DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft ZBW – Leibniz Information Centre for Economics

Dumitrascu, Vadim

Article

The fundamentals of a business model based on responsible investments

Provided in Cooperation with:

Dimitrie Cantemir Christian University, Bucharest

Reference: Dumitrascu, Vadim The fundamentals of a business model based on responsible investments.

This Version is available at: http://hdl.handle.net/11159/305

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics Düsternbrooker Weg 120 24105 Kiel (Germany) E-Mail: rights[at]zbw.eu https://www.zbw.eu/econis-archiv/

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

https://zbw.eu/econis-archiv/termsofuse

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.



The Fundamentals of a Business Model Based on Responsible Investments

Vadim Dumitraşcu¹, Roxana Arabela Dumitraşcu²

^{1,2} Faculty of Finance, Banking and Accountancy, Dimitrie Cantemir Christian University, Bucharest ¹E-mail: vadimdu@yahoo.com, ²E-mail: dumitrascu_arabela@yahoo.com

Abstract

The harmonization of profitability and social responsibility is possible under the adoption and practice conditions by the companies of some adequate business models. "Responsible profitability" must benefit as well of management tools that guide the business sequentially, based on some objective decision making criteria towards sustainable economic behaviors. The simultaneous increase of the specific economic over-value generated by social responsible investment (SRI) project and responsible intensity of economic employment reflects the company's strong subscription to the authentic sustainable development path.

Key words

Corporate Social Responsibility, responsible investment, business model, goodwill, sustainable business strategy

JEL Codes: G21, C33, C51, E01

1. Introduction

The interest for SRI has been stimulated by the dissemination of the Corporate Social Responsibility (CSR) concept and by the management practices derived from it. CSR represents the company's conscious commitment of the necessity to create economic value, but only by considering and meeting the economic, social and environmental expectations of all groups of participants (*stakeholders*), thus demonstrating a profound respect for people, ethical values, community and environment, contributing therefore to building common welfare. SRI is investments designed and realized in this spirit (Kinder, 2011). The fundamental principles of CSR are: respecting the personal dignity of individuals, non-humiliating employment conditions, solidarity, subsidiarity, contribution to the common good, coresponsibility, trust, respect for business ethics, prevention of illicit business, close ties with local community, transparency, honesty and legality, justice and equity, social development (Capron and Quairel-Lanoizelée, 2008).

CSR's purpose is to improve the following essential dimensions of the company's functioning and performance: the quality of the working conditions, business ethics, the impact on the environment and sustainability, innovation, devotion to achieve a

positive reputation in the context of the local community, improving the marketing solutions in order to promote fair trade practices, cooperation for development, humanitarian actions and volunteering (Norris and Dwyer, 2014).

The organic integration of CSR's principles in the company's management system targets decisions and actions in the following areas of great interest:

- 1. The relationship between CSR and the business strategy (company's mission, vision and values as an expression of CSR; organizing a CSR department within the organizational structure; including the CSR problematics in the Management Board's priorities; the use of a Responsible Conduct Code; the implementation of a system of incentives for responsible behaviors; the introduction of a an *integral balanced scorecard* that includes CSR criteria);
- 2. Managing the groups of intererests (extending CSR from considering the opinions and needs of the shareholders, employees and clients to incorporating the perspectives of the unions, communities, lobby and local actions groups, public authorities etc.);
- 3. Technical and economic management (applying the triple results account, which expresses not only the economic parameters of the company's functioning, but also the environmental and social ones):
- 4. Corporate Governance (the existence of a good governance code; risk management based on ethical, environmental, social and economic criteria; publishing some Reports concerning good governance);
- 5. Social management policies (policy in human resources field and assimilation of CSR principles in HR practices; the quality of the working environment; work safety; respect for human rights; integration of disabled people and representatives of ethnic minorities; form, develop and manage skills; involving the employees in respecting and promoting the CSR criteria; reconciling the professional activity with family values; extra-salary financial stimuli; various support services offered to employees);
- 6. Environmental management and sustainability (correlation between company's environmental management and the lifecycle of the main products and technologies; systems and procedures to save consumption of the main resources (electricity, water, paper etc.); programs to reduce polluting residues and eco-efficiency increase; obtaining green certificates).

Lately, the external monitoring of CSR practices at companies' level spread following the increased interest of investors and markets to guide the management policies in accordance with the requirements of sustainability. In this regard, the most known tools to ensure conformity at international level are: *GRI* (Global Reporting Initiative); *Social Accountability Standard 8000*; *Standard Accountability 1000* (AA-100); *ISO 26000* concernign social responsibility etc.

2. Literature review

The economic factor differentiates between the socially responsible investment (SRI) and an altruistic activity, as it maintains the financial criteria associated with the cost-effectiveness idea, which are considered legitimate and are pursued as well within the investment approach. Currently, to the environmental and social considerations those originating from the corporate governance area have been added, together constituting a coherent system of behavioral restrictions, known as the ESG factors or criteria (in English, E stands for the word environment, S for social and G for corporative governance). SRI is not donations, sponsorships or various acts of philanthropy, but lucrative activities, mainly oriented towards generating a flow of economic results. Related to this aspect, a vivid polemics has spread lately concerning whether SRI is more convenient or not from a financial point of view than conventional investments. Consequently, three hypothesis concerning SRI cost-effectiveness took shape (Wu, 2009):

- "No effect", meaning that SRI cost-effectiveness is similar to that of conventional investments:
- "Doing good but not so well", sustains that SRI cost-effectiveness is lower than that of conventional investments;
- "Doing well while doing good", stipulates that SRI cost-effectiveness is superior to that of conventional investments.

However, most empirical studies conducted during last years converge in the conclusion that a slightly positive difference of SRI compared to conventional investments is observed, but it must be taken into account that most important SRI carried out in the developed countries are still in recovery phase (Albareda *et al.*, 2011).

Given that the expansion and increase of financial markets' complexity has constituted one of the pivot factors of the evolution of global economy in the last decades, it is absolutely normal that the biggest attention towards SRI to have come from this direction. In the specialized literature dedicated to SRI, the financial markets' optics is dominant (EUROSIF, 2013). This explains the fact that currently, the majority of the selection criteria and evaluation models of SRI express the financial markets investors' perspective. Most commonly, a SRI is addressed in the manner of financial assets.

In the initial stage of SRI development, most projects were designed based on negative pre-selection criteria, such as, for example, excluding the alcohol industry, tobacco, pornography etc. Subsequently, the evolution of SRI concept went from the exclusion area of certain activities to that of identifying and including in the area of interest of the responsible investors the so-called "model companies" (best in class), this time operating a type of positive discrimination. The evolution of the decision-

making criteria in terms of SRI opened a prolific conceptual space, that stimulated the appearance of a variety of foundation methodologies and selection of firms and, consequently, different degrees of SRI "maturation", which allows us to talk at present about several generations of responsible financial funds and stock indexes oriented towards sustainability (EUROSIF, 2010).

Selection filters (screening) consider applying, in parallel with conventional tools, some social, moral, ecological or ethical criteria in taking investments decisions. Generally speaking, these criteria may be classified as negative criteria, when it operate in excluding certain investments or positive criteria, with the purpose to choose the investments with the best behaviour. In the context of financial markets, shareholders' activism implies dialogue with the company's management team, using a legitimate and fundamental right of any shareholder: to participate, as coowner, in making decisions through his voting right. SRI allow investors to include, in the options formulation process, including variables ignored until recently by financial models, reflecting thus personal values or incorporating politic criteria in the management of investments portfolios (SIF, 2014). However, a SRI may be approached and analyzed from different angles, starting with restrictive, exclusion conceptions and reaching visions that claim to integrate all risk factors in the evaluation models by explicitly introducing social, environmental or relative criteria to corporate governance in the financial risks' management methodologies.

Table 1. SRI strategies at financial funds level

SRI Strategy	Content			
Exclusion	Eliminations based on a large number of negative criteria.			
Positive Screening	Search and select the companies with the best behaviours in social responsibilities area, including those that produce positive goods or services.			
Best in class	Approach that considers the evaluation of the main companies in a business sector based on sustainability criteria and selecting the best ones, in order to achieve the investments.			
Selecting the pioneers/thematic investments	Thematic investment funds, guided by the sustainability criteria as well, such as, for example, reducing petroleum use. It focuses on sectors with strong social and environmental impact.			
Standard based screening	Negative <i>screening</i> , focused on checking the compliance of some international standards proposed by entities such as OCDE, ONU, UNICEF etc.			
Simple exclusions/simple screening	Excluding the sectors or activities with significant negative effects on sustainability, such as munitions, tobacco, alcoholic beverages industry etc. Simple <i>screening</i> may also include the selection depending on the degree of observance of the fundamental human rights or international standards.			

SRI Strategy	Content
Engagement/ investors' dialogue	It is used by the investment funds management in order to introduce and consolidate the most responsible practices. It is based on the influence capacity of the investors as shareholders, being implemented with the help of their voting rights.
Community Investments	Supporting a productive activity with ample positive effects on the local community.
Integration	Excplicit introduction of some social, ecological or corporate governance criteria in the analysis and management of financial risks.

SRI strategies may be grouped according to the Eurosif classification as well, in two major segments, expressing the evolution observed during the last years (EUROSIF, 2013):

- Focused or central (core) SRI that includes both negative filters and positive screening, including best in class companies and selecting pioneers or thematic investment:
- Extended (broad) SRI that includes strict SRI, referring at the same time to the simple exclusions based on a negative screening, investors' dialogue (engagement) and integration.

Social responsibility indices are the indicators of prices' evolution for the most representative titles of the financial market segment returned to SRI. The methodology of determining this type of index depends on the institution that designed, managed and published it. The increase of the number of these types of indices is a reliable proof of the financial market's increasing interest for SRI. We may mention among stock indices of maximum representativeness: Domini 400 Social Index, created in 1990, a stock index that claims the role of "sustainable copy" of S&P 500 index, enabling comparisons with the developments observed in the traditional segments of the financial market: FTSE4Good, created in 2000 by FTSE in collaboration with Ethical Investment Research Service (ERIS) and UNICEF; Dow Jones Sustainability Group Index, that actually represents a family of indexes that include Dow Jones Sustainability Staxx Index (for the European financial market) and Dow Jones Sustainability World Index (worldwide); ASPI (ARESE Sustainable Performance Indices) are a group of indexes concerning social responsibility, launched in 2001 on the French market; Calvert Social Index, launched in 2000, consisting of a number of 468 large North-American corporations. selected from a sample of 1000 of the biggest American companies etc. Social rating agencies evaluate social responsibility of companies as well, based on their own methodologies. The results of these studies are structured in thematic databases, which are afterwards marketed to interested operators in the financial market. These agencies, in addition to functioning as consultants, offer investors other services as well, such as benchmarking researches, sectoral studies, comparisons between investment funds, financial risks' global analysis, SRI management services or even sustainability ratings of countries. Among the most important and most notable rating agencies are KLD Research and Analytics Inc.; SAM (Sustainable Asset Management); Group Holding AG; SIRI (Sustainable Investment Research International) Company Ltd., the largest consultancy service provider in SRI area in the world. With certainty, the transparency and crystallization of a financial culture that implies decision making by reporting including to sustainability criteria has the effect of significant progress in developing financial markets and intermediation structures.

The studies that approach SRI as productive investments are significantly less than those that analyse it in terms of financial markets and assets (Säve-Söderbergh, 2014). This leaves outside the theoretical, methodological and applicative concerns a vast segment of companies not listed on capital markets, but with a major interest and potential for SRI, especially small and medium enterprises. The signalled aspect provided us the main motivation for writing this paper, in which we propose to fundament the reference points of a SRI based business model.

3. Methodology of research

Any business model explains from where the firm obtains its main revenues, implicitly from where it receives the main cashings, and which are the most important expenses categories, respectively to which area the payments made by the company are directed with priority. In other words, from where and where the business money go (Genton and Duplaa, 2009). These essential aspects depend decisively on the internal operational flow architecture and on the firm's connections network with the economic environment. Therefore, the business model reflects the "production mechanism" or the main scheme of the economic value creation process (Hamel, 2010). The role or the function of the business model consists of the long-term selection and steadiness of material, financial, informational, knowledge and work flows through which the economic value will be extracted. In the specialized literature, this understanding of the business model, seen as "profit equation" received wide recognition (McAdams, 2014).

In the purpose of our research we define the business model (BM) as follows: that fundamental structure of the business that generates the essential skills and the company's reputation as sources of competitive advantages and economic value. The main elements of this generative structure are:

1) Value proposal for clients (What, who and under which conditions do we offer?);

- 2) The activities and operations that will provide value to customers (What functions will be performed by the company and what functions will be purchased on the market?);
- 3) The assets necessary to the company to honor its value proposition (What elements must be owned and what can be gained by renting or leasing?)
- 4) The capital that will support the business (How do we finance the business and at what costs?);
- 5) The key people of the business (What are the relevant qualifications and professional experiences to business' success?).

The options concerning these elements and their concrete mode of combining produce a particular "functioning style" of the company, its original manner of doing business, which is materialized in creating some specific competencies and a certain reputational positioning of the company in the context of its economic and social environment. Therefore, competencies and reputation represent the core of a BM. "What we do best and how this reflects on the way in which we are appreciated by the environment in general and by the customers in particular?" is the key to business success. The functionalization of a BM has as effect in time the crystallization of certain determined competitive advantages of the company in relation to relevant competitors. The economic value extracted by the company is based on these competitive advantages. We see how a coherent causal relationship is articulated between the BM profile and the economic value obtained by the company, so that distinctive skills, reputation and competitive advantages operate as essential rings of this chain (Dowling, 2001; Fombrun and Van Riel, 2003).

The possibilities of creating a BM based on SRI may be explored starting with the premise that the design and interconnection of structural elements of the BM must be conducted in accordance with RSC principles and spirit. Basically, it is about promoting, by analogy with TQM, a "total management of responsibility", which starts from the conceptual premises of the business, summarized in the BM, it includes all the significant business processes and it concludes with the economic value generated by the company. Specifically, "sustainable" solutions must be found and applied to all significant questions for each component of the BM. Investigating the answers to these questions is a complex approach and will be the subject of a subsequent paper that we intend to write. However, we believe that the elucidation of these aspects may be facilitated by formulating some quantitative benchmarks and, at the same time, decision-making criteria, which do not only limit the searches' perimeter but serve as well as validation rules of the identified solutions. In other words, we wish to propose a simple model to test the company's strategic behavior in terms of responsibility/sustainability.SRI do not need to be planned and carried out in the context of a militant approach of sustainable development - "costeffectiveness does not matter, the ecological and social effects are important". The company, seen as an open and dynamic system, assumes its function-aim to create the economic value. In other words, profitability is absolutely necessary, and the condition of sufficiency of its making is that SRI produce a certain over value, such as goodwill.

Liability towards all the interest groups involved in the company's activity is constituted by respecting some economic value extraction rules that protect their specific interests. Therefore not "cost-effectiveness does not matter" but rather "not cost-effectiveness at any price". Sustainable development in a company should and must be profitable. Moreover, a strategic behavior that reconciles responsibility with profitability may transform in an original business model that allows the company to overcome potential blocking points and propel it to a unique and favorable strategic position (Garies, 2010).

Given the above mentions, we formulate the following hypotheses concerning a possible business model based on SRI:

- SRI, except for the social and/or ecological benefits, necessarily generates a flow of economic value for the company;
- SRI ensures a balance between the economic, social and ecological requirements as foundation of the sustainable development of the company. The company's allocations must be both profitable and responsible;
- The economic attractiveness of SRI may be guaranteed by generating an economic over-value compared to the conventional investment projects of the company;
- Any SRI project must produce its own goodwill, as synthetic financial expression of the intangible effects attracted to the project;
- The goodwill generated by SRI project is the result of a "differential profitability", respectively, of a profitability positive difference of the SRI project compared to the average economic profitability of the company;
- For a relevant evaluation of the capacity of a SRI project to generate flows of economic value, reporting to the mobilized capital costs is pertinent in order to finance the particular project.

Before developing the model we wish to point out that, because of the high degree of uncertainty, specific primarily to the intangible component, SRI cannot be plausibly evaluated using traditional methods, such as, for example, those based on forecasting and updating the flows of future economic results, net updated value criterion (NUV) and related indicators (the term of retrieval, the updated profitability index, re internal rate) representative for this category of practices. Most SRI aim, among others, the creation of some elements of intangible capital (human, structural and relational). Intangible capital is knowledge, tacit or explicit, embedded in the business processes developed by the company (Fustec and Marois, 2009). The

elements of intangible capital are characterized by high volatility and uncertainty associated to their future profitability. This distinction not only makes it more difficult to forecast future developments of SRI, but it also justifies a higher financial remuneration as a source of goodwill of that particular SRI. There is still a fundamental difference between SRI and conventional investments.

The parameters of the model that we propose are the following:

a) Specific economic over-value generated by SRI project (PV_{SRI}):

$$PV_{SRI} = C_{SRI} \times VC_{S} \tag{1}$$

where:

C_{SRI} = the coefficient of the SRI specific contribution to the creation of economic value:

VC_{SRI} = SRI accounting value

$$C_{SRI} = \frac{RE_{Sri} - RE_{C}}{CMPC_{Sri}}$$
 (2)

where:

REsri = economic profitability of the evaluated SRI project;

REc = average economic profitability of the company;

CMPCsri = weighted average cost of the capitals attracted to finance the assessed SRI project.

 C_{SRI} reflects, in relative terms, the profitability surplus created by the SRI project compared to the normal profitability of the company, adjusted with the size of the mobilized capitals cost to finance that particular project.

It results that:

$$PV_{SRI} = \frac{RE_{Sri} - RE_{C}}{CMPC_{Sri}} \times VC_{SRI}$$
(3)

 PV_{SRI} may be considered a reliable assessment of the goodwill generated by SRI-that overvalue of the capital the company may benefit for, as a result of a management and some performances positively appreciated by the economic and social environment. Each SRI project must generate its own goodwill. A positive value of goodwill is the proof that SRI, in addition to the environmental and social effects it produces, is the source of a substantial economic value flow.

The Fundamentals of a Business Model Based on Responsible Investments, Vadim Dumitraşcu, Roxana Arabela Dumitraşcu

b) Real economic value of SRI (VERSRI):

$$VER_{SRI} = VC_{SRI} + PV_{SRI}$$
 (4)

$$VER_{SRI} = VC_{SRI} + C_{SRI} \times VC_{SRI}$$
 (5)

$$VER_{SRI} = VC_{SRI} \times (1 + C_{SRI}) \tag{6}$$

VER_{SRI} represents an adjusted value of SRI by considering the over-value of the generated economic value. VER_{SRI} value is directly proportional to the size of C_{SRI}, respectively with the observed difference in profitability between SRI project and the current activity of the company.

c) Company's responsible investments rate (Rirc):

$$R_{irc} = \frac{Fix ed \text{ assets created by SRI}}{Total \text{ fixed assets}}$$
 (7)

R_{irc} characterizes the weight of fixed assets resulted after performing SRI in the total of fixed assets owned by the company, describing the extent to which the long-term economic means are affected to the responsible use.

d) Company's responsible intensity of economic employment (laer):

$$I_{aer} = \frac{\sum VER_{STi}}{AE}$$
 (8)

where:

AE = company's economic asset (AE = Fixed assets + Need for working capital).

l_{aer} is an indicator that fully describes the company's responsible commitment compared to the volume of all economic means attracted by the company and reflected in the size of the economic asset.

- e) Business' value/company that take into account the SRI effects (BV):
- If the value of the assets created through SRI have not been included yet in the balance-sheet assets' value:

$$BV = ANC + VER_{SRI}$$
 (9)

where: ANC = company's net asset

 If the value of assets created through SRI has been included in the balance-sheet assets' value:

$$BV = ANC + \sum PV_{SRI}$$
 (10)

BV represents the business' value established based on incorporating the effects of SRI project and states the degree to which the company's orientation towards SRI exerts positive influence on overall competitiveness and performance.

Consdering the above methodological statements, we formulate the following two financial rules of a responsible management:

- 1) C_{SRI} and laer ascending and convergent co-evolution principle SRI specific contribution to economic value creation and the intensity of the responsible commitment must grow simultaneously and in rhythms similar in size as evidence of the responsible involvement of the company in business.
- 2) Maximizing the ratio $\sum PV_{SRI}/BV$ principle the weight of the accumulated specific overvalue, created by SRI, in the overall value of the business must grow.

In our view, the enounced principles may constitute quite plausible benchmarks for a business model based on SRI.

4. Data analysis and results

Bio Plast Industries Company SRL is a manufacturer of industrial packaging of special cartons and polymer materials. The company is headquartered and operates in village Biia, Şona parish, Alba county. The investment conducted by the company aims to install a new technological line, which allows the use of some recyclable materials in a proportion of 72.5% of the final product and reduce pollution by 90%. Furthermore, the use of this line involves hiring 27additional workers. Environmental and social impacts of this investment are obvious. The investment demands the following financial effort:

Actual investment expenses cover: building the production hall and associated service connection; manufacturing line; trimming/packing line; transport of equipment, assembly, tests, adjustments; substantiation study of the project; permits, licenses, approvals; marketing expenses of the project; human resources training.

Current expenditure associated with the investment relates to the following: raw materials; salaries and related social contributions; commissions to distributors and commercial intermediaries; energy, services, facilities; maintenance of equipments and installations; administrative/general expenses.

No	Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
1.	Investment	500	550	550	550	550
2.	Current expenditure associated with the investment		150	150	150	150
3.	Investments earnings	650	900	1000	1050	1100
4	Income tax		16%	16%	16%	16%
5.	Operating income (3-1-2)	50	200	300	350	400
6.	Net operating income	42	168	252	294	336
7.	Ratio of operating income 6/1 in %	8.4	24.0	36.0	42.0	48.0

Table 2. General economic and financial characteristics of SRI

The economic surplus value flows released by SRI are presented in Table 3.

T 11 0 0					001	1
I anin a Ci	DACITIC D	icanamic au	ar vallia	adharataa r	W SPI nrai	$\triangle \cap I$
I able J. Ol		conomic ov	cı-valuc	uci ici alcu i		こしし

No	Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
1.	Ratio of operating income of SRI	8.4	24.0	36.0	42.0	48.0
2.	Ratio of operating income of company	8.25	23.5	35.1	41.02	46.73
3.	The weighted average cost of capital raised to finance, %	35.8	47.61	63.4	65.1	65.0
4.	Csri	0.418	1.05	1.419	1.507	1.968
5.	VCsri	500	550	550	550	550
6.	PV _{SRI} (4 × 5)	209	577.5	780.45	828.85	1082.4
7.	∑PV _{SRI} *	209	786.5	1566.9	2395.8	3478.2

^{*\(\}sum_{PV_{SRI}}\) it was calculated by aggregating succesive annual PV_{SRI}

The main conclusions concerning the generation of surplus value by the investment may be summarized as follows: 1) in each of the five years of implementation, the investment benefits of a positive differential profitability, respectively a surplus of investment exploitation profitability towards the exploitation profitability characteristic for the entire company, as evidenced by the upward trend of C_{SRI} coefficient; 2) therefore, the project generates each year its own goodwill (reflected by PV_{SRI}), whose value increases about 5 times from year 1 (209 thousands euro) and up to year 5 (1082.4 thousands euro), even from year 2 recording superior levels compared to the accounting value of the investment, so that, for year 5, be 3 times higher compared to the accounting value of the investment (1082.4 thousands euro compared to 550 thousands euro); 3) thus the project SRI developed by the company produces significant positive effects not only ecological or social, but economic as well, displaying a high degree of sustainability.

Table 4 presents the formation way of the real economic value of the SRI project, as well as the evolution of the company's responsible involvement in business.

Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
VER _{SRI}	709	1127.5	1330.45	1378.85	1632.4
∑VER _{SRI} *	709	1836.5	3166.95	4545.8	6178.2
Economic asset of company	2824.25	3992.39	5320	5612.1	6715.43
Fixed assets created by SRI**	500	1050	1600	2150	2700
Total fixed assets	2500	2763.5	3265.3	3771.93	4218.75
Rirc	0.20	0.38	0.49	0.57	0.64
laer	0.251	0.46	0.595	0.81	0.92

Table 4. Evolution indicators VER_{SRI}, Rirc and laer

Regarding the relative measure of responsible involvement in business of the company, the following conclusions may be synthesized: 1) as a result of the generated surplus value flow, the real value of the investment VER_SRI is higher compared to the accounting value for all the years of analysis, registering an ongoing growth as well; 2) Rirc ratio has an upward trend for the whole period, rising from 20% in the first year to 64% in the last year, meaning that an increasing part of sustainable economic means (starting with year 3 their weight exceeded 50%) is allocated responsibly; 3) a similar evolution is observed in the case of laer indicator, mentioning that its value indicates the degree of responsible involvement of all company's economic means in responsible business, for the last analyzed year it reached 92%; 4) the way in which the SRI project is implemented respects the ascending and convergent co-evolution principle of C_{SRI} and laer.

Table 5 summarizes the data on the SRI project's impact on the formation of the overall business value.

Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
Net asset value of company	2610	3275	3996	4203	5189
BV*	2819	4601.5	5562	6598.8	8667.2
∑PV _{SRI} /BV	0.074	0.17	0.28	0.36	0.401

Table 5. Evolution of business value

The effects exerted by SRI on the business' value are: 1) direct consequence of the constant growth of surplus value generated by the investment, the business' value BV increase occurs as well; 2) it is also observed the increase of the weight of the

^{*\(\}sum VER_{SRI}\) it was calculated by aggregating succesive annual VER_SRI

^{**} Fixed assets created by SRI were determined by aggregating succesive annual SRI accounting value

^{*} Fixed assets created by SRI it was included in value of balance sheet

cumulated surplus value in overall business value from 7.4% to 40.1% in the last year of the investment; 3) in this way, maximizing the ratio $\Sigma PV_{SRI}/BV$ principle is respected as well.

Figure 1 shows the co-evolution of Rirc and laer indicators, as well as the dynamics of the ratio \(\nabla PV_{SRI} \)/BV of the ratio \(\nabla PV_{SRI} \)/BV.

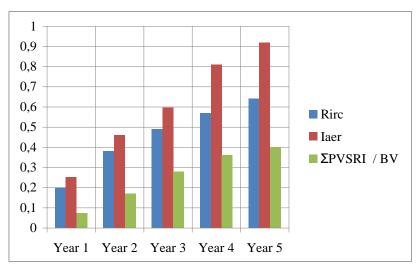


Figure 1. Coevolution of sustainability indicators

The value of the Rirc indicator has increased on average per year with 11 percentage points, while the average annual increase of the laer value has been of 11.5 percentage points. These are evolutions characterized by a very high level of similarity. The average annual increase rhythm specific to the ratio ∑PV_{SRI}/BV was 11.65 percentage points. These dynamics express convergent evolutions which demonstrate the ongoing growth of sustainability/responsible character of the business. Also, these dynamics show that rate operating income of SRI project not only does not suffer, but rather consolidates. The sustainability characteristics of the company's business strategy thus become more pronounced. Table 2 presents the main economic and financial characteristics of the proposed investment (in thousand euro).

6. Conclusions

The harmonization of profitability and social responsibility is possible under the adoption and practice conditions by the companies of some adequate business models. "Responsible profitability" must benefit as well of management tools that

guide the business sequentially, based on some objective decision making criteria towards sustainable economic behaviors. We believe that pursuing laer and CSRI indicators may offer a plausible foundation for the sustainability of the company's business strategy. A laer value less than 0.5 signifies that less than 50% of the economic means are involved in socially responsible operations, revealing a weak or moderate commitment of the company towards the idea of sustainability. A negative value of the C_{SRI} indicator is the expression of the fact that the allocation of the company resources does not create economic added value but consumes it; C_{SRI} positive values are the proof of the fact that the company's investments are generating economic surplus value. We do not want to adopt a reductionist perspective on the concept of sustainable strategy, but we consider that a responsible path and simultaneously profitable of the business may be recorded inclusively by ensuring of some "matched pairs" of laer and C_{SRI} values. Figure 2 presents a type of "sustainable pilotage map" of the company, which may allow it to adjust its strategic decisions depending on the co-evolution of the laer and CSRI indicators.

laer ≥ 0.5	Dilemma Responsible investment, but consuming economic value. It can be optimized economically?	Improvement Responsible institution and creating moderate economic value. It is necessary to improve profitability.	Consolidation Responsible investment and generating significant economic value. It is appropriate to extend the maximum the economic, environmental and social effects.
laer < 0.5	Withdrawal Conventional investment consuming economic value. It requires its abandonment.	Improvement Conventional investment creating moderate economic value. It is necessary to increase accountability and strengthen profitability	Responsability Conventional investment, but creating significant economic value. It is necessary to improve the responsible characteristics of the investment
	C _{SRI} < 0	0 < C _{SRI} < 1	C _{SRI} ≥ 1

Figure 2. "Sustainable pilotage map" of the company

The simultaneous increase of the values of laer and C_{SRI} indicators reflects the company's strong subscription to the authentic sustainable development path. The position *Consolidation* in Figure 2 corresponds to the highest degree of business sustainability. Therefore, the orientation of the company's strategies towards this area is equivalent to choosing the "correct route" towards sustainability.

References

Albareda, L., Balaguers, R.M., Murillo, D. (2011). Observatorio 2011 de la inversion socialmente responsible, Barcelona, ESADE & BBVA, 215-219.

Capron, M., Quairel-Lanoizelée, F. (2004). *Mythes et réalités de l'entreprise responsible*, Editions La Découverte, Paris, 179-185.

Dowling, G. (2001). *Creating Corporate Reputation, Oxford University Press*, 112-115.

EUROSIF (2013). European SRI Study, www.eurosif.org.

EUROSIF (2010). High Net Worth individuals and Sustainable Investments, www.eurosif.org.

Fomburn, Ch., Van Riel, C.B. (2003). Fame & Fortune. How Succesful companies Build Winning Reputations, FT Prentice Hall, 289-293.

Fustec, A., Marois, B. (2009). *Valoriser capital immatériel de l'entreprise*, Editions d'Organisation, Paris, 255-257.

Garies, R. (2010). *Happy Projects!*, Manz Verlags und Universitätsbuchhaltung GmbH, Wien, 98-103.

Genton, D., Duplaa, C. (2009). *Faites évoluer votre business model*, Edition Dunod, Paris, 250-255.

Hamel, G. (2010). *The Future of Management*, Harvard Business School Press,113-117.

Kinder, P. (2011). Socially responsible investing: An envolving concept in a changing world, KLD Research & Analytics, Boston, 208-211.

McAdams, D. (2014). Game-Changer: Game Theory and the Art of Transforming Strategic Situations, Mc Millan Publishiers, London, 301-303.

Norris, G., Dwyer, B. (2014). *Motivating socially responsive decision making:* the operation of management controls in a socially responsive organization, The British Accounting Review, 36, 78-99.

Säve-Söderbergh, P. (2014). *Ethics and Financial Investments*, Dissertation Series, The Swedish Institute for Social Research, Stockholm, 59, 120-132.

SIF (2014). 2013 Report on Socially Responsable investing Trends in The United States, www.sif.org.

Wu, M. (2009). Corporate Social Performance and Firm Size. A Meta-Analysis, Journal of American Academy of Business, 8, 156-168.