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A new approach to accounting disclosure

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ABSTRACT

This paper aims at contributing to the growing literature interested in how to improve or to better interpret accounting information in nowadays business world. Lev and Gu (2016) shed light on a problem which already existed in the Accounting, Finance and Management world. This paper provides an accurate understanding of the issues surrounding the topic of accounting disclosure, both from an academic and industry perspective. It describes the proposed solutions and presents a final discussion. The paper tries to help contributing to probably one of the most important debates the accounting profession is facing.

Classification JEL: G30, M41.

KEYWORDS

Accounting information, disclosure, relevance, Strategic Resources and Consequences Report

RESUM

Aquest article té com a objectiu contribuir a la creixent literatura interessada en com millorar o interpretar la informació comptable actual. Lev i Gu (2016) han fet molta llum sobre un problema que exis-

teix des de fa molt temps en el món de la comptabilitat, les finances i la gestió. Per això, es proposa un model per informar millor sobre els factors clau d'èxit de l'empresa. Amb aquesta proposta es tracta de contribuir a un dels debats més importants que té en l'actualitat la professió comptable.

Classificació JEL: G30, M41.

PARAULES CLAU

Informació comptable, divulgació, rellevància, Informe de recursos estratègics i conseqüències.

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1. Introduction

Nowadays' world is characterised by the increasing presence of highly innovative companies whose strengths lie in their ability to disrupt the market. A classic example of such companies would be Apple. Service companies, such as banks and insurance companies, just to mention two kinds of companies belonging to the business service field, keep playing a key role in society, allowing businesses to operate and invest in their profitable projects. Generally speaking, it seems like creativity is coming back as an invaluable skill in order to succeed. Indeed, many innovative companies abandoned a very hierarchical structure in order to allow its employees creative moments to contribute to the development of new ideas.

All changes come with challenges associated with them and in this particular case probably the biggest challenge is for the standard setters and regulators to make sure investors have valuable and clear information available to make appropriate investment decisions. Unfortunately, according to the evidence provided by Lev and Gu (2016), it seems that regulators have failed in this task. Although there have been some meaningful discussions related to the topic. For example, the issue related to R&D capitalisation, there is still a relevant gap between the actual value of a company and what investors can abstract from the financial statements. Companies are trying to provide such relevant information to investors in several ways, for instance by providing long and detailed footnotes, or by using other communication means to convey their innovations or strategic advancements. In fact, it is now common practice for corporations to engage in communications

through Twitter, Facebook or social networks in general to pass relevant information to investors.

From this brief introduction, it is clear that the need of a new approach to accounting disclosure is far from being superficial, especially because accounting is considered to be the language of business and investors need to be able to understand it properly to engage in the investment world. Even academics in the finance and accounting field understand that probably the numbers in the financial statements have been either over analysed or they are less relevant than they used to be. Indeed, textual analysis research is becoming an important tool for accounting and finance academics to provide relevant advancements in the discipline and this is documented by the increasing number of articles in top academic journals adopting such technique to gather relevant data. Moreover, several relevant research questions related to voluntary disclosure, valuation and value relevance have been re-explored in light of these big changes. However, as Lev and Gu (2016) correctly point out, there is not too much difference between the financial statements produced a century ago and those investors can use today to make their investment decisions. The balance sheet, income statement and statement of cash flow maintain an extremely similar structure as the ones which were created in the past, when the main industry and, as a consequence, the main economic driver was the manufacturing industry. Therefore, this confirms that so far regulators and standard setters might have failed in meeting this challenge. They might have overlooked the importance of restructuring and better complementing the existing financial statements with other documents, helping investors make better investment decisions.

After this introduction, the paper will continue with a literature review, a description of the solution proposed by Lev and Gu (2016) to the problem, as well as commenting how to apply their proposed disclosure approach and finally we will provide some concluding remarks.

2. Literature Review

To understand how the academic community is trying to shed light on the importance of strategic information in order to make informed investment decisions, this literature review will touch upon the fields of accounting research which are more affected by the issue we are discussing. The first piece of work we should mention is Lev and Gu (2016). They prove that there is a need for change to the financial accounting regulation due to the growing importance of strategic assets. Actually, professor Lev along

with other eminent scholars such as S.P. Kothari, Mary Barth and David Aboody, already saw and acknowledged the changes the business world was going through and the need to better understand how to properly inform investors about the new important features companies were developing. Their work had always had the aim of helping both investors and standard setters understand the evolution of business performance and the prediction of future value through financial information. In fact, this is the actual aim of Accounting research.

Some prominent examples of what we are talking about are Aboody and Lev (1998) who, exploiting the very special case of software capitalisation, examine the relevance to investors of information on the capitalisation of software development costs in accordance to the SFAS No. 86. In particular, exploiting the fact that software capitalisation, at least at the time when the paper was developed and published, was the only case officially recognised as belonging to the D part of R&D, so was not to be mandatory fully expensed, Aboody and Lev (1998), taking into account that the Software Publishers Association (SPA) issued in 1996 a petition to abolish the standard, tried to give meaning to such challenge providing a rigorous analysis and assessment of the situation. They concluded that capitalised related variables are significantly associated with capital market variables and future earnings. This is a cornerstone example of the importance that intangible assets play for firm performance and valuation. In fact, the academic community giving importance to such factors has been growing over time. For instance, Kothari, Laguerre and Leone (2002) test a new method to estimate the relation between R&D investments and the uncertainty of future benefits from those investments. They conclude that R&D investments generate future benefits that are far more uncertain than benefits from investments in tangible fixed assets. Once again an evidence underlying the need of updating the financial disclosure methods to one that better incorporate the importance of strategic assets and investments.

Lev and Sugiannis (1996) is another very important paper documenting the value relevance of R&D investments, hence its relevance for investment decisions. More recently, Chen, Gavious and Lev (2017) related the importance of R&D capitalisation to the standards imposed by the IFRS concluding that the capitalisation of R&D investments generates positive externalities to investors.

It is clear that, already when going through the literature related to valuation and value relevance, we see an intersection with the subfields of regulation and voluntary disclosure. We will discuss the latter a little more proceeding with the paper. But before doing that, another accounting subfield which has been touched by the gap between standard setters and inves-

tors is definitely the one studying financial analysts. For instance, Barth, Kaszkik and Mcnichols (1999) find a statistically significant relationship between analysts' coverage and firms with more intangible assets. This is a key finding because analysts are the ones in charge of forecasting companies' future profitability as well as recommending which investments to make. If they have more incentives to cover firms with more intangible assets it means two things. First, firms with more intangible assets might yield higher future profitability, and/or taking Barth, Kaszkik and Mcnichols (1999) point of view, these firms might be more covered by analysts simply because their financial disclosure is not as informative as for firms having mainly tangible assets. In fact, intangible assets are typically unrecognised and estimates of their fair values are not disclosed. To fill the gap, academics started using textual analysis to figure out if in the footnotes or on the Management Discussions and Analysis part of the financial statements there is something to be found which would help to better understand the actual value of a firm and communicate it to investors.

Since the scope of the paper is not to be thorough in explaining the textual analysis approach, if the reader is interested in that, we point him to Loughram and McDonald (2016) which is a very good survey about the advancement in the field of textual analysis within the Accounting and Finance field. However, it is important to take into account the fact that the academic community is increasingly relying on this methodology to answer research questions in valuation, such as Bartov, Faurel and Mohanram (2018) who show how company tweets are able to help predict future company performance. The methodology we are exposing has also being extensively used to answer questions related to voluntary disclosure. For instance, Bushee, Now and Taylor (2017) who investigate if the language complexity used by companies in their disclosure is the result of having to disclose complex information or if it is simply a tool managers use to hide unfavourable information. Another important example related to voluntary disclosure is Lundholm, Rogo and Zhang (2013) who study how foreign companies communicate their value to foreign investors.

In summary, it is easy to appreciate how the gap between accounting standards and the current business world is pushing both academics and practitioners to find new solutions to it. The next section of the paper will be dedicated to providing an overview of the most concrete solution that has been provided so far, which is the «Strategic Resources and Consequences Report» proposed by Lev and Gu (2016).

3. Overview of the Strategic Resources and Consequences Report

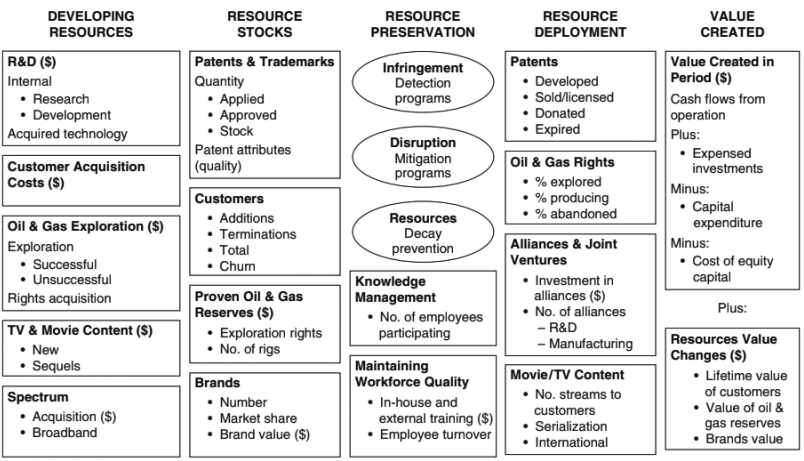
The model proposed by Lev and Gu (2016) challenges the accounting profession, and the accounting world in general. It states that due to the changes the corporate world has been going through in the last decades, the accounting standards and procedure are no longer appropriate to disclose the actual value of a company. Let alone its growth perspective. This is because while the corporate world has been evolving, the accounting world ended up being static in comparison. To solve these issues, the authors developed the so called «Strategic Resources and Consequences Report» which has the aim of providing investors with enough information to assess whether a company has been developing sustainable competitive advantage or not. Sustainable competitive advantage which depends on the ability a company has to generate economic profits. According to Lev and Gu (2016), the way through which a company creates sustainable competitive advantage is by efficiently operating its strategic assets. Strategic assets are those which meet the following requirements:

- **Valuable**: They must be able to generate a stream of profits exceeding costs such as patents underlying profitable goods and service.
- **Rare**: A limited amount of these assets is usually available such as the landing right of an airplane company.
- **Difficult to imitate**: Competitors cannot easily imitate or acquire such assets.

Therefore, this new financial disclosure approach should inform investors about a company's strategic assets, how it develops or acquire them, to what risks are these assets exposed to and how the company intend to use them. To show the validity of such report, the authors tested it in the following industry sectors: media, insurance, pharmaceutical, biotech and oil and gas. The picture below clearly shows how the model works.

A picture is worth a thousand words, so after having narratively introduced the Strategic Resources and Consequences report, let's go through it using the Figure 1, taken from Lev and Gu (2016) to better grasp this new disclosure approach. The model is based on economic theory and the information presented in the report is the one which according to theory is considered useful information for investors. This information focuses on enterprises' strategic assets; their creation, preservation and deployment with the final aim of creating corporate value. The model pictured in Figure 1 is a generic one. Looking at the picture we can identify five columns from left to

right, each one of them representing a set of information which is key for a company to create sustainable competitive advantage. Much of the information is in monetary amount ($), some are quantitative, such as number of new costumers (that information is inscribed in a rectangle). Lastly, some information is inscribed in a circle and that is the qualitative information.



Note: The information in squares is quantitative ($ denotes monetary values), and in circles is qualitative (narrative).

Figure 1. Strategic Resources and Consequences Report.

An important thing to understand is that most of this information is not required to be disclosed in the financial statements, but financial analysts are very interested in them. In fact, they try to extrapolate as much of that information as possible through the conference calls and the footnotes of the financial statements.

To make the reader comfortable with the strategic and consequences report we will go through it step by step. The first column from left to right lists developing resources. There are five squares in that column meaning that we are dealing with quantitative amounts or better $ amounts. The column simply describes and lists which are the resources a company can develop in order to achieve sustainable competitive advantage. For instance, the company might want to invest in research and development. Such investment could be an internal process if the company decides to exploit its own R&D department, or external if the company acquires technologies from other companies or exploits external labs. Either way, the company will incur costs, and these are quantifiable. This is the reason why these items are enclosed in a square. Customer acquisition costs are a quantifiable

item as well. These are all the costs a company has to incur attempting to attract and retain new customers. These could be agreements with other companies to allow customers to try and appreciate the product. As discussed in Lev and Gu (2016), the value of customers' acquisition is one of the most undervalued items in the standard financial statements. Even though for highly innovative companies such as Netflix this item is key to create sustainable competitive advantage. The next square, includes oil and gas exploration costs. These items are clearly applicable to oil and gas companies or even to companies working in the energy sector in general. For these kind of companies, what they invest searching for new sources of energy is a fundamental part of their business. Such explorations require heavy investments and there is always a percentage of successful and unsuccessful results. However, these activities are at the core of their sustainable competitive advantage. Same reasoning applies to the following two squares under the column. TV and Movie content and spectrum. These two items clearly belong to the media and telecommunication industries. How much a TV company invests to create a sequel of a successful TV show or movie can affect its long term visibility and success. How much a telecommunication company invests in acquiring spectrum might push it ahead of competition.

The next column identifies the resources stock. These are the items quantifying how a company strategically stocked its strategic assets. In fact, also in this case there are only squares below the column. For instance, the first square listing patents and trademark quantifies the value of a companies' patents and trademark. This is vital if a company heavily invests in R&D. The company must be aware of how many patents it got approved and how many are on stock. The second square in the column instead is crucial for all companies heavily dependent on customers. Before, we used the Netflix example, but this could be applied also to iTunes for example. The square quantifies the additional customers in dollar amounts as well as the termination costs and churn rate. The square immediately below quantifies the proven oil and gas reserves in terms of exploration rights and the number of rights. If we move to the last square listed under the column we see the dollar quantification of brands. The number of brands, its market share as well as market value.

Then we move to the resources preservation column. The only one so far listing both circles and squares. If we look at the information within the circle, those information are qualitative in nature and they include strategies to protect a company's strategic assets from possible threats. For example, the first circle show a way a company can protect its strategic assets from infringement. They could do it through detection programs. They could protect their strategic assets through mitigation programs and their resources by

prevention. The quantifiable part of the preservation column is given by knowledge management and maintaining workforce quality. To maintain certain skills there is the possibility of implementing either internal or external training programs. Alternatively, a company might decide to implement a heavy employee turnover.

Before discussing the value created by the company's strategic assets, there is another column to be analyszed. The resources deployment column. This is another column listing only squares, so we are dealing with monetary quantifiable information. The deployment of resources in this case represents their efficient allocation. For instance, a company might want to quantify how many patents expired, how many have been developed or donated. On the same line, an oil company might want to quantify the percentage of abandoned rights of exploration, or the percentage of produced rights of exploration. The square listing the alliance and joint ventures is meant to quantify the investment in alliances a company makes. Sometimes, to obtain a sustainable competitive advantage and to be ahead of the game, a company might engage in an alliance contract to develop a new product. Such an agreement might have the effect of reducing R&D costs, speed up the development process and exploit another company's complementary knowledge. The last square within the column is quite self explanatory and it is mainly intended for Television and broadcasting companies.

In the last column, we understand how this model is an important complement to the existing financial statements. In fact, under the value creation column we find two complementary squares. One showing the value created for the period in dollars amount. Such value is calculated using a traditional accounting approach. The interesting addition is the square right below the accounting formula. This square is denoted as resources value changes and it is connected to the accounting formula above through a plus sign. This square includes the change in value of a company's strategic assets and it is a very distinctive feature of the strategic resources and consequences report.

It looks like this model has many pros, but for sake of completeness it is worth mentioning that there is a trade off in adopting this model. The biggest trade off is between the value a firm can gain by attracting investors interested in their sustainable competitive advantage and the value of the information to disclose which might have a competitive implication. This is also a topic which academics are trying to tackle and some of the references we mention in the literature review also touch upon this issue. Given the industry specificity of each information listed in the Strategic Resources and Consequences report, we will borrow one example from Lev and Gu (2016) to show the reader how the new disclosure model works.

4. Example of a company in the media and entertainment industry

Since in the introduction we mentioned the importance of innovation and creativity, to show how the strategic resources and consequences model works we will use and analyse the media and entertainment industry example from Lev and Gu (2016). This industry is an interesting example to study because of the fierce competition within it, mainly due to low barriers to entry and also because customers are the most important strategic asset to media companies. Sometimes, this kind of firms even needs to manage customers' data to develop algorithms or other resources to build sustainable competitive advantage.

It is also important to notice that the media and entertainment industry includes several subindustries such as television and social media. All of them result to be very sensitive to technological disruption. Figure 2 below is from Lev and Gu (2016) and it is a very exact example of a company in the media and entertainment sector.

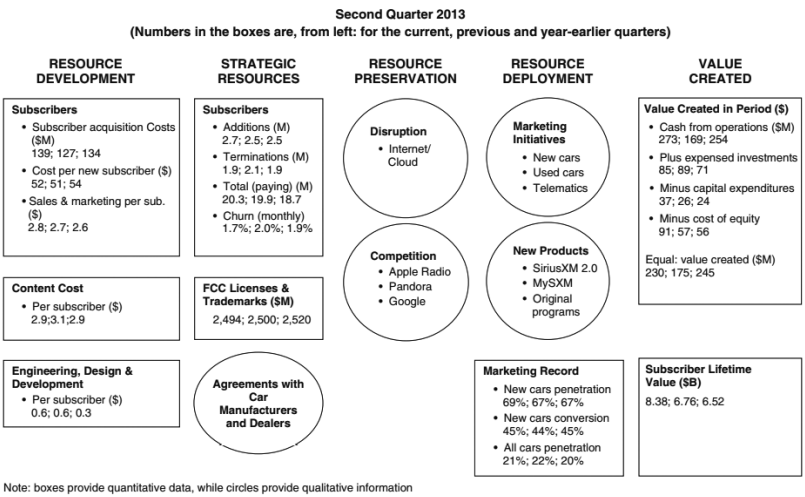


Figure 2. Strategic Resources and Consequences Report of Sirius.

If we analyze the report from this company named SIRIUS XM Inc. we notice the following characteristics. Starting from the column denoted as strategic resources, we notice that there are two square boxes and one circle box under such column, meaning that two boxes will provide quantitative information and one qualitative ones. We need to read the numbers within

the box from left to right because the number further on the left represents the current period number. For instance, we can see that in the current period the company has 2.7 million new customers, an 8% increase from the last period when they acquired 2.5 millions of customers. The number of terminations decreased as well as the churn rate (defined as the annual percentage rate at which customers stop subscribing to a service). The same reading can be applied to the box of FCC Licenses and Trademarks.

The circle box instead explains how the company is qualitatively developing and employing its strategic resources. In this particular case, the company is engaging in alliances with car manufacturing companies and dealers. This move is key to let customers experience and appreciate the product.

Moving to the Resource Development box, we can observe the costs required for the development of such strategic resources which, as expected, increased for the current period. In fact, we can observe that subscribers acquisition costs, cost per new subscriber and sales and marketing per subscriber all increased from the last period. Respectively subscribers acquisition costs increased from 127 millions dollars to 139 millions dollars. Cost per new subscriber increased from 51 to 52 millions dollars. Finally, Sales and marketing per subscriber increased from 2.7 to 2.8 millions dollars. The engineering & design development costs kept being stable at 0.6 millions while the content cost per subscriber went back to 2.9 millions dollars from an increase to 3.1 millions dollars.

The column describing the Resource Preservation only contains qualitative information about the possible competition and the disruptions the company might face. In the first circle within the column set the cloud and internet in general as disruptive initiative within the market the company is competing in. The circle right below lists the competitors which are identified in Apple radio, Pandora and Google.

The last two columns are easy to appreciate at this stage because they are self-explanatory. The resource deployment column shows how the company allocate its resources. For instance, through developing new products or undergoing marketing initiatives. To try quantifying such strategy, the report also shows the marketing records achieved by the firm. Going more into the details of the resource deployment column we can observe the following features. There are two circle containing Marketing initiatives and new products respectively. Both are qualitative information. Indeed, the marketing initiatives list possible strategies to reach a greater customers base. Based on the report the company could do it through the used car market, the new cars market and even telematics. New products which might be developed to achieve sustainable competitive advantage are listed in the

new product circle. Finally, the last part of the column is represented by the a square describing the company's marketing records. We can observe an increase both in new cars penetration from 67 to 69 percent and in new cars conversion from 44 to 45 percent. However, the overall cars penetration decreased from 22 to 21 percent. Even though we need to notice that in the previous period it increased from 20 to 22 percent. therefore, the last decrease might be due to stabilization.

Lastly, the value created column provides quantitative data in millions of dollars about the benefits explained by the initiatives and items presented in the previous columns. The most interesting part of this new approach towards accounting disclosure is that most of the information used is not gathered directly from the financial statements, but rather from the footnotes in the financial statements and the management calls. In fact, the last column is composed by two squares. The first one from the top showing the value created in accounting terms for the period and the second one showing the subscriber lifetime value for the period. The latter focuses on the main strategic asset of the company which are customers. Both squares show positive results for SIRIUS XM. In fact, the value created for the period increased from 175 to 230 millions of dollars and the subscribers lifetime value increased from 6.76 to 8.38 billions of dollars.

5. Conclusion

In conclusion, the accounting world seems not to have followed the pace of the business world. In fact, even though prominent academics through their studies proved there is need of change within the way companies are required to disclose their information, the first actual concrete proposal to meet this challenge is the Strategic Consequences and Resources Report proposed by Lev and Gu (2016). This report is meant to be a complement to the current financial statements and it is meant to capture those items being at the core of the firm's sustainable competitive advantage. Such strategic assets are the result of research, development and creativity and companies nowadays tend to disclose them either through footnotes on their financial statements or through management calls.

To summarize, there is definitely a need of a dynamic change in the way companies are required to disclose their financial information because the business world demands it. The Lev and Gu proposed model is a solution to the problem through a new report which should supplement the financial statements. The availability of such report would benefit both investors making them aware of the real value or potential of the company they

are investing in, and companies themselves because they would be able to effectively communicate to investors and creditors their long term plans and value creation.

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