

Business Model Disclosure: Evidence from Annual Reports of Italian Listed Companies

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Abstract

The European Union (EU) Directive 51/2003, “Modernisation of Accounts,” together with the recent issue (June 2009) of the International Accounting Standards Board (IASB) Exposure Draft (“the draft”) on management commentary, attest implicitly to the narrative power of the “Business Model” concept, stressing its role in garnering forward-looking information and its relevance for financial reporting. According to the draft, if listed companies want this narrative report to be decision-useful for present and prospective capital providers, they will soon have to include much more information related to their own business model within the management commentary (*Relazione sulla Gestione* in Italy). The business model concept has gained a large popularity over time, despite its lack of a generally accepted definition. In brief, the business model describes how a company has configured its structure (in terms of processes, resources, and competences) in order to create and capture value in its own competitive context; for this reason, it is doubtless a high-end non-financial piece of information for firms, analysts, and investors.

Against this framework, the paper investigates the extent to which Italian listed companies are acquainted with the business model concept and whether they voluntarily disclose it by performing the qualitative analysis of their annual reports. The resulting analysis reveals that the vast array of meanings associated with the business model concept complicates the value-relevance of this high-end non-financial piece of information. Finally, this ambiguity results in both a “cognitive” gap (the lack of a business model definition) and in a “technical” gap (a lack of guidelines) which companies must address when reporting on their own business model.

To our knowledge, this is the first study in the field of financial reporting which investigates voluntary business model disclosure within financial statements. It intends to offer a useful insight into the current disclosure behaviours of Italian listed companies; this can be helpful for security regulatory and accountancy bodies, complementing the IASB’s guidelines for a fair representation of business model within the future management commentary.

1. Research Background

In the last three decades, the standard-setters and financial market authorities of the most developed countries have gradually enlarged the content of the narrative information that must be disclosed within the company’s annual report (Di Piazza & Eccles, 2002). When examining this kind of information, one may notice that, as far as the competitive context has become more dynamic and complex, disclosures always have attempted to delineate entities’ patterns of future growth¹ drawing increasing attention to strategic matters as well as expected results (Avallone, 2008). In this way, entities strive to better meet the needs of various stakeholders, especially investors (Bradish, 1965; Buzby, 1974; Cerf, 1961; Chow & Wong & Boren, 1987; Meek & Roberts & Gray, 1995; Stanga, 1976). Investors, in fact, when interpreting the strategic framework of an entity, use these materials to make the necessary assumptions while preparing the forecasted pro-forma financial statements they will use to measure the fundamental value of a company and determine the target price of its stocks.

Obviously, the ways in which one may communicate such information can be different (Holland, 1998; Beattie, 2007). However, the financial statement is surely a privileged document.

Relevant studies, in fact, have shown that financial statements are one of the primary sources of information used by analysts when making investment recommendations (AIMR 2002; Botosan, 1997; Knuston, 2002). Moreover, the importance of financial statements is also underscored by *association studies* (Beattie, 2005; Beaver & Lambert & Ryan, 1987; Easton & Harris, 1991; Dechow, 1994; Feltham & Ohlson, 1995; Holthausen & Watts, 2001; Kothari, 2001; Strong & Walker, 1993). Association studies attempt to identify the value relevance (Barth & Beaver & Landsman, 2001; Healy & Palepu, 2001; Holthausen & Watts, 2001) of certain pieces of information and verify the existence of a relevant association between certain pieces of information and the market value of a company over time (or the returns of its stocks in the long term). Dealing with long periods of time and remaining indifferent to matters relating to the timeliness of disclosures, these studies see the financial statements as the main source of information, despite the fact that it may not be the most timely.

Other studies, then, have empirically demonstrated the existence of a direct correlation between the level of disclosure embedded within the financial report and the level of communication disclosed by different means (Lang & Lundholm, 1993; Botosan & Plumlee, 2002). Moreover, financial reports provide irreplaceable background information for less informed investors, especially foreigners (Lev, 1988).

These circumstances have gradually enlarged the operational body of the financial statements, turning them into a financial report or business report where rich narrative reports accompany primary financial statements and notes.

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In order to facilitate this new style of reporting, financial market authorities and standard-setters (SEC, 1981; ASB, 2005; CICA, 2005) have widened the content of narrative reports by making mandatory types of information which companies used to communicate only on a voluntary base, and sometimes only privately (Coval & Moskowitz, 1999; Haley & Palepu, 2001; Kanna, 2004; Lev, 1988; Young & Guenther, 2003).

This background can frame an interpretation of the requirements embedded in the European Directive 51/2003 (Modernisation of Accounts). Article 14, especially, enlarges the amount and types of information that firms must reveal in the narrative report, asking for the inclusion of indicators pertinent and relevant for the fine interpretation of a firm's performance. This regulation emphasizes the distinction between *lag* and *lead* performance indicators. As a matter of fact, it not only increases the number of those financial indicators (*lag*) commonly used within financial reports and capital markets (Epstein & Palepu, 1999), but stimulates the presentation of non-financial indicators (*lead*) as well, (Kaplan & Norton, 1992); thus this provides a joint narrative explanation of a company's annual report that enables both investors and stakeholders to see the company *through the eyes of management* and formulate their forecast (Beattie & Pratt, 2002; Coleman & Eccles, 1997; Eccles & Phillis & Richards, 1998; Lev & Zarowin, 1999).

Doubtless, to fully exploit the principle of *management's view*, which dates back to the Management's Discussion & Analysis (MD&A) requirements of the SEC (1981), indicators must be both selected and read in the light of the framework of strategic choices pertaining to a company, which, in turn, finds its comprehensive and summarizing expression in the business model concept.

It is not by chance that the IASB, in its last exposure draft on management commentary (June 2009), asks for strategic and forward-looking information. Examples of this kind of information include such issues as the nature of the business, its resources, and its risks and competences—all of which can be easily associated with the business model concept. Also, worldwide, many professional institutions, consultancy bodies, and standard-setters have issued over time a number of documents asking for the inclusion of similar information within narrative reports (SEC, 1981; ASB, 2005; CICA, 2005; FASB, 2001; PW&C, 2002).

However, the vast array of meanings that can be associated with business models nowadays have turned it into so ambiguous a concept that listed companies may not have a clear idea of what to disclose in order to give a basic representation of their business model. This poses many difficulties, because soon these companies will be asked to comply with the IASB's disclosure requirements about management commentary, nullifying EU efforts of "modernisation".

According to this framework, the main task of this study is to address the following research question:

Research question – To what extent ("if and how") do Italian listed companies communicate their business model in their annual report?

A useful starting point for this study is the identification of the current level of business model communication and the development of an understanding of the extent to which companies are acquainted with this concept. From this information, the research team shall develop guidelines that might:

- i. help managers disclose the appropriate kinds of information in the most efficient and standardized possible manner in order to comply with the IASB's and EU's indications and requirements;
- ii. offer Italian security regulators and accountancy bodies an insight into current companies' disclosure behaviours, which may complement the IASB's guideline for a fair representation of the business model/financial information within the future management commentary;
- iii. foster academics toward a generally accepted definition of "business model" and an identification of its main areas;
- iv. give analysts and capital providers the chance to obtain a more decision-useful forward looking narrative report to better interpret and evaluate current and prospective firms' performances.

In order to address the above research question, this exploratory survey is articulated as follows. Section 2, the literature review, collects and examines various contributions on the topic of the business model with the aim to refine the term's meaning and identify its main areas and relevant elements in order to perform a comparable analysis. Section 3 presents the research design, methodology, and sample of analysis—which has been accomplished using an in-depth analysis of 111 annual reports. Finally, Sections 4 and 5 detail, respectively, the results of the analysis and offers some concluding remarks.

2. Literature Review on Business Model

The term business model refers to a concept which is frequently cited but not well defined at all despite its growing use in the language of the international financial and academic communities. Also, the IASB referred directly to the business model concept in its discussion paper on management commentary, citing it as one of the forms of required information to be included within the section dedicated to the "Nature of the Business", although the term has not been used within the later Exposure Draft:

*"The quantified data might be accompanied by narrative, setting out management's rationale for operating in this industry as well as its business model."*²

*"A description of the business is essential for an investor to gain an understanding of the industries and markets in which the entity operates. This includes its segments, products and services, **business model** and processes, distribution methods, the business structure including the main operating facilities and their location."*³

A closer look at the term business model, in fact, reveals that it is not a new concept at all. Its origin probably dates back to Normann's essay, *Management for Growth* (1979), which puts forward the concept of the business idea. In fact, the business idea is described as the unifying principle of a complex pattern of elements which ultimately describes where an entity operates, what kind of product or system it delivers, and

¹ IASB (2005), *Discussion Paper: Management Commentary* par. 115

² IASB (2005), *Discussion Paper: Management Commentary, App. A – Proposal for an management commentary standard* par. A31.

how it reaches its competitive advantage in a defined business segment—that is, which resources and internal conditions permit the entity to create and capture value. To use Normann's words, the business idea “*expresses concrete conditions existing in a company; it describes the company's actual way of functioning, its organization, its actors, processes and strategies or as sometimes is said quite disrespectfully how a company makes money*”.

However, the term “business model” has appeared in management vocabulary only relatively recently. It first came into popular use in the late 1980s, after many people had gained experience with personal computers and spreadsheet software. Thanks to these digital innovations, entrepreneurs and analysts found that they could easily “model” the costs and revenues associated with any proposed “business”. Probably, pro-forma annual reports were the primary documents of business modelling (HBSP: 2001). In any case, the popularity of this term increased significantly with the mid-1990s “dotcom” fever, when companies of all sorts as well as several industries relied on this concept to attract funding. The media's use of the term certainly enlarged this phenomenon. Within major magazines and journals, only one article in 1990 used the term business model three times or more; w by 2000, however, well over 500 articles fell into that category (Shafer *et al.*, 2005). With reference to Italy, a preliminary survey of the online database of the main Italian financial newspaper (Il Sole 24 Ore) indicates that, in the period 2005–2009, an increasing number of hits (254 in 2005 versus 316 in 2009) for the term *Modello di Business*, the Italian phrase for business model.

Starting from the mid-1990s, the business model concept has become quite a fashionable matter of discussion, which researchers have striven to unpack. These efforts have led in several directions—either into its definition, and/or the identification of its elements, and/or the classification of its various typologies—but none of these has been generally accepted. Meanwhile, however, its vast and ambiguous meaning has created such confusion that many managers, when interviewed about this topic, have been unable to explain exactly what the term business model means and which specific business model runs their company (Linder *et al.*, 2001).

The review of the existing literature from the past several years (1998–2006) reveals a large number of definitions for business model (Timmers, 1998; Weill & Vitale, 2001; Hawkins, 2001; Rappa, 2001; Elliot, 2001; Amit & Zott, 2001; Afuah, 2004; Osterwalder & Pigneur, 2002; Linder & Cantrell, 2000; Hamel, 2000; Petrovic *et al.*, 2001; Applegate, 2001; Hamermesh *et al.*, 2002; Magretta, 2002; Stahler, 2002; Shafer & Smith, 2005; Morris *et al.*, 2005). The analysis of these scholars confirms the lack of consensus about this term—with strongly articulated definitions on the one hand, and on the other, simple definitions that encourage an immediate conceptualization of the term. The lack of consensus may be due, in part, to the fact that this concept has been addressed from very different points of view—all of which have found a connection to the term (strategy, e-business, technology, information technology) (Shafer *et al.*, 2005). Such a variety of definitions has led to the development of numerous different elements, all of which have been associated with the concept of the business model (Pateli, 2002).

A review of the literature details that, considering all the aspects to which the term business model can refer, trying to define “business model” both concisely and comprehensively is not an easy task. One risks either giving such a general definition that the result is murky at best (Porter, 2001), or one includes too many elements in it, resulting in a definition that is not only unclear, but also difficult to understand and communicate.

With reference to the field of financial reporting, finding a definition for the business model concept actually loses importance. Rather, what matters most is not to provide a new or the best possible definition for business model; instead, one must grasp the concept with a gradual approach that both rests on its intrinsic meaning and takes advantage of the previous contributions to this topic. The aim is to identify a set of meaningful elements which will allow the true and fair disclosure of a business model, thereby providing a framework within which one may better understand the lag and lead indicators that, according to the regulator—the EU, and the accountancy body—the IASB, create the foundation level of a decision-useful narrative report.

According to this gradual approach, conceptually, a “model” is a pattern, plan, representation, or description designed to reveal the structure or workings of an object, system, or concept existing or planned¹. When “model” is associated with the word “business”, one may infer that this indicates how an enterprise works—which, in turn, refers to the set of strategic choices that produce the current performance of an entity in any given moment of its life cycle. According to various authors (Hawkins, 2001; Afuah, 2004; Osterwalder & Pigneur, 2002; Applegate, 2001; Hamermesh *et al.*, 2002; Shafer & Smith, 2005; Morris *et al.*, 2005) explaining the practical consequences of those strategic choices means describing how an entity has configured its processes in order to create and capture value within its specific competitive context. Such an abstract expression helps one get in touch with the essence of the business model concept, yet it is not enough to point out only the relevant elements which can facilitate its disclosure. An in-depth keyword analysis of the following expressions can help accomplish this task:

- A. processes configuration;
- B. value creation and capture;
- C. specific competitive context.

A. Processes configuration.

Literally, “configure” means to assume a layout, while a “process” is a set of linked activities. Every single “activity” is the exercise of an ability in a *suitable* environment, that is, having the availability of the necessary resources. The reiterated exercise of an ability in a *suitable* environment produces an accumulation of experience that originates a specific competence. From this point of view, configuring processes means to establish both the set and the sequence of activities, and, along with them, the resources and competences to be used in order to achieve the desired result.

Obviously, the configuration is functional to the desired result (a product, a service, a Web content, etc.) and to the value of the entity intended to embed into it.

Thus, the configuring processes call for taking into consideration:

- the value proposition;

¹ See the Wikipedia online encyclopedia for the terms “model” and “business”.

- the process of value creation;
- the sequence of activity;
- the necessary competences and resources.

B. Value creation and capture.

The configuration of the processes stems from the essential purpose of any firm: to create value in order to satisfy a need. Creating value in order to fulfil a need, however, is not enough if the firm is not able to capture a portion of the value created to feed its processes again. A firm, in fact, is not a speculative “one-shot” business, but rather a long-lasting institution—one which should be able to prosper over time.

For this reason, the economic aspect of an enterprise cannot be ignored. In other words, to start an enterprise means to originate an entity able to satisfy a need in an economic manner, which means generating money. This therefore implies a need to identify not only the final consumer, but also the way to deliver to him the value created, the typology of the contract used to dispose value, and the usefulness of executing some additional services in order to improve the offering. Thus, capturing value calls for taking into consideration:

- final consumers;
- distribution channels;
- contracts used to dispose value;
- availability of additional services.

C. Specific competitive context

The configuration of the processes is based on the value a firm intends to produce and offer. This goal not only implies the identification of a set of activities, but even which activity to perform directly. For each activity, then, one must recognize the indispensable resources and competences.

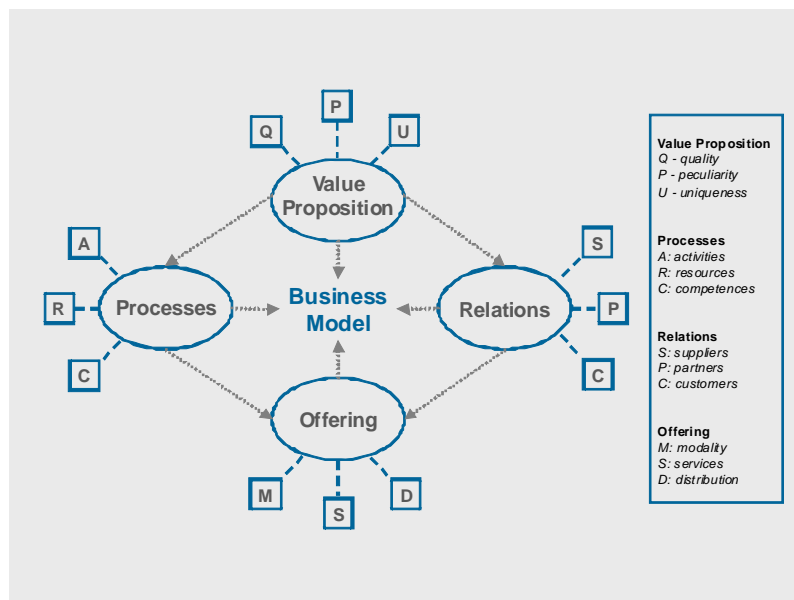
Both process configuration and value capture force firms to seek various actors among those operating in their environment, in order to obtain the necessary resources to set up processes (suppliers) as well as the missing competences (co-makers). Often, then, a company can rely on firms producing complementary products by setting special agreements (complementors). Furthermore, it may be useful to create alliances with specific operators (allies) if the offering has some peculiarities, for instance, maximum delivery times. In the end, processes configuration should turn into the search for subjects operating in the same context; this can improve and strengthen the process of value creation and capture.

The keyword analysis underlines at least four main areas which deserve attention when discussing the business model concept. These areas are: Value Proposition, Processes, Offering, and Relationship. Each of these can be addressed by numerous relevant elements, and therefore may be represented with different level of details. The business model, in fact, can be viewed as a magnifying lens through which one may look at a company: the number of disclosed details depends on how far the lens is placed. The appropriate distance is a function of both the document and the circumstance which creates a for this kind of information.

In this regard, the IASB provides some assistance; in fact, a management commentary prepared in accordance with the IASB’s guideline falls within the boundaries of financial reporting, therefore a business model disclosure embedded in it will be within the scope of the conceptual framework for financial reporting. This means that such a kind of disclosure must take into account understandability, among other qualitative characteristics which make financial information decision-useful. To reach understandability, conciseness is essential; overwhelming users with unnecessarily lengthy narratives or unnecessary information may rob even relevant and representationally faithful information of its decision-usefulness (IASB, 2006).

With these premises, the following information on the four main areas of the business model is considered the basic level, assuring a fair and understandable disclosure of the business model of an entity in a concise but organic manner. This information will be taken into consideration in the qualitative analysis of selected annual reports (Figure 1).

Figure 1: Business model areas, basic elements and related attributes.



Value Proposition

- Q. «quality», information regarding the quality of the product/service which allows its collocation in a definite market segment (high-end, low-end, etc.);
- P. «peculiarity», information regarding the originality of the product/service “in space”, meaning those attributes that differentiate the product/service with reference to competitors, but are not able to defend it from imitation (technical peculiarity, brand image, design, innovativeness);
- U. «uniqueness», information regarding the originality of the product/service “in time”, meaning those attributes which differentiate the product/service with reference to competitors and that is able to defend it from imitation (patent, registered mark, license agreement).

Processes

- A. «activities», information regarding the sequence of activities the firm performs in order to obtain the product or the service, with the indication of key-activities and, among these, the ones in outsourcing;
- R. «resources», information regarding resources employed during activities, with the indication of key-resources and of their degree of availability;
- C. «competences», information regarding competences necessary in order to perform activities with the indication of key-competences and, among these, the ones in outsourcing.

Offering

- M. «modality», information regarding the typology of contracts that are set in order to earn revenues (sell, right of utilization, etc.);
- S. «services», information regarding additional services that can be offered together with the main product in order to improve the offering;
- D. «distribution», information regarding the distribution channels that the firm exploits in order to deliver the value created (direct sales, DOS, business-to-business, business-to-consumer, wholesale, Web site, etc.)

Relationships

- S. «suppliers», of resources, competences, or activities within the process (co-makers included), and relative strength/weakness with respect to the entity;
- P. «partners», considering those able to foster the demand of company's product/services (complementors) and those able to improve the offerings in relation to some type of agreement (commercial partner) and relative strength/weakness with respect to the entity;
- C. «customers», especially different typologies and those with whom a company has a long lasting supply contract, and their relative strength/weakness with respect to the entity.

3. Research design: methodology and sample of analysis

This study has been accomplished using a qualitative analysis that takes into consideration the annual reports of a panel of Italian listed companies. The qualitative analysis has been performed with a *content analysis* (Krippendorff, 1980; Hackstone-Milne, 1996) of the annual reports for the year 2006.

In order to verify the extent to which available information on the basic elements of the business model permits its fair representation, the *phrase* has been chosen as unit of analysis. Indeed, this unit of analysis is considered more “sound” with respect to possible others in the studies on *voluntary disclosure* (Hackstone-Milne, 1996). Precise rules, therefore, have been defined for the codification of the information within the annual reports: a critical prerequisite for a *content analysis*. Researchers have complied with these rules; various tests to check if the researchers were able to codify the same information equally and assign the same score were performed. These tests have allowed the research team to both refine the codification criteria and improve the behavior and coordination of researchers so that Krippendorff's alpha coefficient is at least 0.75 (Milne-Adler, 1999). The same tests have also been conducted on a sample of annual reports after the analysis had been completed.

The concept of the business model was initially developed during the literature review through the keywords analysis; this process has resulted in a useful guideline for use in the qualitative analysis. The existence and completeness of information about the basic elements of each of the four main areas which describe a business model has been measured using a four point scale:

- 0 points = no information is present;
- 1 point = basic information with no details;
- 2 points = some details are given;
- 3 points = full details are given.

The assignment of a score (maximum possible score = 12 elements * 3 points * # of companies) is not a basis upon which to pass judgement about the single business model under examination or its competitive advantage. In fact, in accordance with the main tasks of the research, the analysis seeks to clarify the extent to which annual reports address the business model, rather than determine the validity of a particular business model.

Companies submitted to analysis are those listed in the STAR and Blue Chip segments of the Italian Stock Exchange (ISE). STAR's and Blue Chip's (S&P MIB) companies, indeed, are an ideal panel with which to examine mandatory and voluntary financial and non-financial information that Italian companies disclose to the market due to the requirements of ISE. STAR's companies, especially, commit themselves to comply with rigorous transparency rules.

A total of 111 companies are reviewed in the study. Their annual reports were downloaded from the investor relation sections of their Web sites.

4. Results of the analysis

Tables 2 and 3 illustrate the pattern of analysis which includes the relevant business model elements selected during the literature review (Figure 1). Using data from the analysis, the following conclusions can be drawn.

The annual report provides little information about the 12 main elements of a business model. In fact, in comparison with a maximum possible score of 3.996 points (12 elements * 3 points * 111 companies) the 111 companies in the sample realized a total score of 480.

Of the four main areas of the business model, the area which receives maximum attention is the Value Proposition, the one that receives the least attention is Offering:

1. Value Proposition, 141 points (104 STAR + 37 S&P Mib);
2. Processes, 111 points (73 STAR + 38 S&P Mib);
3. Offering, 108 points (63 STAR + 45 S&P Mib);
4. Relationship, 120 points (66 STAR + 54 S&P Mib).

Table 2: Results of the Analysis on STAR's Companies

	STAR's Co. (#71)											
	VALUE PROPOSITION			PROCESSES			OFFERING			RELATIONS		
	Q	P	U	A	R	C	M	S	D	S	P	C
SCORE	51	27	26	30	23	20	20	11	32	9	24	33
TOTAL SCORE	104			73			63			66		

* The single letters included within the table refer to elements relevant to the business model (see Figure 1).

Table 3: Results of the Analysis on S&P MIB's Companies

	S&P MIB's Co. (#40)											
	VALUE PROPOSITION			PROCESSES			OFFERING			RELATIONS		
	Q	P	U	A	R	C	M	S	D	S	P	C
	SCORE	25	11	1	1	15	22	7	9	29	18	26
TOTAL SCORE	37			38			45			54		

However, a cross sectional analysis reveals the most surprising result. Although it would be logical to expect that the companies citing the expression business model more frequently within their annual report are also those which disclose the largest amount of information about their model,¹ Instead, it is the opposite: companies which give more information about their business model are those that either do not use this expression explicitly in their annual reports or use it less than the others. In other words, companies which cite the term "business model" more frequently do not disclose information about it. Different reasons may explain this circumstance, among them, especially, lack of intentionality and/or lack of ability, with the latter intended as a lack of knowledge about the business model concept and/or lack of instruments (guidelines) with which to report on it. This circumstance applies to both STAR's and S&P MIB's companies.

The situation is quite different when looking separately at STAR's and S&P MIB's companies. It seems that different companies see different elements as more suitable to represent their efforts in order to create value (Table 4).

Table 4: Overall Results of the Analysis on Selected Companies

BUSINESS MODEL ELEMENT	RESULTS COMPARISON	
	STAR's Co.	S&P MIB's Co.
VALUE PROPOSITION	104 (mean 1,46)	37 (mean 0,93)
PROCESSES	73 (mean 1,03)	38 (mean 0,95)
OFFERING	63 (mean 0,89)	45 (mean 1,13)
RELATIONSHIP	66 (mean 0,93)	54 (mean 1,35)
TOTAL SCORE	4,31	4,36

⁵ The citation analysis for the term "business model" and "modello di business" (the Italian phrase for business model) on the annual reports of selected companies over a three-year period (2004–2006) indicates that there has been a clear increase in the use of these terms. The increase can be observed both in absolute terms (91 times during 2006 versus 54 in 2004) and with respect to the two different groups of listed companies: 50 times (2006) versus 28 (2004) among STAR's companies and 41 times (2006) versus 26 (2004) among S&P MIB's companies. In conclusion, the term business model (and its Italian equivalent) is fairly but not steadily cited in the annual reports of Italian listed companies. The trend, however, is increasing and this complies with the international trends observed in the last few years. The document that includes the largest number of citations is the narrative report; this validates its in depth examination.

Among the four basic areas of the business model concept, STAR's companies disclose more on Value Proposition and Processes while S&P MIB's companies disclose more on Offering and Relationships. This could be due to the need of smaller and younger companies, on one hand, to pivot their market penetration on information related to how differently they can satisfy a need with respect to their competitors, versus the need of bigger and consolidated companies, on the other hand, to aim at forwarding information related to how many additional services can be offered and how better their products can reach the final customer thanks to their distribution network and their relationships built over years.

This finding has led us to investigate the composition of the two sets of listed companies, using Pavitt/SIID's² sectors classification, in order to realize if the levels of information about the business model and sectors are interrelated. The decision to use a Pavitt taxonomy-based analysis stems from the fact that this classification relies on sources and nature of technological opportunities and innovations, research and development (R&D) intensity, and typology of knowledge fluxes. Sector identification is fundamentally based on competences and key resources, such as those based on technology, giving our sample a homogeneous segmentation with regard to some basic elements of our business model definition.

According to the mentioned classification criterion, the 111 companies belong to eight different categories:

- SDG : Suppliers Dominated Goods**, are traditional companies belonging to manufacturing, agricultural, and construction sectors, with limited internal R&D activity, where innovation is linked to machinery/materials supplied and to internal competences developed by using machinery/materials;
- SII: Scale Intensive Industries**, are production intensive sectors (standard materials, oil and gas, electricity, automotive) where innovation is oriented to cost and labor savings and companies are large users of product innovations coming from specialized suppliers;
- SGS: Specialized Good Suppliers**, are mechanic/electronic companies in-house producers of innovation;
- SBI: Science Based Industries**, where we find chemical/pharmaceutical companies and electric device producers where innovation is based on internal R&D activity;
- SDS: Supplier Dominated Services**, are retail sale companies where innovation is technology pushed, i.e. it depends on the technology level reached by suppliers;
- CLS: Client Led Services**, are scale intensive large companies belonging to the wholesale, tourism, and transportation sectors, where innovation derives from customers' needs oriented to cost savings in order to practice lower prices;
- OSI: Organizational Service Innovator**, are finance, insurance, logistics, and media sectors, linked to information networks where characteristics/evolution of innovation is led by customers and lays within services;
- SSS: Specialised Services Suppliers**, are companies producing innovation inside customers' companies through services based on Information and Communication Technology ICT tools.

Following the proposed classification, Table 5 displays the results of the analysis according to Pavitt/SIID taxonomy.

Table 5: Results of the Analysis According to Pavitt/SIID Taxonomy

	VALUE PROPOSITION				PROCESSES				OFFERING				RELATIONS				SCORE	# Co.	MEAN
	Q	P	U	TOT	A	R	C	TOT	M	S	C	TOT	F	P	C	TOT			
SII	21	10	5	36	.6	10	14	30	9	1	7	17	12	15	14	41	124	22	5,64
SDG	13	8	10	31	5	12	10	27	4	5	14	23	4	9	5	18	99	16	6,19
OSI	13	3	3	19	8	6	10	24	7	4	18	29	4	8	10	22	94	26	3,62
CLS	4	3	3	10	5	4	2	11	2	6	12	20	2	6	5	13	54	11	4,91
SGS	13	5	2	20	4	3	2	9	1	2	4	7	1	7	1	9	45	19	2,37
SBI	6	4	2	12	3	2	2	7	0	0	2	2	1	4	1	6	27	8	3,38
SSS	4	3	1	8	0	0	1	1	3	0	3	6	0	0	5	5	20	6	3,33
SDS	2	2	0	4	0	1	1	2	1	2	1	4	3	1	2	6	16	3	5,33
																TOT.	479	111	-

The largest contribution comes from the SII category, while the first four categories (SII-SDG-OSI-CLS) represent 68% of the total number of companies examined, generating 77% of the total score. Even if the small number of companies belonging to each category does not establish a strong correlation between the level of information and the intrinsic characteristics of each category, some speculations can be made. For instance, it is quite easy to note that SII and SDG, which provide goods, disclose more information about value proposition than OSI and CLS, which provide services. At the same time, reviewing Table 5 and paying attention to the mean of total score, it is not surprising that SDG presents the higher rate of disclosed information (6,19). SDG companies, in fact, are traditional companies which produce traditional goods and it is easier for them both to describe all the basic elements of their business models, and to give information about their Value Proposition (mean 1,94) in terms of quality, peculiarity, and uniqueness of manufactured products. Immediately after SDG companies, SII companies (often large public

⁶ In 1984, Pavitt introduced a taxonomy based on three elements: technology sources (internal or external), technology nature (R&D- intra/extra muros based- product/process innovation based), and characteristics of the innovative companies in terms of dimension and main activity. In 2003, Van Ark, Broersma & Den Hertog developed Pavitt taxonomy in order to recognise the innovation implicit in services/solutions based on ICT instruments. When it comes to services/solutions, innovation is not based on technology (provided by manufacturing sectors) but on human resources, organizational ability, and knowledge intensity.

companies, sometimes acting as global players) perform 5,64 as mean of total score. Their business model may be complicated due to different sectors of activity and outsourcing, so that communicating information about relationships with suppliers and partners can be more important for these kinds of companies than disclosing other information regarding different elements of their business model. In the same way, OSI companies, because they are more customer-oriented, prefer to disclose a higher level of information about their offering.

5. CONCLUSIONS

The concept of the business model has recently reached such a great level of popularity that the wide academic debate on its meaning has created a *fashion effect*, affecting even the terminology used by managers. This circumstance is demonstrated by the fact that companies which cite the term business model more frequently are rarely those which provide more information about the model's elements. At the beginning, this *fashion effect* seems to have affected the IASB as well, which includes the term business model in its Discussion Paper on Management Commentary (2005) without providing any definition for it and any kind of explanation about its elements, but does not cite the term again in the subsequent management commentary's Exposure Draft (2009).

The next evidence supporting this effect is that the ambiguity of the meaning of business model, underscored by the lack of a generally accepted definition, produces a "*cognitive gap*". Paradoxically, in fact, those companies which voluntarily disclose relevant information about business model elements within their annual report do not link it with an explicit concept of business model. Thus, it is not surprising that annual reports where the business model's elements are more explicitly reviewed, provide this information in an open order and without a homogeneous pattern. This last event confirms a "*technical gap*" that standard-setters can only fill by suggesting a framework which companies could adopt as part of the fair representation of their business model. This framework would provide for the disclosure of such types of information in a decision-useful narrative report. These general conclusions are valid both for STAR's and S&P MIB's companies. However, with respect to the two different groups of listed companies, the different distribution of the scores among the main areas of the business model stimulates the hypothesis that business model disclosure could be related to the size and the life cycle of an entity. Moreover, the use of a taxonomy which subdivides companies depending on their characteristics and economic sector suggests the idea that the more complex and intangible the business of an entity is, the less information about its business model is disclosed; that when information is available, its nature may vary depending on the industry where the entity competes.

References:

- Afuah A. (2004), *Business models: A strategic management approach*, McGraw Hill.
- Afuah A., Tucci C.L., Virili F. (2002), *Modelli di e-business. Acquisire vantaggi competitivi con organizzazioni internet based*, McGraw-Hill, Milano.
- AICPA (American Institute of Certified Public Accountants) (1993), *Improving Business Reporting: A Customer Focus (The Jenkins Report)*.
- AIMR (2002), *What analysts and investors want*, Investor Relations Guide.
- Akerlof G. (1970), The market for "lemons": Quality uncertainty and the market mechanism, *Quarterly Journal of Economics*, 84, (3).
- Alt R., Zimmermann H. (2001), Business Models, *Electronic Markets*, 11, (1).
- Amir E., Lev B. (1996), Value relevance of non financial information: The wireless communication industry, *Journal of Accounting and Economics*, 22, (1).
- Amit R., Zott C. (2001), Value creating in e-business, *Strategic Management Journal*, 22, (3).
- ASB (Accounting Standard Board) (2005), *Reporting Standard (RS) 1: The operating and Financial Review*.
- Avallone F. (2008), *L'impatto dell'informativa contabile di tipo volontario sui mercati finanziari*, Torino, Giappichelli.
- Ball R., Brown P. (1968), An empirical evaluation of accounting income numbers, *Journal of Accounting Research*, 6, (2).
- Barth M. E., Beaver W. H., Landsman W. R. (2001), The relevance of value relevance literature for financial accounting standard setting: another view, *Journal of Accounting and Economics*, 31, (1).
- Beattie V. (2005), Moving the financial accounting research front forward: The UK contribution, *The British Accounting Review*, 37, (1).
- Beattie V., Thomson S. (2007), Lifting the lid on the use of content analysis to investigate intellectual capital disclosures, *Accounting Forum*, 31, (2).
- Beattie V., Pratt K. (2002), *Voluntary Annual Report Disclosures: What Users Want*, The Institute of Chartered Accountants of Scotland, Edinburgh.
- Beaver W. H. (2002), Perspective on recent capital market research, *The Accounting Review*, 77, (2).
- Beaver W.H., Lambert R., Ryan S. (1987), The information content of security prices: A second look, *Journal of Accounting and Economics*, 9, (2).
- Betz F. (2002) Strategic business model, *Engineering Management Journal*, 14, (1).
- Botosan C.A. (1997), Disclosure level and the cost of equity capital, *Accounting Review*, 72, (3).
- Botosan C.A., Plumlee M.A. (2002), A re-examinations of disclosure level and the expected cost of equity capital, *Journal of Accounting Research*, 40, (1).
- Bradish R.D. (1965), Corporate reporting and the financial analyst, *The Accounting Review*, 40, (4).
- Buzby S.L. (1974), Selected items of information and their disclosure in annual report, *The Accounting Review*, 49, (3).
- Bushee B. J., Noe C. F. (2000), Corporate disclosure practices, institutional investors and stock return volatility, *Journal of Accounting Research*, 38, (3).

- Byard D., Shaw K.W. (2003), Corporate disclosure quality and properties of analysts' information environment, *Journal of Accounting Auditing and Finance* 18, (3).
- Cerf A. R. (1961), *Corporate reporting and investment decisions*, The University of California Press, Berkley, CA.
- Chesbrough H., Rosenbloom R (2002), The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies, *Industrial and Corporate Change*, 11, (3).
- Chow C. W., Wong-Boren A. (1987), Voluntary financial disclosure by Mexican corporations, *The Accounting Review*, 62, (2).
- CICA (Canadian Institute of Chartered Accountants) (2009), *MD&A Guidance on Preparation and Disclosure*.
- Coda V. (1984), La valutazione della formula imprenditoriale, *Sviluppo e Organizzazione*, Marzo-Aprile, (82).
- Coleman I., Eccles R. G. (1998), *Pursuit value: Reporting gaps in the United Kingdom*, PricewaterhouseCoopers Papers, London.
- Coval J. D., Moskowitz T. J. (1999), Home Bias at Home: Local Equity Preference in Domestic Portfolios, *Journal of Finance*, 54, (6).
- Dechow P. (1994), Accounting earnings and cash flows as measures of firms performance; the role of accounting accruals, *Journal of Accounting and Economics*, 18, (1).
- Di Piazza S., Eccles R. G. (2002), *Building public trust: the future of corporate reporting*, John Wiley.
- Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings.
- Dumontier R., Raffournier B. (2002), Accounting and capital market: a survey of the European evidence, *European Accounting Review*, 11, (1).
- Easton P., Harris T. (1991), Earnings as an explanatory variable for returns, *Journal of Accounting Research*, 29, (1).
- Eccles R.G., Phillips D., Richards H. (1998), *Reporting Gaps in the United Kingdom: The Chief Executives Perspective*, PricewaterhouseCoopers Papers, London.
- Eisenhardt K.M., Sull D.N. (2001), Strategy as simple rules, *Harvard Business Review*, Boston, 79, (1).
- Elliot S. (2002), *Electronic Commerce: B2C strategies and models*, John Wiley, Chichester, UK.
- Epstein M.J., Palepu K. (1999), What Financial Analysts Want, *Strategic Finance*.
- FASB (Financial Accounting Standards Board) (2001), *Improving Business Reporting: Insights into Enhancing Voluntary Disclosures*, Business Report Research Project.
- Feltham G., Ohlson J.A. 1995, Valuation and clean surplus accounting for operating and financial activities, *Contemporary Accounting Research*, 11, (2).
- Gelb D. S., Zarowin P. (2002), Corporate disclosure policy and the informativeness of stock prices, *Review of Accounting Studies*, 7, (1).
- Gordijn J., Akkermans J.M. (2001 a), e3- value: Designing and evaluating e-business models, *IEEE Intelligent System*, 16, (4).
- Gordijn J., Akkermans J.M. (2001 b), Ontology-based operators for e-business model de- and re-construction, *Proceedings of the First International Conference on Knowledge Capture*.
- Gordijn J., Osterwalder A., Pigneur Y. (2005), Comparing two business model ontologies for designing e-business model and value constellations, *Proceedings of the 18th Bled eConference eIntegration in Action*, Bled Slovenia.
- Groth J.C. (1988), Corporate communications and firm value, *Managerial Finance*, 14 (1).
- Hackstone G., Milne M.J. (1996), Some determinants of social and environmental disclosure in New Zealand companies, *Accounting, Auditing & Accountability Journal*, 9, (1).
- Hamel G. (2001), *Leader della rivoluzione*, Il Sole 24 Ore, Milano.
- Hamermesh R.G., Marshall P.W., Pirmohamed T. (2002), *Note on business model analysis for the entrepreneur*, Harvard Business School Press, Boston.
- Harvard Business School Press, *Building a business model and strategy: How they work together*, in *Entrepreneur's toolkit: Tools and techniques to launch and grow your business*, Boston.
- Hawkins R. (2001), The "Business Model" as a research problem in electronic commerce, STAR (Socio-economic Trends Assessment for the digital Revolution) IST Project, Issue Report n.4, July, SPRU-Science and Technology Policy Research.
- Healy P.M., Palepu K.G. (2001), Information, corporate disclosure, and the capital markets: a review of the empirical disclosure literature, *Journal of Accounting and Economics*, 31, (1-3).
- Hedman J., Kalling T. (2003), The business model concept: theoretical underpinnings and empirical illustrations, *European Journal of Information Systems*, 12, (1).
- Holland J. (1998), Private voluntary disclosure, financial intermediation and market efficiency, *Journal of Business Finance and Accounting*, 25, (1-2).
- Holland J. (2006), *A Model of Corporate Financial Communications*, The Institute of Chartered Accountant of Scotland (ICAS), Edinburgh.
- Holthausen R.V., Watts R. L. 2001, The relevance of value relevance literature for financial accounting standard setting, *Journal of Accounting and Economics*, 31, (1-3).
- Hooks J., Coy D. and Davey H. (2002), The information gap in annual reports, *Accounting Auditing & Accountability Journal*, 15, (4).
- IASB (International Accounting Standards Board) (2005), *Discussion paper: Management commentary*.

- IASB (International Accounting Standards Board) (2006), Financial series preliminary views. Conceptual for financial reporting: objective of financial reporting and qualitative characteristics of decision-useful financial reporting information.
- IASB (International Accounting Standards Board) (2009), Exposure Draft: Management Commentary.
- ICAEW (Institute of Chartered Accountants in England and Wales) (1998), 21st Century Annual Report.
- Khanna T., Palepu K., Srinivasan S. (2004), Disclosure practices of foreign companies interacting with US markets, *Journal of Accounting Research*, 42, (2).
- Kaplan R.S., Norton D.P. (1992), The balanced scorecard: measures that drive performance, *Harvard Business Review*, 13, (1–2).
- Keen P., Qureshi S. (2006), Organizational transformation through business models: a framework for business model design, *Proceedings of the 39th Hawaii International Conference on System Science*, Hawaii USA.
- Knuston P. (2002), *Financial reporting in the 1990s and beyond*, McGraw-Hill, New York.
- Kothari S. (2001), Capital Markets Research in Accounting, *Journal of Accounting & Economics*, 31, (1–3).
- Krippendorff K. (1980), *Content analysis. An introduction to its methodology*, The Sage CommTEXT Series, Beverly Hills, Ca.
- Lambert S. (2003), A review of the electronic commerce literature to determine the meaning of the term business model, Flinders University of South Australia.
- Lang M., Lundholm R. (1993), Cross sectional determinants of analyst rating of corporate disclosure, *Journal of Accounting Research*, 31, (2).
- Lev B. (1988), Toward a theory of equitable and efficient accounting policy, *The Accounting Review*, 63, (1).
- Lev B., Zarowin P. (1999), Boundaries of financial reporting and how to extend them, *Journal of Accounting Research*, 37, (2).
- Linder J.C., Cantrell S. (2001), Cast in concrete or carved in water: Five business model myths that holds companies back, *Accenture Institute for Strategic Change*.
- Lundholm R. J., Myers, L. A. (2002), Bringing the future forward: The effect of disclosure on the return-earnings relation, *Journal of Accounting Research*, 40 (3).
- Magretta J. (2002), *Why business models matter*, Harvard Business Review, Boston.
- Mahadevan B. (2000), Business models for internet-based e-commerce: An anatomy, *California Management Review*, 42, (4).
- Mansfield G.M., Fourie L.C.H. (2004), Strategy and business models – strange bedfellows? A case for convergence and its evolution into strategic architecture, *South African Journal of Business Management*, 35, (1).
- McInnes B., Beattie W., Pierpoint J. (2007), *Communications between Management and Stakeholders: A Case Study*, Institute of Chartered Accountants in England and Wales, London.
- Meek G.K., Roberts C.B., Gray S.J. (1995), Factors influencing voluntary annual report disclosure by US, UK and continental European multinational corporations, *Journal of International Business Studies*, 26, (3).
- Milne M.J., Adler R.W. (1999), Exploring the reliability of social and environmental disclosure content analysis, *Accounting, Auditing & Accountability Journal*, 12, (2).
- Mitchell D., Coles C. (2003), The ultimate competitive advantage of continuing business model innovation, *Journal of Business Strategy*, 24, (5).
- Morris M., Schindehutte M., Allen J. (2005), The entrepreneur's business model: Toward a unified perspective, *Journal of Business Research*, 58, (6).
- Normann R. (1979), *Management for growth*, John Wiley & Sons.
- Osterwalder A. (2004), The business model ontology: A proposition in a design science approach, *Ecole des Hautes Etudes Commerciales de l'Université de Lausanne*, Losanna.
- Osterwalder A., Lagha S.B., Pigneur Y. (2002), An ontology for developing e-business model, *Ecole des Hautes Etudes Commerciales de l'Université de Lausanne*, Losanna.
- Osterwalder A., Pigneur Y. (2002), An e-business model ontology for modelling e-business, *Proceedings of the 15th Bled Electronic Commerce Conference*, Bled Slovenia.
- Osterwalder A., Pigneur Y., Tucci C.L. (2005), Clarifying business models: Origins, present and future of the concept, *Communications of the Association for Information Systems*, 15, (1).
- Pateli A. (2002), White Paper: A domain area report on business models, *Athens University of Economics and Business*, Atene.
- Pateli A., Gigalis G. (2003), A framework for understanding and analysing e-business models, *Proceedings of the 16th Bled Electronic Commerce Conference*, Bled Slovenia.
- Pavitt K. (1984), Sectoral Patterns of Technical Change: Towards a Taxonomy and a Theory, *Research Policy*, 13, (6).
- Petrovic O., Kittl C., Teksten R.D. (2001), Developing business models for e-business, *Proceedings of the International Electronic Commerce Conference*, Vienna.
- Porter M.E. (1985), *Competitive advantage*, The Free Press, New York.
- Porter M.E. (2001), Strategy and the Internet, *Harvard Business Review*, 79, (3).
- PricewaterhouseCoopers (2005), *Trends 2005: Good practices in corporate reporting*.
- PricewaterhouseCoopers (2005), *Building public trust: The future of corporate reporting*.
- Quagli A. (2004), *Comunicare il futuro. L'informativa economico-finanziaria di tipo previsionale delle società quotate italiane*, Franco Angeli,

Milano.

- Rajala R., Rossi M., Tuunainen V.C. (2003), A framework for analyzing software business models, Helsinki School of Economics.
- Rappa M. (2001), Business models on the Web, Managing the digital enterprise, digitalenterprise.org.
- SEC (1981), Securities Act Release No. 33-6349 (28.9.1981).
- Seddon P.B., Lewis G.P., Freeman P., Shanks G. (2004), The case for viewing business models as abstractions of strategy, *Communications of the Association for Information Systems*, 13, (3).
- Shafer S.M., Smith H.J., Linder J.C. (2005), The power of business models, *Business Horizons*, 48, (3).
- Shocker A.D., Sethi S.P. (1973), An approach to developing societal preferences in developing corporate action strategies, *California Management Review*, 15, (4).
- Stanga K.G. (1976), Disclosure in public annual reports, *Financial Management*, 5, (4).
- Sterling R. (1972), Decision-oriented financial accounting, *Accounting and Business Research*, 2, (7).
- Stewart D.W., Zhao Q. (2000), Internet marketing, business models, and public policy, *Journal of Public Policy and Marketing*, 19, (2).
- Sthäler P. (2002), Business models as a unit of analysis for strategizing, *Proceedings of the 1st International Workshop on Business Models*, Losanna.
- Strong N., Walker M. (1993), The explanatory power of earnings for share returns, *Accounting Review*, 68, (2).
- Tavlaki E., Loukis E. (2005), Business model: A prerequisite for success in the network economy, *Proceedings of the 18th Bled Electronic Commerce Conference*, Bled Slovenia.
- Timmers P. (1998), Business models for electronic markets, *Electronic Markets*, 8, (2).
- Van Ark B., Broersma L., Den Hertog P. (2003), Services innovation, performance and policy: a review, Synthesis report in the Framework of the Project Structurele Informatievoorziening in Diensten (SIID) (Structural Information Provision on Innovation in Services), Research Series No. 6, Directorate-General for Innovation, Ministry of Economic Affairs, The Hague (with Dialogic).
- Viscio A.J., Pasternack B.A. (2006), Toward a new business model, *Strategy+Business*, www.strategy-business.com.
- Young D., Guenther D.A. (2003), Financial reporting environments and international capital mobility, *Journal of Accounting Research*, 41, (3).
- Wernerfelt B. (1984), A resource based view of the firm, *Strategic Management Journal*, 5, (2).
- Wernerfelt B. (1995), The resource based view of the firm ten years later, *Strategic Management Journal*, 16, (3).
- Weill P., Vitale M.R. (2001), Place to Space. Migrating to e-business models, Harvard Business School Press, Boston.
- Weill P., Malone T.W., D'Urso V.T., Herman G., Woerner S. (2005), Do some business models perform better than others? A study of the 1,000 largest U.S. firms, MIT Sloan School of Management, Boston.
- Williamson R.W. (1984), Evidence on the Selective Reporting of Financial Ratios, *The Accounting Review*, 59, (2).
- Zott C., Amit R. (2003), Successful entrepreneurs design innovative business models, *European Business Forum*, 9, (15).
- Zott C., Amit R. (2004), Business strategy and business model: extending the strategy-structure-performance paradigm, Insead paper.

Appendix A: Breakdown tables

Table 2: Results of the analysis on STAR's companies – breakdown table

	STAR's Co. (#71)											
	VALUE PROPOSITION			PROCESSES			OFFERING			RELATIONS		
	Q	P	U	A	R	C	M	S	D	S	P	C
ACOTEL	1	2	0	0	0	0	2	0	2	0	0	2
AEDS	1	0	0	2	1	1	1	1	1	0	0	1
AEFFE	0	1	1	0	1	1	0	1	2	2	2	1
ANSALDO	1	1	1	2	1	0	2	0	2	0	0	2
ASCOPIAVE	2	0	0	2	2	1	0	1	1	1	1	0
ASTALDI	2	0	0	0	0	0	0	0	0	0	1	0
BCA IFIS	0	0	0	0	0	0	0	0	0	0	0	0
BCA FINNAT	0	0	0	0	0	0	0	0	0	0	0	0
BCA POP ETRUR-LAZ.	0	0	0	0	0	0	0	0	0	0	0	0
BIESSE	0	0	0	0	0	0	0	0	0	0	0	0
BOLZONI	1	0	0	0	0	0	0	0	1	0	0	0
BREMBO	1	0	0	1	0	0	1	0	0	0	1	0
CAD	0	0	0	0	0	0	0	0	0	0	0	0
CAIRO COMMUNICAT.	0	0	0	0	0	0	0	0	0	0	0	0
CEMBRE	0	1	0	1	0	0	0	0	1	0	0	0
CENTR LATTE TORIN	0	0	0	0	0	0	0	0	0	0	0	0
COBRA	0	0	0	0	1	0	0	0	0	0	1	1
CREMONINI	0	0	0	0	0	0	0	0	0	0	0	0
DADA	1	1	1	0	0	0	1	0	1	0	0	2
DAMIANI	1	2	1	0	2	1	0	0	1	0	1	0
DATALOGIC	1	1	1	0	0	0	0	0	0	0	0	0
DEA CAPITAL	0	0	0	0	0	0	0	0	0	0	0	0
DIASORIN	2	2	2	2	2	2	0	0	0	0	2	0
DIGITAL BROS	0	0	0	0	0	0	1	0	1	1	1	1
DMAIL GROUP	0	0	0	0	0	0	0	0	0	0	0	0
DMT	1	1	1	0	0	0	0	0	0	0	0	2
DUCATI MOTOR HOL.	0	0	0	0	0	0	0	0	0	0	0	0
EEMS	0	0	0	0	0	0	0	0	0	0	0	0
ELEN	0	1	1	0	0	0	0	0	0	1	1	0
EMAK	0	0	0	0	0	0	0	0	0	0	0	0
ENGINEERING	0	0	0	0	0	1	0	0	0	0	0	0
ESPRINET	2	1	0	2	0	0	0	1	2	0	0	1
EUROTECH	2	0	0	1	0	0	0	0	0	0	0	0
FIDIA	0	0	0	0	0	0	0	0	0	0	0	0
FIERA MILANO	1	1	0	0	0	0	0	1	0	0	2	2
GEFRAN	1	0	0	1	0	0	0	0	0	0	0	0
GRANITHANDRE	2	2	2	0	0	0	0	0	0	0	1	1
GUALA CLOSURES	0	0	0	0	0	0	0	0	0	0	0	0
I.M.A.	1	0	0	0	0	0	0	0	0	0	0	0
INTERPUMP GROUP	0	0	0	0	0	0	0	0	0	0	0	0
IRCE	0	0	0	0	0	0	0	0	0	0	0	0
ISAGRO	0	0	0	0	0	0	0	0	0	0	0	0
JOLLY HOTEL	0	0	0	0	0	0	0	0	0	0	0	0
JUVENTUS FC	0	0	2	1	2	0	1	1	1	0	2	1
LANDI	2	1	0	0	0	2	0	0	0	0	0	0
LA DORIA	1	0	0	0	0	0	1	0	0	1	0	1
MARIELLA BURANI	2	1	3	3	3	2	2	1	2	1	1	1
MARR	0	0	0	0	0	0	1	0	1	0	0	1
MIRATO	0	0	0	0	0	0	0	0	0	0	0	0
MONDO TV	1	0	2	2	2	2	1	0	1	0	1	1
NAVIG. MONTANARI	0	0	0	0	1	0	0	0	1	0	0	1
NEGRI BOSSI	0	0	0	0	0	0	0	0	0	0	0	0
NICE	1	0	0	0	0	0	0	0	2	0	0	0
OMNIA NETWORK	0	0	0	2	1	1	1	1	1	0	1	0
PANARIAGROUP	2	0	2	0	0	1	1	0	0	0	0	0
POLIGRAF. S.F.	0	0	1	0	0	0	0	0	0	0	0	0
POLTRONA FRAU	3	3	3	2	2	2	1	1	2	1	1	2
PRIMA INDUSTRIE	1	1	0	1	1	1	0	1	1	0	0	0
RDB	0	0	0	0	0	0	0	0	0	0	0	0
RENO DE MEDICI	0	0	0	0	0	0	0	0	0	0	1	1
REPLY	1	0	0	0	0	0	0	0	0	0	0	0
SABAF	2	0	0	0	0	0	0	0	0	0	0	0
SAES	2	0	0	0	0	0	0	0	0	0	0	0
SOCOTHERM	2	2	0	1	0	0	1	0	0	0	2	3
SOGEFI	1	0	0	0	1	0	0	0	1	1	0	3
STEFANEL	2	1	1	0	0	1	0	0	1	0	0	0
TARGETT SANKEY	1	1	0	0	0	0	0	0	0	0	1	0
TREVISAN COMETAL	0	0	0	0	0	0	0	0	0	0	0	0
TXT	1	0	0	0	0	0	0	0	0	0	0	1
UNILAND	0	0	0	2	0	0	0	0	1	0	0	0
VITTORIA ASS.NI	2	0	0	2	0	1	2	1	2	0	0	1
TOTAL SCORE	51	27	26	30	23	20	20	11	32	9	24	33

Table 3: Results of the analysis on S&P MIB's companies – breakdown table

	S&P MIB's Co. (#40)											
	VALUE PROPOSITION			PROCESSES			OFFERING			RELATIONS		
	Q	P	U	A	R	C	M	S	D	S	P	C
AEM	0	0	0	0	0	0	0	0	0	1	1	0
ALITALIA	0	0	0	0	2	1	0	0	0	0	1	0
ALLEANZA ASS.NI	0	0	0	0	0	0	0	0	0	0	0	0
ATLANTIA	1	0	0	0	0	1	0	0	0	0	0	0
AUTOGRILL SPA	0	0	0	0	0	0	0	0	3	0	0	0
BANCA MPS	0	0	0	0	0	1	0	0	2	0	0	0
BANCA POP MILANO	1	0	0	0	0	0	0	0	2	0	1	0
BCO POP VR E NO	1	0	0	0	1	1	0	1	1	0	0	1
BULGARI	0	0	0	0	2	0	0	0	2	0	0	0
BUZZI UNICEM	1	0	1	0	1	1	0	0	0	0	0	0
ENEL	0	0	0	0	0	1	0	0	0	2	1	0
ENI	1	0	0	0	0	2	1	0	0	2	1	1
FASTWEB	1	2	0	0	0	0	1	0	0	1	1	1
FIAT	1	1	0	0	0	0	1	0	0	0	1	0
FINMECCANICA	0	1	0	0	0	1	0	0	0	0	2	2
FONDIARIA-SAI	1	0	0	0	0	0	1	0	0	1	0	0
GENERALI ASS.NI	1	1	0	0	0	0	0	0	0	0	0	1
GR. EDIT. L'ESPRESSO	0	0	0	0	0	0	0	0	1	0	0	0
IMPREGILO	1	0	0	0	0	0	1	0	0	0	0	0
INTESA SANPAOLO	1	1	0	0	0	0	1	1	1	0	1	1
ITALCEMENTI	1	0	0	0	0	1	0	0	0	0	1	0
LOTTOMATICA	1	1	0	0	1	0	0	2	3	2	1	1
LUXOTTICA GROUP	1	0	0	0	0	1	0	2	3	0	1	0
MEDIASET	0	0	0	0	0	0	0	0	0	0	0	0
MEDIOBANCA	0	0	0	0	0	0	0	0	0	0	0	0
MEDIOLANUM	0	0	0	0	0	0	0	0	1	0	0	1
MONDADORI EDIT.	0	0	0	0	1	1	0	0	0	0	1	0
PARMALAT	0	0	0	1	0	1	0	0	0	0	1	0
PIRELLI	0	1	0	0	0	1	0	0	0	0	2	0
PRYSMIAN	1	2	0	0	1	0	0	1	0	0	3	0
SAIPEM	2	0	0	0	2	1	0	0	0	0	0	0
SEAT PAGINE GIALLE	0	0	0	0	0	1	0	0	2	0	0	0
SNAM RETE GAS	1	1	0	0	2	1	1	0	2	2	0	0
STMICROELECTRONICS	1	0	0	0	0	0	0	0	1	1	1	1
TELECOM ITALIA	1	0	0	0	0	1	0	2	0	2	0	0
TENARIS	1	0	0	0	0	1	0	0	0	0	1	0
TERNA	2	0	0	0	2	1	0	0	0	2	1	0
UBI BANCA	0	0	0	0	0	1	0	0	3	0	1	0
UNICREDITO IT	1	0	0	0	0	1	0	0	0	2	1	0
UNIPOL	1	0	0	0	0	0	0	0	2	0	1	0
TOTAL SCORE	25	11	1	1	15	22	7	9	29	18	26	10