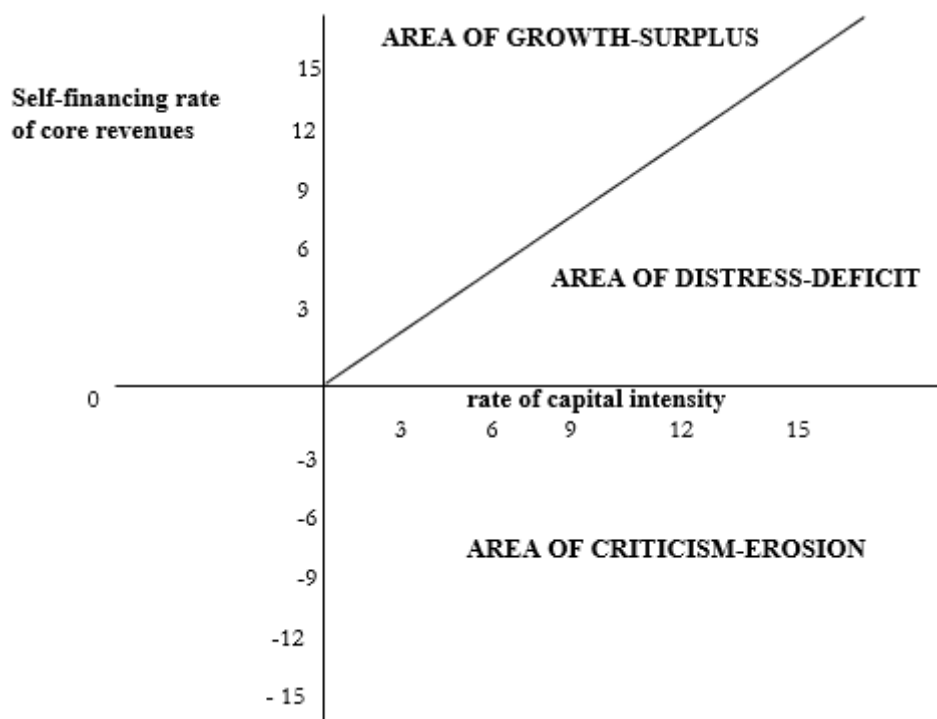
- Indispensable
- Very useful←
- Useful
- With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The financial sustainability of corporate growth is generally monitored through the joint study of two quotients: the capital intensity ratio and the self-financing rate of sales. The former compares the value of Net Assets net of all sources without explicit financial charges (e.g. severance pay, non-interest-bearing tax payables, non-interest-bearing sundry payables and trade suppliers) and revenues from the company's core business. This ratio measures the ability of Net Assets financed by onerous sources (in the sense of financial charges passed through the profit and loss account) to realise typical revenues. The lower the ratio, the greater the company can utilise capital to produce positive income components. The self-financing rate of sales, on the other hand, measures the ability of revenues to create cash flows within the company's economy related to the management of typical activities. It is evident that the higher the value of this ratio, the less the company must resort to external sources to finance corporate growth.

As already pointed out, the two ratios are often interpreted jointly so that the analyst can monitor, in a global way, the capacity of the company to self-finance its growth.

The joint use and interpretation of the two ratios allow the construction of the following graph:

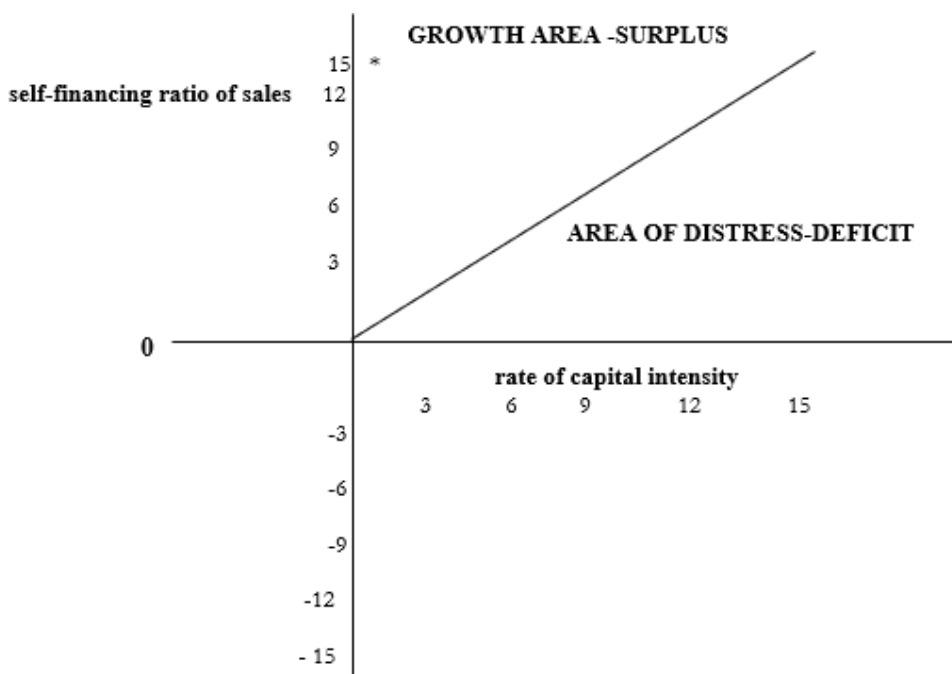


From the analysis of how the above graph is constructed, it is clear that there are three potential areas in which the company can position itself:

- 1) Growth-surplus area: an area in which the company shows a high capacity to self-finance its growth. Assume, for example, that the following indicators characterise the company Alfa:

- (a) capital intensity rate: 0.30
- b) self-financing rate characteristic revenue: 15%.

On a graphical level, the situation should look like this:



As can be seen, the positioning of the company in the upper part of the growth-surplus area highlights the fact that the company commits, in relative terms, little onerously financed capital and, at the same time, manages to produce a high amount of cash flow. A circumstance that enables the company to cope financially autonomously with high growth.

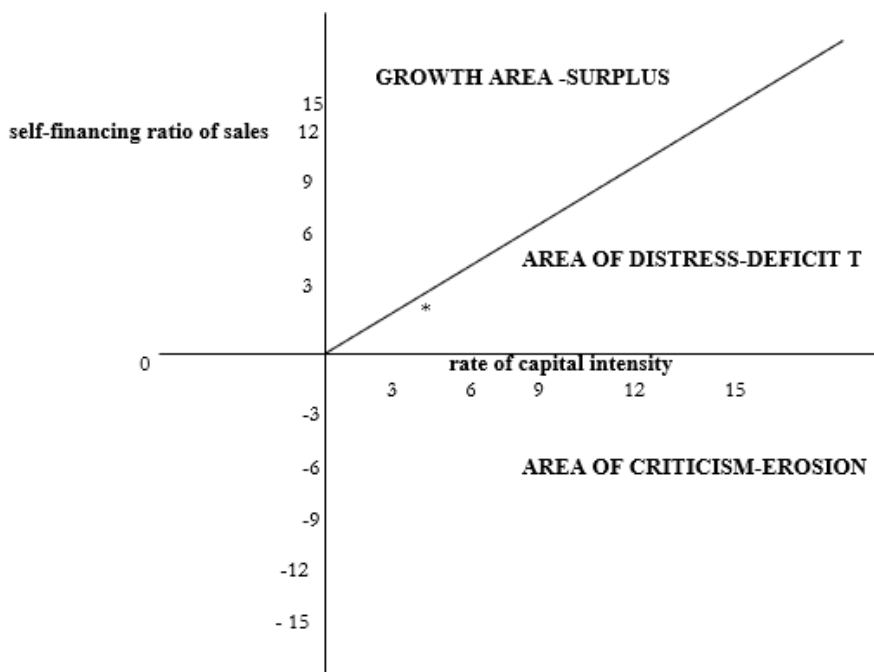
- 2) Non-performing-deficit area: an area where the company does not self-finance, with cash flow, its own dimensional growth. Companies in this area show difficulties in self-financing themselves with cash flow produced by typical operations but do not show problems of capital erosion. If the company is in this sector, it

offers financial difficulty in creating internal flows that can guarantee business development. However, this situation does not yet border on erosion but shows symptoms that should concern company management.

Assume that company Beta presents this situation:

- (a) capital intensity rate: 3.80
- b) self-financing revenue rate: 2%.

The graphical situation would be as follows:



It is evident how the company is in financial distress that, in the medium term, can turn into a real financial emergency.

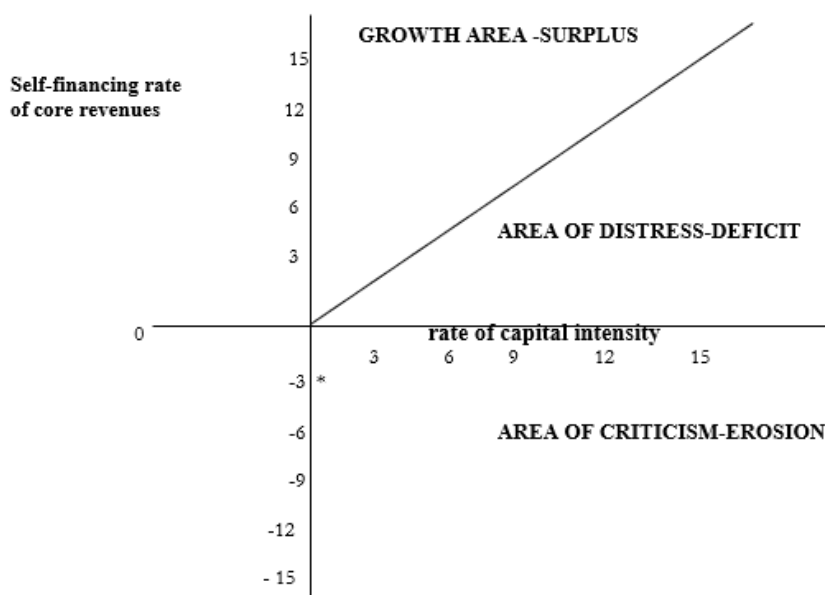
3) Criticality-erosion area: an area in which the enterprise not only fails to self-finance its growth, but even finds itself having to erode its capital so that the financial situation does not lead to a real default. It is evident how being in this sector causes the company to show clear and serious symptoms of financial difficulties. If the self-financing rate becomes negative, not only does the typical activity not create new financial resources, but even drains management flows, creating an unsustainable financial situation. In fact, the main task of typical activity is to create cash flow. When typical management, instead of creating, destroys monetary resources, it places the company in a bankruptcy situation that contains, at its core, the prodromes of a complete financial default.

Assume that the Delta enterprise is characterised by the following values:

- (a) capital intensity rate: 0.5
- b) self-financing rate of revenues: - 3%.

On a graphical level, the situation should look like this:

No particular commentary is needed to understand how management can no longer finance a company's development and even contributes to draining resources that will obviously have to be diverted to other objectives. Such a situation, prolonged for even a short time, inevitably leads to the financial failure of the company.



BENCHMARKS

No benchmarks are identified for these quotients. They are to be interpreted jointly in the light of the chart illustrated above.

AVERAGE CREDIT DURATION RATIO

$$\text{Average credit duration ratio : } \frac{\text{Trade receivables before allowance for doubtful accounts}}{\text{Total Annual Credit Sale}}$$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable ←
 Very useful
 Useful
 With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The average duration of receivables shows the average payment period granted to the company's customers. Since it represents an average value, it cannot be considered valid information to reclassify the item 'trade receivables'.

The intermediate term, on the other hand, identifies an indispensable tool for evaluating the financial equilibrium of companies, as it allows us to understand whether, within the company's economy, there is a balance between deferrals granted to customers and deferrals obtained from suppliers.

Concerning the average duration of receivables, it should be noted that, to avoid misinterpretation of the ratio value, the quotient should be determined as follows.

(a) the receivables in the numerator must include all trade receivables gross of the allowance for doubtful accounts. If one were to remove the allowance for doubtful accounts, one would essentially be eliminating precisely those 'stranded' receivables, i.e., those receivables that extend the average duration

(b) revenues or receivables must be adjusted to make the two values homogenous. Receivables, in fact, contain VAT as opposed to revenues. For the numerator and denominator to be homogeneous, either remove the VAT included in the receivables or add annual VAT to the revenues.

The interpretation of the average credit period requires two considerations:

- 1) an increase in the ratio is, in itself, negative, whereas a reduction in the ratio must be evaluated positively as it demonstrates an early repayment of the credits granted
- 2) the correct ratio assessment cannot disregard a comparison with the average duration of debts since such extensions are monitored to understand whether there is a balance between collection terms granted and payment terms incurred. Only comparing the two ratios can provide an overall picture of this situation.

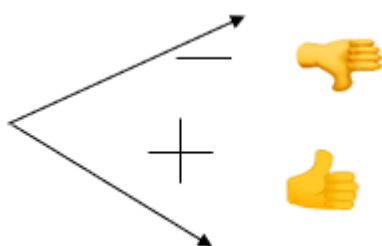
BENCHMARKS

The only internal benchmark of average credit duration is average debt duration

JUDGMENT TREND RATIO

In general terms, it can be said that an increase in the ratio indicates a negative situation, in itself, while a reduction in it is to be assessed positively.

In summary terms:



As already pointed out, any consideration of the ratio cannot be separated from a comparison of the ratio value with the average debt duration.

AVERAGE DEBT DURATION RATIO

Trade payables

Average debt duration ratio : $\frac{\text{Trade payables}}{(\text{purchases} + \text{VAT}) / 360}$

MANAGEMENT UTILITY OF THE RATIO IN THE CONTEXT OF FINANCIAL-PATRIMONIAL ANALYSIS

Indispensable ←
Very useful
Useful
With reduced usefulness

CONSTRUCTION LOGIC AND MANAGEMENT SIGNIFICANCE OF THE RATIO

The average duration of payables shows the average payment term obtained from the company's suppliers. Since it represents an average value, it cannot be considered valid information to reclassify the item "trade payables".

On the other hand, the average duration of payables identifies an indispensable tool for evaluating the financial equilibrium of companies since it allows us to understand whether, within the company's economy, there is a balance between deferrals granted to customers and deferrals obtained from suppliers.

With specific regard to the average duration of debts, it should note that to avoid misinterpretation of the ratio value, the quotient should be determined as follows

- (a) payables in the numerator must include all trade payables,
- (b) purchases or payables must be adjusted to make the two values homogeneous. The payables contain VAT as opposed to purchases. For the numerator and denominator to be homogeneous, it is, therefore, necessary to remove the VAT in the debts or add annual VAT to the purchases.

The interpretation of the average duration of debts requires two considerations:

- 1) an increase in this ratio is, in itself, positive, while a reduction in it must be evaluated negatively as it demonstrates an obligation to pay, in a shorter time, the accumulated debts
- 2) the correct ratio assessment cannot disregard a comparison with the average duration of receivables since such extensions are monitored to understand whether there is a balance between collection terms granted and payment terms incurred. Only comparing the two ratios can provide an overall picture of this situation.

BENCHMARKS

The only internal benchmark of average debt duration is average credit duration.

JUDGMENT TREND RATIO

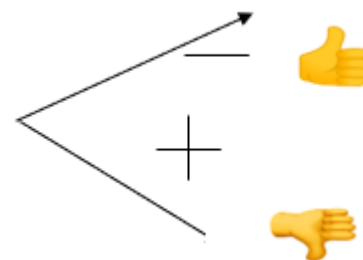
in general terms, it can be said that if the ratio increases, the financial equilibrium strengthens, if, on the other hand, the ratio shows a decrease, the financial situation, at least in inter-temporal terms, shows signs of worsening.

In summary terms:

As already pointed out, any judgement on the development of the ratio of average debt duration cannot be separated from a comparison with the corresponding average credit duration.

3) Ratios gaps: need for financial reporting.

As pointed out in the previous chapters, ratios identify indispensable tools for enterprise financial analysis. Such an in-depth analysis cannot be carried out without a prior comparison of items and aggregates of the balance sheet (and, in some instances, of the profit and loss account) since only such an operation can make it possible to understand the existence or lack of balance between items distinguished by similar characteristics (of maturity, structure, etc.).



The financial reporting quotient, therefore, represents a highly relevant analysis tool as it disregards the absolute value of the accounts to focus attention on aspects of relativity.

In the preceding pages, it was also emphasised that it is indispensable to implement an integrated analysis system, as the interpretation of individual quotients can be limited and misleading. Furthermore, it must highlight how the various ratios must often investigate in light of several considerations that cannot be derived directly from the book values of the balance sheet and income statement.

At this point, however, it must be pointed out that, in reality, carrying out a complete analysis of the company's financial situation requires other means of in-depth accounting analysis in addition to the instruments indicated above. Let us suppose, for example, that we wish to perform a calculation by ratios, which is systematic and characterised by the simultaneous consideration of all the elements of valuable knowledge for interpreting the ratios themselves. One must ask oneself the following: does the fulfilment of the three conditions mentioned above (implementation of a systematic analysis, systematic, and supplemented by the in-depth consideration of extra-financial reporting of accounting items) make the results of the financial study complete, exhaustive and reliable? The answer is no. To demonstrate this, consider this simple example.:

Let us assume that we want to calculate the current ratio of an individual. The intention is to show the financial equilibrium of his position. An individual's financial situation can be considered similar to that of a company without inventory. For this reason, it can assume that the short-term financial equilibrium is 'guaranteed' by a current ratio greater than unity. Assume that the person under study is characterised by a current ratio of 1.3 (with a constant trend compared to the previous period). The question the analyst must ask is: does the fact that the ratio is well above unity allow one to say that a sound financial balance in the short term characterises the person? It could say that the value of the current ratio constitutes, on a substantial level, a guarantee of short-term financial soundness. Let us now suppose that we have a different piece of information: let us assume that the income that the subject will be able to count on in the next financial year is the result of a loan. At the same time, future outgoings are connected with incurring normal living expenses. It is evident how such information calls into question the apparent financial equilibrium that could have been assumed after considering the current ratio. While it is true that, in the period under consideration, income will exceed expenditure, it is equally valid that it is by no means possible to speak of financial equilibrium if a person is forced to take out a bank loan to meet normal living expenses. This consideration sheds new light on the interpretation of ratios. Ratio analysis, although carried out systematically, does not allow an analysis of the type of financial income and expenditure that the company will have or has had. This limitation cannot be overcome in ratio analysis as it is an intrinsic element of the ratios. The financial ratio is static and lacks information on the quality of the income and expenditure that will occur in the period under consideration. These two elements, characteristic of any financial quotient, make it impossible to employ the ratios tool, a dynamic analysis to gain a qualitative insight into the company's financial income and expenditure. It is evident at this point how the analysis by ratios is, in itself, limited. These considerations only apply in the financial sphere, as the income analysis by ratios can be considered sufficiently complete. The need to supplement ratios with other analysis tools only distinguishes the in-depth analysis of the financial situation.

These considerations allow us to state that to express an opinion on a company's financial situation, the analysis by ratios must necessarily be supplemented by a qualitative comparison between income and expenditure. The qualitative analysis of income and spending can only be implemented through the use of an accounting tool that, on the one hand, identifies all needs and all sources and, on the other, allows an in-depth qualitative analysis of the items thus specified. This analysis is implemented through financial flows.

In synthetic terms, it is possible to state that the objective of financial flows is twofold:

- 1) identification of all financial income and expenditure;
- 2) comparison between recurrent income and recurrent expenditure and, by residue, between non-recurrent (occasional) income and non-recurrent (occasional) expenditure.

The objective of the flows is, therefore, to identify all receipts and outgoings to subsequently subject them to qualitative monitoring. As will be seen when reading the following pages, while the interpretation of results is straightforward, calculating financial flows appears to be a challenging task. The focus will therefore be on how the cash flows are calculated, as the interpretation poses no particular problems. Since this section is intended to determine cash flows, the notions of requirement and source will be restricted to a purely monetary concept. Therefore, when reference is made to a requirement, it will implicitly mean a liquid requirement, i.e. a cash requirement and an active bank.

Conversely, when reference is made to a source, it will implicitly mean a source expressed in monetary terms of cash and active bank. Regarding the use of flows, it should note that doctrine, practice, and finally, accounting standards agree that it is more beneficial to analyse cash flows than other types of flows. The analysis of cash flows, e.g., working capital, is no longer considered particularly significant for analysing the financial situation since financial equilibrium can conceal a profound monetary imbalance. For this reason, cash flows represent the most widely used dynamic analysis tool at the operational level and are most studied in theoretical terms.

In this section, the issue of the quantitative determination of liquidity needs and sources will be explored. To be able to carry out such a calculation, it is necessary to ask, in essence, this question: what happened in a certain period in terms of cash inflows and outflows?

It is evident that flows do not concern an instant, as ratios do, but rather consider a period. This is why flows are defined as dynamic, as opposed to ratios, interpreted as static analysis elements. It should note that the period taken into consideration may be not only the financial year but also the month, the week or even the day.

After determining the inflows and outflows, it is necessary to move on to the stage of interpreting the data obtained. Understanding the dynamic financial situation requires that the values of flows identified employing worksheets or other accounting tools be correlated to show the balance or imbalance between items that must be interpreted simultaneously. To achieve this, a summary document must be drawn up. Since those analysing the data often do not have specific technical skills in accounting, it is necessary to draw up a document that simultaneously achieves two objectives.

- 1) summary of the results obtained in the determination of flows between needs and sources;
- 2) illustration of the results employing a document that can be understood even by a non-accounting expert.

The above two objectives are achieved by preparing the so-called cash flow statement, a document summarising the flows while explaining the results in a clear and understandable way.

The cash flow statement is, in many countries, legally regulated. However, this does not prevent the drawing up of a cash flow statement that is more in line with the knowledge needs of managers.

The drafting of the statement used for internal management purposes is therefore left to the analyst, who must opt for a clear and understandable form for all users whose attention will be submitted. The choice will have to be made based on the theoretical and practical considerations that each analyst develops in the context of budgetary analysis. The objective of financial statements, regardless of the technical format used, is to "bring together" all flows concerning homogeneous transactions in a meaningful aggregate. In this sense, business operations are broken down into several homogeneous functions. The diversity of the various schemes found in doctrine and accounting standards is expressed in the different identification of significant sub-aggregates. In other words, the company's management is subdivided into aggregates identified according to different logics in the various schemes.

In the writer's opinion, the format of the report must be identified with the primary need of the analyst in mind, the non-fulfilment of which significantly invalidates the clarity of the results obtained through the analysis of the company's financial statements. The need to which we refer relates to the circumstance that, for reasons of intelligibility of the results, the research should use terminology endowed with substantial constancy of meaning. Using the same terms with different definitions in the various areas of analysis causes a terminological inconsistency that prevents the study itself from being considered as a whole. The financial reporting framework represents a single entity within which the reclassification of the balance sheet, the restatement of the income statement and finally, the preparation of the cash flow statement represent parts of a coordinated system. Introducing the notion of a system, i.e. a set of interrelated elements, requires coordinating the various analysis tools. Using terms that are the same in form but different in substance constitutes an element of imperfection in the system. To make the analysis by ratios and by flows, a fluid set of congruent and coordinated elements, it is necessary to prepare a set of schemes characterised by formal and substantial coherence. This coherence must be expressed in every part of the analysis to guarantee an overall uniformity of the results obtained and a possibility of reading unaffected by potential interpretative errors. For these reasons, the writer prefers to recommend, as part of an internal company analysis, the reporting scheme indicated below, which is part of an integrated information system. On the other hand, we do not recommend adopting the reporting scheme provided for by the Italian international and national accounting standards, as these structures are not considered particularly informative.

Within the integrated information system mentioned above, the form of the statement is as follows:

Financial statements prepared as part of an integrated analysis/planning system

	Needs	sources
CASH FLOW OF CHARACTERISTIC BUSINESS MANAGEMENT (OR CASH FLOW IN STRICT SENSE)		
LONG TERM TANGIBLE AND INTANGIBLE ASSET MANAGEMENT * *		

FINANCIAL MANAGEMENT * * * * *		
ASSET MANAGEMENT * * * *		
MANAGEMENT OF NON-TAX EXPENSE PROVISIONS AND RISK PROVISIONS *		
TAX MANAGEMENT NON- CHARACTERISTIC MANAGEMENT BY DEFINITION		
SEVERANCE PAY MANAGEMENT *		
EQUITY MANAGEMENT AND DIVIDENDS * *		
Δ CASH AND ACTIVE BANK		
TOTAL		

The preparation of such a document must be considered indispensable so that the financial ratios outlined above do not lead to erroneous and misleading conclusions.

3) Conclusions

After this brief excursus on financial ratios, it is worth highlighting how financial ratios may often be incorrectly determined or misinterpreted. If performed on incorrect ratios, financial analysis will inevitably lead to erroneous conclusions. If, on the other hand, the ratio calculation is correct, but the interpretation is erroneous, the judgement made on the financial situation will, of course, be misleading concerning the company's actual financial situation. It is, therefore, necessary to pay close attention to both the moment of calculation and the moment of interpretation of the financial ratios, not forgetting that the ratios, drawing their origin from financial reporting data, i.e. from a system, also represents a system; all ratios are interrelated, and the interpretation of each one must be made in the light of the performance of all the other ratios calculated. As highlighted in the previous pages, everything must be interpreted in light of the results of the dynamic financial analysis carried out through the financial flows and the drafting of the statement point. Simultaneously, the flows can provide valuable management information to managers who must fully understand the company's financial situation. Only in this way will the conclusions be drawn from the interpretation of the ratios.

Works Citation

- Alexander D., A European true and fair view?(1993). European accounting review, vol 2, issue n. 1. Alexander, D. and H. R. Schwencke and (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.
- Alexander, D. and H. R. Schwencke, (2003). Accounting change in Norway, European Accounting Review vol. 12, issue 3, p. 549-566.
- Alexander D., Jermakowicz E, (2006). A true and fair view of the principles/rules debate, Abacus, Vol. 42, n. 2.
- Alexander, D., Nobes C. (2013). Financial accounting: an international introduction, Pearson.
- Avi M.S., “ Accounting, finance, financial reporting, management administratione and...refererences. “, European Journal of Economics, Finance and Administrative Sciences, Issue 103 February, 2020, pag. 4-7
- Avi Maria Silvia (2019), Il sistema informativo integrato, Volume I, Analisi aziendali di natura economico-finanziaria: il financial reporting come strumento di gestione
- Anda E. O., Puiga X. (2005). The Changing Relationship between Tax and Financial reporting in Spain, Accounting in Europe, Vol. 2, Issue 1, pages 195-207.
- Ballwieser W., G. Bamberg, M.J. Beckmann, H. Bester, M. Blickle, R. Ewert, A. Wagenhofer and M. Gaynor (2012). Agency theory, information, and incentives. Springer Science & Business Media.

- Benston, G. J., M. Bromwich, R.E. Litan, and A. Wagenhofer, (2006). *Worldwide financial reporting: The development and future of accounting standards*. Oxford University Press.
- Burchell S., C. Clubb, A. Hopwood, J. Hughes, J. Nahapiet, (1980). The roles of accounting in organizations and society, *Accounting, Organizations and Society*, Vol. 5, issue 1, Pages 5-27.
- Burchell S., C. Clubb A.G. Hopwood (1985). "Accounting in its social context: Towards a history of value added in the United Kingdom", *Accounting, Organizations and Society*, Vol. 10, issue 4, pages 381-413.
- Delvaile, P., Ebbers, G. and Saccon, C. (2005) International financial reporting convergence: evidence from three continental European countries, *Accounting in Europe*, 2(1), pp. 137–164.14
- De Franco G., S. P. Kothari and R.S..Verdi (2011). "The Benefits of Financial Statement Comparability", *Journal of Accounting Research*, Vol. 49, pages 895–931.
- Di Pietra R, McLeay S., Riccaboni A.,(2001) "Regulating Accounting Within the Political and Legal System", *Contemporary Issues in Accounting Regulation*, Chapter 3, Pages 59-78, Springer.
- Ewert R., A. Wagenhofer (2005), Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review* vol. 80, Issue 4, pages 1101-1124.
- Godfrey J.M., , Chalmers K., (2007) *Globalisation of Accounting Standards*, Edgar Elgar. *European Journal of Economics, Finance and Administrative Sciences* Issue 101 (2019) 45
- Graham J.R.,Raedy J.S., .Shackelford D.A.," (2012) Research in accounting for income taxes", *Journal of Accounting and Economics*, vol. 53, issue 1- 2, pages 412-434.
- Haller, A. Financial accounting developments in the European Union: past events and future prospects, (2002). *European Accounting Review* vol 11 issue 1, pages 153-190.
- Haller A, P. Walton and B. Raffournier B. (2003). *International accounting*. Cengage Learning EMEA.
- Hopwood, A.G. (1972). "An Empirical Study of the Role of Accounting Data in Performance Evaluation", *Journal of Accounting Research*, Vol. 10, pages 156-182.
- Hopwood, A. G. (1973). *An accounting system and managerial behaviour*. Lexington Books.
- Hopwood, A.G. (1974). *Leadership Climate and the Use of Accounting Data in Performance Evaluation*, *The Accounting Review*, Vol. 49, No. 3, pages 485-495.
- Hopwood, A. G. (1976). *Accounting and human behavior*. Prentice Hall.
- Hopwood, A.(1987). "The archeology of accounting systems", *Accounting, organizations and society*, vol. 12, issue 3, pages 207-234.
- Hopwood, A. G. and Peter Miller (1994). *Accounting as social and institutional practice*. Vol. 24. Cambridge University Press.
- Hopwood, A.G., (1999). "Situating the practice of management accounting in its cultural context: an introduction". *Accounting Organizations and Society*, Vol. 24, Issue 5-6, pages 377-378.
- Hopwood, A.G. (1983). "On trying to study accounting in the context in which operates", *Accounting, Organizations and Society*, Vol. 8, No. 213, pages. 287-305.
- Hopwood, A. G., (1990). "Ambiguity, Knowledge and Territorial Claims: Some Observations on the Doctrine of Substance Over Form", *British Accounting Review*, Vol. I. pages 79-87.
- Hopwood, A.G. (1990). "Accounting and the pursuit of efficiency", *Accounting, Auditing & Accountability Journal*, Vol I, pages 238-249.
- Hopwood, A. G. (2000). "Understanding financial accounting practice", *Accounting, Organizations and Society* Volume 25, Issue 8, pages 763–766.
-] Hopwood, A. G., (2007). Whither accounting research?, *The Accounting Review* vol. 82, issue 5, p. 1365–1374.
- Hopwood, A. G., Chapman C. S., Shields M. D. (2007). *Handbook of management accounting research*. Volume 1, Elsevier.
- Hopwood ,A. G., Chapman C. S., Shields M. D. (2007). *Handbook of management accounting research*. Volume 2, Elsevier.
- Hopwood ,A.G., (2008). "Changing Pressures on the Research Process: On Trying to Research in an Age when Curiosity is not Enough", *European Accounting Review*, Vol. 17, Issue 1, pages 87-96.
- Lamb M., Lymer A., Freedman J., James S., edited by (2005). *Taxation, An Interdisciplinary Approach to Research*, Oxford University Press. 46 *European Journal of Economics, Finance and Administrative Sciences* Issue 101 (2019)
- Lamb M., C. Nobes, A. Roberts (1998). International Variations in the Connections Between Tax and Financial reporting , *Accounting and Business Research*, vol. 28, Issue 3, pages 173-188.
- Lewis A., Carrera S.,PhilipJones J.C., (2009), "Individual, cognitive and cultural differences in tax compliance: UK and Italy compared", *Journal of Economic Psychology*, Vol. 30, Issue 3, Pages 431-445
- Kleven H. J., Kreiner C.T., Saez E., (2016)"Why Can Modern Governments Tax So Much? An Agency Model of Firms as Fiscal Intermediaries", *Economica*, Vol. 83, Issue 330, Pages 219–246
- Mouritsen, J., K. Kreiner (2016). Accounting, decisions and promises", *Accounting, Organizations and Society*, Vol 49, pages 21-31.
- Nobes, C. W. (1979). Fiscal harmonization and European integration: comments, *European Law Review*, August

- Nobes ,C.W., Aisbitt S. (2001). “The True and Fair Requirement in Recent National Implementations”, Vol. 31, No. 2, pages 83-90.
- Nobes, C. and Schwencke, H. R. (2006) Modelling the links between tax and financial reporting: a longitudinal examination of Norway over 30 years up to IFRS adoption, *European Accounting Review*, vol. 15, Issue 1, Pages. 63–87.
- Nobes, C.W. and H.R. Schwencke (2006). Tax and financial reporting links: a longitudinal examination over 30 years up to IFRS adoption, using Norway as a case study, *European Accounting Review*, vol. 15, issue 1, pp. 63-87.
- Nobes, C. W., M. Gee and A. Haller (2010). ‘The Influence of Tax on IFRS Consolidated Statements’, *Australian Accounting Review*, Vol. 7, No. 1, pages 97-122.
- Nobes, C.W., (2013). “The continued survival of international differences under IFRS”, *accounting and Business Research*, Vol.43, No.2, pages 83-111.
- Nobes C. (2016). *Towards an Assessment of Country Effects on IFRS Recognition Decisions and Measurement Estimations*, Paper, Venezia.
- Nobes C. , Parker R., (2016), *Comparative International Accounting*, Pearson.
- Aderlheide, D. (2001). *Transnational Accounting*, Macmillan, London.
- Provasoli A., Mazzola P., Pozza L., (2007)“The role of National Standard Setters in the Standards Developing process: the Italian experience”, in Godfrey J.M., , Chalmers K.,*Globalisation of Accounting Standards*, Edgar Elgar.
- Schoen, W. (2004) International accounting standards – a ‘starting point’ for a common European taxbase? *European Taxation*, vol 44, issue 10, Pages. 426–440.
- Wagenhofer, A. (2003). “Accrual-based compensation, depreciation and investment decisions.” *European Accounting Review*, Vol. 12, Issue 2, pages 287-309
- Wagenhoferb, A., Göxa R.F. (2009). “Optimal impairment rules”, *Journal of Accounting and Economics*, Vol. 48, Issue 1, pages 2–16.
- Zambon, S. (2002) *Locating Accounting in its National Context: The Case of Italy* , Franco Angeli.