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### From SROI to SIROA complex: New complex ratio of social impact/return of business and no profit-firm's

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#### Abstract

The SROI indicator Represents the best-known ratio for measuring the social impact, especially of nonprofit enterprises. The usefulness Of this indicator is undoubted in that comma in extremely synthetic terms, it succeeds in highlighting the social impact of the activity carried out by the company analyzed. Its use in for-profit enterprises makes little sense; this is its inherent limitation. Another limitation of this indicator is that the outputs and inputs considered are evaluated highly subjective. SIROA complex. This is not a specific indicator but is made up of a set of indicators that, in general, business terms and in particular terms concerning the activity carried out by the company, measure the socio-environmental impact of the activity carried out by the unit under consideration the latter index unlike the SROI, It applies to for-profit and nonprofit companies. The SIROA complex index, Representing a set of indicators of a different nature, must be interpreted in the light of the values entered in the numerator of the denominator. A mere list of indicators makes no sense as it is not a correctly interpretable point. Each quantitative index must, therefore, be analytically explained in verbal and not quantitative terms.

**Keywords:** Invested capital, the social impact of productive activities, measuring social impact/redundancy of firms, SIROA complex, SROI

#### 1. Introduction

It is now known to everyone that the socio-environmental impact of the production activities of companies and businesses, in general, represents an element from which one can no longer disregard. For this reason, the doctrine and businesses, together with international bodies responsible for issuing accounting standards, including socio-environmental, have attempted to create indices that could measure the socio-income impact of the production activities carried out both concerning companies that have as their objective the profit and non-profit companies. In this regard, one could make an endless list of indices and aggregates proposed by scholars, businesses and international bodies. This article is intended to focus on the SROI index and many operational on which so much has been written by many scholars. The paper aims to point out how this index can be supplemented or even replaced with another indicator of the socio-income impact of business activity. Such a ratio has been named SIROA complex by the writer. This indicator comprises an assortment of components of a general nature, which are to be applied to all companies considered, and a set of ratios referring to specific categories of companies.

#### 2) From SROI to SIROA complex

The SROI ratio identifies an indicator that measures the social-return performance of enterprises that carry out activities primarily of a social nature. The Guide carried out the description and calculation method of the SROI to Social Return on Investment, issued by Human Foundation. This Guide highlighted some key features of this ratio of a social nature complemented by precise guidance on calculating the indicator. In a nutshell, the Guide mentioned above states that Social Return on Investment (SROI) is an approach for measuring and reporting on this broader concept of value; it aims to reduce inequality and environmental degradation, to improve well-being, by integrating social, economic and ecological costs and benefits into the analysis.

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SROI measures change in ways relevant to the people and organizations that experience or contribute to it. It explains how the difference was created by measuring social, environmental, and economic outcomes and using monetary values to represent them. This allows a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of € 1 generates € 3 of social value.

SROI is interested in value rather than money. Money is simply a common unit of measurement, being, in this sense, a valid and shared form of value attribution.

Just as a business plan contains much more information than financial projections alone, the SROI is much more than a number. It is a story about change on which to base decisions, encompassing case studies, including qualitative, quantitative and financial information.

An SROI analysis can take many forms. It can contemplate the social value generated by an entire organization or focus on a specific aspect of an organization's work.

The Guide that makes explicit the essential characteristics of SROI highlights how six steps must be observed for the identified indicator to be useful for management and communication purposes:

1. Establish the scope of analysis and identify key stakeholders. It is essential to define clear boundaries about what the SROI analysis will include, who will be involved in the process, and how.
2. Map outcomes. By involving your stakeholders, you will develop an impact map, or theory of change, that shows the relationship between inputs, outputs and outcomes.
3. Demonstrate the outcomes and assign value to them. This step involves finding data to show whether outcomes have been achieved and then evaluating them.
4. **Define impact:** Having collected the demonstrations of outcomes and given them a monetary value, aspects of change that would have occurred anyway or are the result of other factors must be discounted.
5. **Calculate the SROI:** This step consists of adding all benefits, subtracting negative values, and comparing outcomes and investments. This is the time when the sensitivity of the results can be checked.
6. **Do not overestimate: Only** claim value creation for which the organisation is directly responsible. This principle requires referring to trends and benchmarks to support assessing the change generated by the activity, distinguishing it from other elements and considering what would have happened regardless. It also requires considering the contributions of other people or organisations to the outcomes described to match the contributions with the outcomes.
7. **Be transparent:** Highlight the basis for which we can consider the analysis accurate and honest and show what was collected and discussed with stakeholders. This principle requires that every decision about stakeholders, outcomes, indicators, and benchmarks; sources and methods of collection; different scenarios considered; and communication of results to stakeholders, must be explained and documented. Based on the analysis result, the report will also describe how activity managers will change them. The analysis will be more credible when the rationale behind the decisions is transparent.
8. **Verify the result:** Ensure appropriate and independent certification. Although SROI analysis provides an

opportunity for a more complete understanding of the value generated by an activity, it inevitably involves an element of subjectivity. Appropriate, independent certification is required to help stakeholders assess whether the decisions made by those responsible for the analysis are well-founded.

The SROI Identifies a socio-income index that is extremely useful to understand the contribution of the organization studied to the community's social development. however, this indicator has limitations, inherent in the ratio itself, which cannot overcome by changing anything in the index calculation as they are inherent in the ratio itself.

For this reason, in this article we propose the determination of another indicator, the SIROA complex which, Contains a range of social, income and asset information that the SROI, By its nature, Cannot contain.

The SIROA complex consists of two major indicator complexes:

1. Indicators of a general nature that must apply to all organizations analyzed.
2. Indicator of a specific nature that change depending on the type of organization.

It should note that while the SROI is applied only to organizations of a social nature that carry out only social activities, the siroa complex is an indicator that can be applied to all enterprises, including for profit and not only to non - profit activities, as is generally the case with the SROI.

### **The general indicators applicable to each type of company are two:**

- a) Activity impact expressed in terms of value added.
- b) Delta income attributable to actions with social impact.
- c) Indicators related to the workforce present in the company. Indicators of a specific nature that may change depending on the type of company analyzed are:
- d) Indicators showing impact on environmental pollution in terms of waste, noise pollution and air, water and soil pollution
- e) Indicators specific to the activity carried out vary depending on the type of company analyzed (e.g. if you analyze, a hotel, the indicators will be very different from those related to a company that produces plastic material).

All the indicators that make up the SIROA complex indicator must interpret in the light of an analysis performed ratio by ratio. to think of merely listing numerical values determined by the formulas proposed in this article, leads to the identification of judgments that could be very misleading. The analytical interpretation of each index and comma in particular of the numerator of the denominator of the ratio are essential for SIROA complex to provide real and useful information about the social impact of the company, for-profit or nonprofit, analyzed. this Standard of behavior applies to each of the indices that will be illustrated below and that together form SIROA complex

### **3) General indicators applicable to each type of company**

- a) **Activity impact expressed in terms of added value**  
This reclassification presupposes the study of the enterprise

from what we might call a 'social' perspective. Based on this approach, the 'traditional' viewpoint from which the entrepreneurial reality is read and interpreted is wholly changed.

The shift from a 'pure income' perspective to a 'social' perspective means that the enterprise is transformed from an instrument of profit production into a means of producing wealth in a broader sense. Wealth that, after the moment of production, must be distributed to all participants in the economic activity carried out within the company.

To overcome specific problems of a theoretical nature that could arise when identifying the amount of this wealth, it is considered appropriate to adhere to the doctrinal current that subordinates the identification of values that can be interpreted as 'distributed wealth' to the identification of subjects who, by definition, can be considered 'internal participants' in the economic activity of the enterprise.

In this way, the differentiation between business cost (arising from external relations) and distributed wealth (attributable to subjects internal to the company, i.e., subjects participating in the company's economic activity) occurs indirectly.

To identify the nature of book values, instead of recognising the objective elements characterising these items, attention is focused on the subjective aspects qualifying the operators to whom these amounts are destined.

The doctrine, almost unanimously, agrees in considering that, according to this view, the company's internal subjects are made up of:

- Shareholders
- Workers

- Enterprise
- State
- Lenders

These subjects are the recipients of the wealth produced within the enterprise. In particular:

- Dividends are distributed to shareholders.
- Workers are attributed wages, salaries and all forms that may be included in the concept of labour costs.
- the enterprise itself is attributed to the profits set aside in reserves.
- Taxes are attributed to the state.
- the lenders are allocated interest.

Even a summary analysis shows how, according to this new approach, the roles played by the economic actors directly involved in the management of the enterprise are interpreted in a profoundly different way from what happens in traditional theory.

Considering, for example, that wages, salaries, taxes and interest do not represent costs but rather the distribution of wealth on a par with the distribution of dividends, it can be understood how subjects that in the 'traditional-reddit' theory represent - to all intents and purposes - external elements (workers, banks, state, etc.), in this 'new' approach are transformed into internal productive factors whose position is equal to that of the entrepreneur.

To compare the two 'optics' in the light of which the enterprise can be interpreted, it may be helpful to summarise its characteristics:

	<b>Traditional optics</b>	<b>Optica "Sociale"</b>
Subjects 'inside' the company	Enterprise as an entity in its own right that has objectives other than workers, financiers, state.	State, workers, shareholders, lenders are internal actors within the enterprise sharing the same objectives (maximising added value).
Concept of 'income' produced	Nel Profit	Value added
Contrasting elements in determining income	Costs and revenue of the Year	External costs and external revenues
Costs	Interest expenses Salaries Energy Taxes Purchases mat. Raw materials Purchase of services Marketing costs Salaries Severance pay Socialsecurity contributions Transport costs Shipping costs Legal advice	No external cost No external cost Yes external cost No external cost Yes external cost Yes external cost Yes external cost Yes external cost Yes external cost No external cost No external cost Yes external cost Yes external cost Yes external cost Yes external cost Yes external cost
Wealth element distributed to 'internal' parties	Company: Reserves Shareholders: Dividends	Company: Reserves Shareholders: Dividends State: Taxes Lenders: Financial charges Workers: Labour costs

Following the logic behind this 'innovative' view of business, the profit and loss account should be reclassified as follows:

**Sales revenues**

- + revenue from products distributed and reused
- +/- changes in inventories of semi-finished products
- +/- changes in inventories of finished products

**Value of production carried out**

- a) Consumption of raw materials (opening rem. + purchases - final rem.)
- b) External' costs i.e.:
  - Costs of a commercial/sales nature (e.g. advertising, promotion, commissions, commercial consultancy, etc.).
  - Costs of a general-administrative nature (e.g. stationery, costs of a general-administrative nature (e.g. stationery,

postage costs, administrative representation costs, mechanical costs, etc.).

- Costs related to the production of hotel services (e.g. maintenance, customer transport costs, lighting utilities, fuel costs, etc.).

**Gross operating added value**

+/- extra-core revenues/costs

**Overall gross value added**

- Depreciation of fixed assets

**Net global added value**

distributed as follows:

- Wages/wages and other personnel costs to personal
- Taxes to state
- Interest, insurance premiums to lenders
- Dividends to shareholders
- Allocations to company reserves

As part of the company's external social reporting, the reclassified value-added income statement can become a part of the social balance sheet. This document can be split into two parts:

- a) Value-added reclassified profit and loss account;
- b) Social balance sheet 'stricto sensu'.

If, however, on the one hand, in the sphere of 'social' reporting to third parties, the value-added profit and loss account is of considerable importance, on the other hand, the managerial usefulness of this document - for the effective and efficient management of company resources - does not appear exceptionally high. Or rather, this document assumes an essential role as a management tool when focusing on strategic decisions concerning external corporate communication.

Since implementing the decision-making process leading to the realisation of communication strategies is to be included in the broad concept of 'corporate management', the reclassified value-added income statement also assumes

managerial relevance.

If, however, as is our intention, we interpret the managerial usefulness of the reclassified profit and loss account in proportion to its ability to provide managers with information that enables them to manage company resources more effectively and efficiently, we do not believe that we should attribute significant importance to the amount of value-added and its distribution.

To interpret the trend of value-added, it is possible to opt for the analysis of the direction of the absolute value of the value added produced by the company over the years. The total value, however, has a limitation that may invalidate the entire analysis. The absolute value does not take into account the trend of the company size. Therefore, it is possible that, for example, the value-added decreases from one year to the following year but shows a clear improvement in proportion to the company size. For this reason, it is preferable to calculate an indicator with a numerator and a denominator. In the writer's opinion, the most meaningful indicator comes from the contrast between value-added net company assets. This indicator can be used for both for-profit and not-for-profit enterprises even though, for obvious reasons, the interpretation of the value of the index will be different depending on whether the enterprise is aimed at obtaining profit or the distribution of services of a socio-environmental nature. Concerning the determination of net assets, it is necessary to clarify.

The net profit can be determined in two ways that must be chosen according to the type of company analysed. Firstly, it can be stated that the net assets are the capital invested in the company net of adjusting items. This linking of every item with every other object and every document with every other document is only characterised by the integrated information system, as in most cases, it can be seen that companies adopt accounting instruments that are not linked to each other and, therefore do not form an actual information system. According to the integrated information system, the calculation of net assets must be implemented as follows:

**Reclassification scheme balance sheet/budget balance sheet implemented as part of an integrated information system.**

Assets	31/12/n	Liabilities and equity	31/12/N
<b>Short-term assets</b>		<b>Short-term liabilities</b>	
1. Immediate liquidity		1. Short-term financial liabilities	
2. Deferred liquidity		2. Short-term tax liabilities	
▪ Trade receivables			
▪ Financial liquidity			
▪ Tax-deferred income			
▪ Non-characteristic deferred income			
3. Availability (inventories)		3. Short-term non-financial liabilities	
4. Short-term assets non-characteristic			
5. Advances to trade suppliers			
Long-Term Assets		Long-term liabilities	
1. Long-term tangible assets		1. Long-term financial liabilities	
2. Long-term intangible assets		2. Long-term tax liabilities	
3. Long-term credit assets		3. Long-term non-financial liabilities	
▪ Trade accounts receivable			
▪ Financial assets			
▪ Tax assets			
▪ Non-typical accounts receivable		Equity	
4. Long-term assets non characteristic			

Stand-alone items		Stand-alone items	
Net Assets		Balance Total	

To clarify the exact meaning of the micro-aggregates mentioned above, the contents of the individual aggregates are listed below.:

- Immediate liquidity includes everything that is already cash and cash equivalents.
- By definition, deferred cash includes only and exclusively short-term receivables. The subdivision of this aggregate into four micro-aggregates (commercial, financial, tax and non-characteristic) is necessary to determine a series of income and financial ratios: deferred commercial liquidity substantially includes all short-term trade receivables net of the allowance for doubtful accounts; deferred financial liquidity includes all short-term financial receivables; tax-deferred liquidity includes all short-term tax and social security/assistance receivables; non-characteristic deferred liquidity consists of all future revenues (realisable within 12 months), not already included in previous aggregates, which have the characteristic of not being considered part of the company's typical operations. This is the case, for example, of receivables related to the sale of long-term assets. It is evident that this receivable cannot be included in the typical business activity (otherwise, the receivable would be from customers). For this reason, it can be included in this sub-aggregate.
- Short-term assets non-characteristic comprise all accounting items held for capital purposes such as securities/shares had with a view to their sale within the next financial year.
- Availability equivalents are the total inventories of the enterprise.
- Tangible long-term assets comprise everything that will provide the company, through the start-up of the production process, with income in the long term and that, at the same time, is endowed with physicality.
- Intangible long-term assets, on the other hand, consist of everything that will provide the company with long-term income through the start of the production process, but which, at the same time, is not physical.
- Long-term credit assets include only and exclusively long-term loans. The subdivision of this aggregate into four micro-aggregates (commercial, financial, tax and non-characteristic by definition) is necessary to determine a series of income and financial ratios: The long-term commercial credit asset includes all long-term trade receivables net of the allowance for doubtful accounts; the long-term financial credit asset includes all long-term financial receivables; the long-term tax credit asset includes all long-term tax and social security/welfare receivables; the long-term non-characteristic credit asset by definition consists of all future revenues (realisable beyond 12 months), not already included in previous aggregates, which have the characteristic of not being able to be considered as belonging to the company's typical operations. This is the case, for example, of receivables related to the sale of long-term assets. It is evident that, by theoretical definition, this receivable cannot be included in the typical business activity (otherwise, the receivable would be from customers). For this reason, it can be

included in this sub-aggregate.

- Long-term assets comprise long-term items that identify capital investments. Examples of such things may be civil buildings and securities and participations held not for speculative purposes but as a long-term investment in the company.
- Stand-alone items, It should be noted that it is only in the context of the integrated information system that an element is highlighted that is, in fact, fundamental for the implementation of a correct balance sheet analysis and whose failure to be taken into account may lead to the determination of aggregates without financial significance. In addition to the aggregates indicated above, it is desirable to include a further category of items in the capital employed and in the total sources, defined as "stand-alone items", which identifies a set of items which, although they must be recognised in the reclassification for accounting balancing reasons, in reality, will not be transformed into future income or expenditure. An example of such an item is the amount of a provision for future expenses or tax provision that, following specific elements (e.g. court decisions, tax commission decisions, etc.). However, it cannot be eliminated from the accounts due to the principles of prudence and accrual; it can be reasonably assumed that, in the following financial year, it will be transformed, for accounting purposes, into an extraordinary item and not into a future expense or income (separate item in the assets). An example of an item that should be recognised in different entities in debt is the amount of the tax advance that exceeds the tax liability that can be offset and will be offset in the future. This amount does not identify a lower expense recognised in the financial statements (the debt has not yet been created), nor is it considered future income. For this reason, it should be recognised as a separate item in the reclassified balance sheet, an aggregate that, as noted above, is part of the concept of the net asset or net capital employed (i.e. the reclassified total assets).
- Short-term financial liabilities include all financial liabilities that will result in a cash outflow within one year; short-term tax liabilities include all tax and social security/social security liabilities that will result in a cash outflow within one year; short-term non-financial liabilities include all non-tax and non-financial liabilities that will result in a cash outflow within one year;
- Long-term financial liabilities include all debts of a financial nature that will result in monetary outlays beyond one year; long-term tax liabilities include all debts of a tax and social security/social security nature that will result in monetary outlays beyond one year; long-term non-financial liabilities include all debts of a non-tax and non-financial nature that will result in monetary outlays beyond one year;
- Shareholders' equity is interpreted as the company's wealth that will essentially result in the company's final exit. It is only when the company is put into liquidation that equity will become a future output;
- **Stand-alone items:** See the considerations made about stand-alone items above. Naturally, items under

liabilities are found in assets: an example of such an item is the amount of advances from customers received in connection with a contract that is about to be terminated and for which no reimbursement is expected. This item will become a contingent asset the following year, and, therefore, there is and will be no monetary movement. For this reason, the item must be recognised in a separate aggregate, separate from the items that will undoubtedly become cash outflows or receipts in the future.

In the document cited in the previous pages that analytically illustrates the calculation of the SROI, it is pointed out that the net assets, especially in social enterprises, can also include the hours developed by volunteers within the social company in this case to the value of investments should be added the total amount of hours carried out by volunteers in which the hour is assessed an average value estimated by the analyst. In this case, the net assets are in comma in reality, net assets adjusted by the value of the contribution of volunteers who, in social enterprises, are recognized as a fundamental and founding value of the company itself. The use of the value referred to, with the exclusion or inclusion of the volunteers' hours, depends on the type of company. It is evident that the problem does not arise in a for-profit company because there are no volunteers. Therefore, the net assets value is composed only of the company's assets net of adjustment items. In social enterprises, on the other hand, it seems more appropriate to use the asset value adjusted with the addition of the hours performed by volunteers within the company because only in this way is it possible to have a meaningful indicator.

Based on the above, the indicator for added value can be determined as follows:

Added Value/ Net Assets or Added Value/Net Assets Including Volunteer Hours

#### **b) Delta Income Attributable To Actions With A Social Impact**

This indicator identifies a highly subjective value, the determination of which requires heavy evaluative interventions on the part of the analyst. With this indicator, the objective is to identify the Delta income attributable to actions carried out by the company to have a positive socio-environmental impact from the activity carried out by the company itself. It is not necessary to delve much into the subject to understand how the determination of this value presupposes a profoundly subjective calculation in who performs it. Therefore, the importance of the indicator is theoretically very high but, in reality, limited precisely because of its characteristics that cannot be overcome with objective quantitative calculations. The determination of this Delta Income should be profoundly and analytically illustrated in the report in which the SROI index appears, as only an in-depth study and analysis of the calculation methodologies can allow third parties to understand the actual validity of the indicator of interest. Since the Absolute value is not very relevant, as each balance sheet data is significant only when compared to other values in the balance sheet itself, this Delta Income must be compared to a value that can be considered important, and that can provide helpful information to third parties outside the company. Delta income from and attributable to actions

with a social impact can be related to two values:

- 1) equity
- 2) net assets.

Relating it to the value of equity gives a profitability ratio to the company's wealth. For some companies, especially those that act only in the social sphere and are not-for-profit companies, relating Delta income to equity does not seem helpful in identifying an indicator that allows the company's social activity to be assessed. It should be noted that if a company is exclusively social, the income itself has little relevance because the primary objective is not to maximise profit but to maximise social profit, which does not derive from the contrast between operating costs and revenues but between social services rendered and costs incurred to make it possible to carry out the social service the company aims at and in which the company identifies its mission. If one opts for a comparison between delta income and equity, the indicator can be determined as follows:

#### **Delta Income/Equity**

Again, it is possible to add to equity the value of volunteers' hours spent in the company. If this solution is chosen, the indicator should be determined as follows:

#### **Delta Income/Equity+ Valuation Of Volunteer Hours In The Analysed Company**

Alternatively, it might be interesting to determine an indicator in which Delta's income is compared with the total net assets of the company. Again, this indicator is more suitable for a for-profit enterprise than a purely social enterprise, as a social enterprise generally has a somewhat restricted capital base. However, this is not a compulsory rule, and therefore, this indicator could also be used for enterprises that only carry out activities of a social-environmental nature.

The indicator's performance will allow the expression of a judgment on the performance of the company's activities. Like all indicators, the comparison can be made intertemporally within the same company or by comparison with companies similar to the company analysed. In this regard, however, it should be noted that the identification of Delta's income connected to the performance of social activities carried out by third-party companies is practically impossible to determine from outside the company; therefore, even if, in theory, a comparison between various companies could be hypothesised, the only realistic comparison that can be made is inter-temporal, that is, an analysis of the trend in the multiple years of the index calculated, naturally, with the same calculation methodology. If one opts for net assets, including volunteer hours, this methodology must be applied to all the indices considered in the analysis of the company's performance over the various years.

Based on the above, the value-added indicator can be determined as follows:

Delta income/ Net assets or Delta income/net assets, including hours worked by volunteers

#### **c) Indicators related to the workforce present in the company**

Determining indicators regarding the workforce present in the company presents calculation problems that cannot be overcome. regarding the force and, in fact, a document

explaining the company's policies in favour of workers is much more effective. Reading the EFRAG documents, which have become mandatory in the area of non-financial reporting in connection with the enactment of the new EU directive recently approved by the European Parliament, one understands how policies relating to workers, a central topic in the area of non-financial reporting, is an issue that can be deepened mainly by a report that highlights all the actions carried out in favour of workers. Identifying quantitative indicators relating to the workforce is complex.

If you want to identify some quantitative indicators related to the workforce, the following indicators could be a first step to providing information to third parties outside the company or the company's internal workforce. This information, however, to be interpreted correctly, must necessarily be complemented by a non-quantitative report that adequately and analytically illustrates the policies implemented in favour of company employees.

By way of example, some workforce indicators could be the following

Average number of workers in the year/ net assets (or net assets including hours worked by volunteers).

Number of redundancies during the year/ / net assets (or net assets including volunteer hours).

Average wage increase granted to workers during the year/ / net assets (or net assets including volunteer hours).

Average number of workers who were laid off during the year// net assets (or net assets including volunteer hours).

Number of accidents at work that occurred during the year// Net assets (or net assets including hours worked by volunteers).

Number of volunteers employed in the performance of the company's social activity// net assets, including volunteer hours. This indicator can only be determined by so-called social enterprises and, therefore, does not make sense to be calculated in for-profit enterprises.

As highlighted above, these indicators can only be considered the first step in analysing the company's policies in favour of its workers. This indicator must, therefore, necessarily be supplemented by a report highlighting the various social policies implemented in favour of the workforce working in the analysed company.

#### **4) Indicators of a specific nature that may change depending on the type of company analysed**

As we have noted in the previous pages, the SIROI Complex index includes several indicators of a specific nature that change according to the type of company being analysed; as we will see in the examples that follow, some indicators may be extremely useful in specific business environments while the same indicators may not make any sense in other business realities. As we have already pointed out, the ratios of a particular nature are divided into two categories, namely waste, acoustic pollution, air pollution, water and soil, and indicators specific to the activity carried out, which represent the particular elements of each activity. as we will have occasion to point out, these latter indicators cannot be listed with the idea of being able to make an exhaustive list because each activity will be distinguished by a list that would be utterly absurd in other work environments point for example, indicators that can be used in a hotel environment that obviously can never be used comma because they are specific to the business activity of hospitality, in social companies that carry out activities in

favour of persons with disabilities or for-profit companies. For this type of indicator, it is, therefore, necessary first to identify the type of activity analysed and then to identify the stakeholders connected to this activity and comma based on this analysis to determine the indicators that can specifically highlight specific characteristics of the activity carried out by the company analysed.

#### **d) Indicators highlighting environmental pollution in terms of waste, noise pollution and pollution of air, water and soil**

To determine indicators that complete the SIROA complex index Analysing the impact of the company's activity waste, noise pollution, air pollution and water or soil pollution, it is necessary to identify quantitative values that measure these pollutant net assets or net assets, including the value attributed to the hours worked in the company by volunteers.

This set of indicators must show the impact of the company's activity on the environment. In the following, we will give some examples of valuable indicators in this respect. However, making a complete list of indicators that should complete this part of the SIROA complex is virtually impossible. To understand the environmental impact of the company's activity, these indicators can be used:

fuel consumption from coal and coal products/ net assets or net assets, including hours worked by volunteers in the company

fuel consumption from crude oil and petroleum products/ net assets or net assets, including hours worked by volunteers in the company

metric tons of CO2 equivalent/ net assets, including hours worked by volunteers in the enterprise

fuel consumption from natural gas/ net assets or net assets, including hours worked by volunteers in the enterprise

fuel consumption from other non-renewable sources/ net assets or net assets, including hours worked by volunteers in the enterprise

consumption from nuclear products/ net assets or net assets, including hours worked by volunteers in the enterprise

Consumption of purchased or acquired electricity, heat, steam, and cooling from non-renewable sources/ net assets, including hours worked by volunteers in the enterprise

Total energy consumption from renewable sources, broken down by fuel consumption for renewable sources (including biomass, biogas, non-fossil fuel waste, hydrogen from renewable sources, etc.); Consumption of purchased or acquired electricity, heat, steam, and cooling from renewable sources; and self-generated non-fuel renewable energy. / net assets, including hours worked by volunteers in the company

total amount of non-recyclable waste produced by the company / net assets or net assets, including hours worked by volunteers in the company quantity of recyclable waste produced by the company// net assets or net assets, including hours worked by volunteers in the company average decibels produced by the farm activity per year// net assets or net assets including hours worked by volunteers in the farm.

Water withdrawals in thousands of m3 // net assets or net assets, including hours worked by volunteers in the enterprise.

Water consumption in thousands of m3 /net assets, including hours worked by volunteers in the company water discharges in thousands of m3/net assets or net assets,

including hours worked by volunteers in the company  
Quantity of commodities of marine origin (such as gravels, deep-sea minerals, seafood) used by the undertaking// net assets, including hours worked by volunteers in the undertaking amount of electricity consumed in the year/ net assets or net assets, including hours worked by volunteers in the enterprise amount of energy from renewable sources consumed in the year/ net assets or net assets, including hours worked by the volunteers in the enterprise

**e) Specific indicators of the activity carried out, which vary according to the type of company analysed**

Within this category of indicators, it is impossible to propose a specific list of ratios because the ratios change radically depending on the activity carried out by the company, and, above all, they vary depending on whether the company is for-profit or non-profit. It is easy to understand how the indicators that measure the social impact of the activity carried out by the company change radically depending, for example, on whether the company is a social company aimed at the re-employment of disadvantaged or disabled persons or a for-profit engineering company. In the context of these specific indicators, one can only point out how, in addition to what has already been highlighted in the indicators listed in the previous pages, particular indicators that highlight the social impact of the companies' activities must be identified. For example, suppose in one year the company opened a day care centre for employees' children, hired a person to run errands requested by employees (e.g. pick up dry cleaning, pay bills, etc.), opened an in-house gym for employees and their families, etc. In that case, it is impossible to think that the number of innovative services created in one year for the benefit of employees is always compared to the net assets or net assets. It is not possible to think that the numerator of this indicator must continually be on the increase because the services created for the benefit of employees cannot continue indefinitely. There is no doubt, however, that if one places the number of new services rendered to employees at the numerator and looks at the indicator's inter-temporal trend, one can judge the company's ability to meet employees' small and large problems. This indicator in particular, should be amply illustrated because it is obvious that if one year had, for example, a numerator equal to three resulting from the construction of an in-house kindergarten, the construction of an in-house gymnasium and an employee shuttle bus service, while the following year the numerator was only equal to one and concerned the hiring of a person to run errands for employees, the comparison between indicators, if it were based only on the numerator number and comma of the indicator, could lead to inappropriate judgements being made. Therefore, such an indicator must be calculated and amply illustrated so that the reasons for the trend can be understood.

Again, by way of example, one might think that in this category of indicators, if the activity considered is the hotel business, the comparison consistently implemented with the / net assets or net assets including the hours worked by the volunteers in the company could see at the numerator the number of disabled persons who were able to use all the hotel services, or the number of new services provided by the hotel for people with disabilities, or new hotel services offered to allow people with disabilities to use spaces outside the hotel, such as the beach or the meadows in the

mountains, either on their own or with the help of in-house personnel.

It is easy to understand how it is not possible in this work to propose an exhaustive list of these indicators as the ratios change radically depending on the business activity considered. Naturally, these indicators will be of considerable relevance in both for-profit and not-for-profit companies as the social impact of the activity carried out by the company is always of significant relevance whether the company's mission is to maximise profit or whether the ultimate objective of the company is to carry out an activity of a social nature. Depending on the type of business, it is necessary to identify the stakeholders particularly interested in the information provided and to identify the list of activities with a social impact. This is the first step to finding quantitative values that measure the social impact of the activity carried out by the company. Depending on the company's mission and type of company, the actions that have a social impact will have to be identified. After this first step, quantitative data can be specified to measure the social impact of the company's activities. Since the absolute value, as we have repeated several times now, comma has no relevance, even in this case, the values thus found must be compared with the net assets or net assets, including the hours worked by volunteers in the company.

## 6. Conclusions

From what we have stated above, it is clear that the SROI index must be, if not replaced, certainly complemented by another indicator that we have called the SIROA Complex, whose structure is a complex one made up of a plurality of indicators. To think that the assessment of a company's social activity, whether for-profit or not-for-profit, can only be evaluated through the first mentioned index is pure fantasy as the SROI, alone, fails in highlighting the social impact of a company, the determination of the SIROA complex on the other hand, allows for a better appreciation of the socio-environmental impact of the activity carried out by the analysed company, whether for profit or not for profit. As illustrated in the previous pages, this last index is not a single indicator but rather a complex indicator, i.e., made up of a series of indicators that analyse the social impact from a general and specific point of view. The set of ratios that make up the indicator defined here as SIROAcomplex varies as the activity carried out by the company EE varies profoundly depending on whether the company is a for-profit company or a social company. It will be up to the person who has to identify the stakeholders and the social activity carried out by the company to identify the set of ratios that best represent the social impact of the activity carried out by the company. This complex of indicators will form the index defined here as the SIROA complex.

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