Critical issues when valuing small businesses

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Small and medium enterprises (SMEs) are a crucial component of local and global economies. Their wealth can support or hinder the sustainable development of many countries. The appropriate determination of the transaction values of smaller businesses represents an important variable in the functioning of the markets. Notwithstanding, best practices of business valuations often refer to the ongoing conditions of large, public companies. This paper investigates the main criticalities that a practitioner may have to deal with when valuing SMEs by applying generally recognized methods. The last part of the paper considers the potential adoption of generally recognized standards for SMEs.

1. Introduction

Smaller businesses are a fundamental component of local and global economies. Research estimates indicate that small and medium enterprises (SMEs) represent more than 95% of the world's enterprises and account for approximately 60% of private sector employment (Edinburgh Group, 2012). In OECD countries, SMEs create around 60% of total employment and from 50% to 60% of value added (OECD, 2017). Smaller enterprises are crucial to the financial health and a sustainable economic growth of both developed and developing countries.

This paper is dedicated to the analysis of the peculiarities arising in the valuation of an SME. Despite the economy data, valuation methods proposed by practitioners are not focussed on the SME as the target entity.

The general idea could be that the valuation of an SME may be easier than the valuation of a public company. Paradoxically, it could be the opposite. Best practices are often built referring to the valuation of large, public companies, that usually have specific safeguards to avoid the mix between personal and business affairs, operate in "perfect" financial markets and provide a high level of information to their stakeholders, and specifically to the financial community.

Understanding SMEs' value becomes crucial for their stakeholders, such as the ownership that has to decide whether it is more appropriate to succeed or to sell, cease or continue its operations by combining with other enterprises or entering financial markets, also considering the minority interests (when they exist), and the employees who may aspire to take over the business.

The paper approaches the issues by a qualitative perspective. As a matter of fact, the valuation of an SME cannot be easily investigated by a quantitative point of view, for a number of reasons, including the following: transactions are usually not public, as they are operated in non-regulated markets; the universe of the operations is not determinable; and, each deal can present very peculiar features.

This document illustrates the difficulties that practitioners may face when valuing smaller businesses -without investigating the peculiar issues related to the valuation of interests in SMEs-, especially when they apply generally recognized practices. Aiming at providing an overview of the main criticalities, the research contextualizes the applied concept of SME, then investigates -functionally to the purposes of this paper- the main qualitative characteristics of smaller businesses and the main issues a practitioner can experience when adopting the consolidated practices. Lastly, the authors express some considerations about the approach that could be adopted in the valuation of SMEs.

2. The "concept" of small and medium enterprise

2.1. Regulatory approach

As of today, it is not possible to give a univocal and generally accepted definition of SME. Each definition needs to be placed in the context in which it arises in order to fully understand the objective it is intended to pursue.

The approach to the definition of SME varies depending on its "location" and application. This last feature is especially clear when the definitions established by regulators (regulatory approach) are opposed to the ones provided by the technical bodies (professional approach). From this point of view, the para-

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graph illustrates some significant cases emerging from local and regional jurisdictions and standard setters.

Regulators usually apply a quantitative approach to identify SMEs (Dennis, 1982; Jarvis *et al.*, 2000), as definitions must be objectively determined in order to clarify the scope of application and the recipients of the relevant rules. The predominant feature which identifies an enterprise is the size. In many legal environments, businesses can be categorized in: large enterprises, medium enterprises, small enterprises, and micro-enterprises.

At the same time, economies have a different understanding of the size of an enterprise. The U. S. Small Business Administration provides a "Table of Small Business Size Standards", where it categorizes enterprises in relation to the NAICS Industry Description. This classification is based on average annual income or the average number of employees of a business. To have an idea of the required size, most categories classify an enterprise as a small enterprise when it has less than 500 employees.

The European Union defines the categories of enterprises based on three thresholds: turnover; total assets; and average number of employees. Specifically, the 2013/34/EU, based on the "think small first" approach, states that undertakings are categorized considering if on their balance sheet date, they do not exceed (or exceed) the limits of at least two of the three criteria exposed in the following table.

Micro undertakings (up to)	Small undertakings (up to)	Medium undertakings (up to)	Large undertakings (over)
(a) balance sheet total: EUR 350 000; (b) net turnover: EUR 700 000; (c) average number of employees during the financial year: 10	(a) balance sheet total: EUR 4000000; (b) net turnover: EUR 8000000; (c) average number of employees during the financial year: 50.	(a) balance sheet total: EUR 20 000 000; (b) net turnover: EUR 40 000 000; (c) average number of employees during the financial year: 250.	(a) balance sheet total: EUR 20 000 000; (b) net turnover: EUR 40 000 000; (c) average number of employees during the financial year: 250.

Member States may define thresholds exceeding the thresholds in points (a) and (b) of small undertakings. However, the thresholds should not exceed EUR 6.000.000 for the balance sheet total and EUR 12.000.000 for the net turnover.

The Indian government recently approved a new classification of enterprises based on annual revenue and replacing the former definition based on investment in tangible assets (plant and machinery). In this perspective:

a. micro enterprises present total annual revenue up to Rs 5 crore (approximately € 600.000);

b. small enterprises have total annual revenue from Rs 5 crore to Rs 75 crore (approximately from € 600.000 to € 8.970.000);

c. medium enterprises have total annual revenue from Rs 75 crore to Rs 250 crore (approximately from € 8.970.000 to € 30.500.000);

d. large enterprises have total annual revenue exceeding Rs 250 crore (exceeding approximately € 30.500.000).

As previously mentioned and then illustrated, definitions can vary in relation to the pursued aims, economy and cultural organization.

2.2. Professional approach

From a technical and professional point of view, the size of an enterprise is often combined –if not replaced- with other qualitative factors. The focus is essentially on the appropriateness of the applied standards.

As far as accounting standards are concerned, IFRS for SMEs is intended to be used by SMEs, which are entities that publish general purpose financial statements for external users and do not have public accountability. Specifically, "An entity has public accountability under the IASB's definition if it files, or is in the process of filing, its financial statements with a securities commission or other regulatory organization for the purpose of issuing any class of instruments in a public market; or it holds assets in a fiduciary capacity for a broad group of outsiders. Examples of entities that hold assets in a fiduciary capacity include banks, insurance companies, brokers and dealers in securities, pension funds and mutual funds" (IASB, 2015).

The issue of the adoption of professional standards by SMEs has been dealt with by the International Audit and Assurance Standards Board (IAASB), the most authoritative audit standard setter. IAASB enacted the International Auditing Practice Statement (IAPS) 1005 (IAASB, 2002), "Special Considerations in the Audit of Small Entities". IAPS 1005 has then been withdrawn as a result of the Clarity project and its content has been included, where appropriate, in the relevant standards. However, IAASB provides, in relation to the special considerations, the following list of "... qualitative characteristics, such as:

a. Concentration of ownership and management in a small number of individuals (often a single individual – either a natural person or another enterprise that owns the entity provided the owner exhibits the relevant qualitative characteristics); and

b. One or more of the following are also found:

(i) Straightforward or uncomplicated transactions;

(ii) Simple record-keeping;

(iii) Few lines of business and few products within business lines;
(iv) Few internal controls;
(v) Few levels of management with responsibility for a broad range of controls; or
(vi) Few personnel, many having a wide range of duties" (IAASB, 2016).

IAASB adds that the above defined qualitative characteristics are not exhaustive and non-inclusive to smaller entities; they do not have to be all existing to identify a "smaller entity" as well.

The International Valuation Standards Council (IVSC), as the most authoritative international organization in the valuation field, does not present special issues in relation to the valuation of SMEs, or a definition of smaller enterprises (IVSC, 2017).

The SME considered for the purpose of this research is:

- a for-profit entity. Technical experts sometimes assimilate small enterprises to not-for-profit organisations. The considerations of this paper only relate to entities oriented to profit;
- an enterprise which is not listed and does not aim to list its financial instruments in a regulated market. It is substantially a private company whose ambition is not to become public, or to turn to the financial markets to obtain resources;
- an enterprise that is not extremely complex in its management and has potential comparable entities in the market. However, this paper does not examine the case of micro-enterprises. Micros require further specific considerations. On the other side, "bigger" medium companies, apart from the territorial collocation, could have more similarities with large companies than with small businesses;
- an enterprise that does not belong to public company groups. SMEs belonging to groups follow different decisional approaches, are often managed and accounted for as a branch of the large company rather than as an "individual" SME.

Lastly, it has to be observed that SMEs are often family businesses. Issues and criticalities can be identical in many cases (Ballwieser, 2017). That said, the paper takes into consideration smaller entities regardless of the fact that they are family businesses.

3. Literature review

Academia, professional bodies and practitioners have addressed the matter of the valuation of SMEs, approaching this issue from different but, sometimes, overlapping perspectives.

With reference to the scope identification, SMEs have often been associated to closely held businesses (Dukes *et al.*, 1996), as a corporation whose owners are limited in numbers. From this perspective, the studies -moving from the fact that entities are not on open markets- focus more on the impact that the illiquidity of the stocks can have on deals. In other cases, small businesses are associated, as already mentioned, to family businesses; the small size is sometimes considered as a characteristic of family businesses (Ballwieser, 2017). The "size effect" is studied as an autonomous variable as well (Banz, 1981).

Researchers have suggested specific valuation criteria (Sridharan, 2012). Boudreaux *et al.* (2011) propose to value business units by discounting cash flows with a discount rate reflecting the stockholders' risk, usually higher than in public firms. Feldman (2005) proposes selected adjustments for the SMEs discounted cash flows, impacting on the determination of the specific variables.

Some scholars focus on the determination of specific variables in the SMEs context in the application of the Discounted Cash Flow method (DCF). The analyses start from the consideration that cost of capital is usually lower for a public company than for a private company (OIV, 2015). Accordingly, a body of literature has, for example, considered the fair measurement of the systematic risk for smaller enterprises (Damodaran, 2005).

Another body of literature identifies net assets value as an applicable method for business valuations, once the appropriate accounting data are adjusted in order to reflect their current value (Liberatore, 2010).

Professional organizations usually adapt "original" standards to the qualities of smaller entities. Among the existing examples, in 2001 FEE (now ACE), the European Federation of Accountants, published some recommendations on how to approach the valuation of smaller entities. The paper investigates the different conditions that could "deviate" the adoption of usual rules.

AECA (2005), the professional body operating in the enactment of good practices in business management in Spain, published a text dedicated to the valuation of SMEs, explaining and considering the adoption of DCF and net asset value methods.

At the same time, IDW (2014), the Institute of Public Auditors in Germany, approached more specifically the topic by publishing application guidelines, investigating the potential impact of the size and the characteristics of smaller businesses on valuations.

AICPA (2016) has enacted a guide on the valuation of privately-held-company equity securities when issued as compensation, as a consequence to what required by the US GAAP.

Professionals are certainly very concerned about the investigated topic, which is of extreme interest also for professional practices, given its relevance from the fis-

cal point of view. An example is in the US the enactment of the Revenue Ruling 59-60.

Some professionals apply this approach as well, determining the criteria that are capable of adjusting the standard measurements (Pratt et *al.*, 1996; Feldman, 2005; Trugman, 2017). Some researches intend to verify the effect of SMEs characteristics in determining price transactions in terms of the entity's size (Trugman G. and Trugman L., 2011).

4. The significant SMEs features in relation to business valuation

4.1. Structural features

SMEs often present some features and peculiarities which need to be taken into consideration when performing valuations.

These characteristics can be related, on one hand, to their common structural features and, on the other hand, to technical peculiarities.

Structural features refer only to the enterprises that present the relevant qualitative characteristics. They refer essentially to the governance and to the socio-economic role played by the entity in the community where it operates.

Technical peculiarities are related to the usual practices that lead practitioners to consider an SME based on the assumption that it is a private company and usually less regulated.

Governance

One SMEs' common characteristic is that managers are often not substantially independent from owners. Specifically, owners may be the managers (FEE, 2001). This aspect needs to be carefully taken into account in the valuation from different points of view.

First, a smaller enterprise embodies an intangible value, that is sometimes difficult to measure. IDW provides some potential personal characterizations of smaller entities, strictly related to the characterizing activities of owners, such as the provision of services that are crucial for customer satisfaction (e.g., a professional or an expert whose know-how is key for the development of new products (IDW, 2014)).

The question arising from the circumstances described above is: will the entity be able to maintain the former potential after the possible withdrawal of its owner? SMEs' intangible capital could be high, non-represented in bookkeeping and difficult to measure. The case of a smaller entity, whose appreciation in the market relates to the credibility acquired by its director/owner, is quite common. What about the measurement of the value of the enterprise, once the director/owner will not be involved anymore?

This can contribute to address special hypotheses in valuing businesses, considering the capacity of the enterprise to produce the same level of earnings in the short and medium-term future.

The wealth of an enterprise could depend upon the capacity of managers. This aspect can be differently judged in the application of different valuation methods, where the operation excludes the continuity in the management team. In this case, if the practitioner is going to use, for example, the market value, the valuation has to reflect the estimated amount for which the entity should be exchanged "between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion" (IVSC, 2017), but without the added value that could be provided by the owners in their quality of managers. At the same time, the entity may benefit from special synergies arising from the personal owners' activities or assets. This can be the case of a synergistic complex built aside the entity, that is not part of the operation, or the case of a machinery, whose productivity is related to specific knowledge.

In addition, it is not rare that owners obtain, in their capacity of management, a higher (or lower) wage for their job, and such remuneration may sometimes not be related to the real "contribution" provided to the enterprise. Even this aspect should be appropriately considered when determining the flows of the enterprise. Their salary could be then compensated by the adopted dividend distribution policy (Pratt *et al.*, 1996). The perspective of the acquirer is clearly different and must preliminarily understand the related ongoing structural assumptions.

As an alternative to higher wages, owners can benefit from the distribution of resources based on specific profits distribution policies. Considering the above, it may conversely happen that the owner decides to distribute to himself less than the average, as they consider the entity as family. In substance, the policy in distributing profits can diverge from market conditions and impact the valuation.

An intuitive (and not easy) solution would be to isolate the enterprise from the abnormal (positive and negative) effects related to the observed facts and circumstances. The board of directors could be excessively numerous, as composed of several family members. The preliminary activity of the professional would be to value the enterprise in presence of a board of directors, based on the actual complexity and needs of the entity, as the change of the ownership would naturally bring the enterprise back to a physiological governance.

Corporate and personal assets

Owners/managers could, then, be tempted to com-

bine personal and corporate affairs. The distinction between stockholders' and managers' interests, which is at the basis of the Agency theory (Jensen and Meckling, 1976; Eisenhardt, 1989), is blurred by the case of SMEs combining these two roles into one person (or one family).

In general terms, the practitioner should try to adequately distinguish corporate assets from "personal" assets. These last ones should/may not be related to the commercial side of the enterprise and be addressed as surplus assets.

In this context, even the relationship between the business and the owners has to be carefully analysed. IDW affirms that SMEs often do not have appropriate equity (IDW, 2008). That said, even the financial relationships between the ownership and the enterprise should be carefully examined. From the perspective of the enterprise, the separation between equity and liabilities is crucial (IDW, 2014). It can happen, for instance, that the owners fund the organization atypically. In addition, and in connection to this, SMEs often have a low level of equity, as the entrepreneur can be ready to invest only when necessary (or when they have the capacity to). This misleads the interpretation of financial statements, which might be altered by a contingent situation and could vary in relation to ongoing facts and circumstances. In this case, it would be relevant to assess whether the business debts are secured by the owner, as this could alter the deal with a potential acquirer. At the same time, specific attention should be dedicated to the items used promiscuously. The valuation should take into consideration the potential optimization of these elements; the valuation of an item used in part for a personal purpose and in part for business affairs could, for example, optimize its value for sale purposes.

Another issue relates to the strategy horizons. The non-formalized strategy of SMEs -especially when the enterprise is a family business- is often a long- term strategy. The perspective of the market might be shorter. Obviously, the strategy would change the composition of the estimated cash flows as well.

Tax systems

The corporate income tax of SMEs can be optimized with the owners' personal fiscal position. The tax effect should be referred to the enterprise, assumed as a stand-alone entity.

4.2. Technical peculiarities

General aspects

A preliminary critical feature when referring technical standards to the SMEs' environment concerns the collection of the required information and material.

In some cases, professional standards require collecting disclosures and information. This can worry practitioners, especially where information is not easy to obtain, due to the fact that SMEs are not required to make their disclosure public as they do not have a broad range of stakeholders. At the same time, due to their private position and to the lack of resources, SMEs do not present sophisticated organizations. The lack of reliable information, mainly in forward looking estimates, can create a significant issue. This could be the case of a practitioner who looks for structured strategy or innovative business models. Another common example is the absence of a structured plan, to consider the cash flows or benefits arising from the future operations. The technical and professional standards deal with this problem, often requiring the practitioner to comply with this duty, especially when this is essential to perform the valuation. In this case, the mentioned professional standards would allow practitioners to adopt the hypotheses and the assumptions of the directors, moving from historical data (IDW, 2014; OIV, 2015).

In addition, practitioners should establish whether -considering the lack of information- it is feasible for them to carry out the valuation engagement and should define the responsibilities in relation to the documentation provided.

Financial data and financial statements

Another important aspect to be focused concerns the reliability of the financial statements. In many jurisdictions, SMEs are not required to prepare general purpose financial statements. This implies that, at least in these circumstances, enterprises apply tax-based requirements to present their "true and fair view".

The scarce reliability of financial data can have a misleading impact. The appropriate determination of financial data is the basis of any business valuation. It is obvious that a misleading effect is produced especially when adopting the "accounting methods" (Penman, 2010). This is especially true when the valuation is carried out to reflect the point of view of an investor, who is willing to understand the earning power of the entity (Trugman, 2017). In this case, the asymmetry of information from "internal" operators and third parties can determine unreliable estimates, if the data are not accurate.

Additionally, many regulations allow SMEs to prepare their financial statements on an abbreviated basis. This reduces the ability of financial statements to provide an exhaustive picture of the entity's financial health.

Perception of risk

The management's impact and - even - perception of risk is usually different in SMEs and in large companies. SMEs are mostly mono-business. SMEs are, some-

times, related to stronger partners, specifically, clients. The concentration of business and/or clients implies in these cases the existence of higher risks in the management of the entity. At the same time, the lack of appropriate hedging policies can increase the possibility of a sudden financial crisis, which may threaten the going concern. However, it is true that the minor complexity of business models and financial data result in simpler plans and reduced uncertainty in the determination of forward data.

Illiquidity of entities

The illiquidity of smaller undertakings could create significant risks of marketability. The practitioner usually applies a discount to the determination of the value of an SME to reflect the potential difficulties that a vendor may find to sell an entity (Tuller, 2008; IVS, 2017) or qualified interests (IASB, 2013), particularly when the practitioner is measuring a fair value. However, some authors and organizations (IASB, 2013; Trugman, 2017) have proved that the degree of risk decreases when the size of enterprise increases (size premium). This generally requires the use of specific risk premiums for investing in SMEs as well (OIV, 2015; IRS, 2009). The measurement of the premium adjustments is always discretional and, according to this, questionable.

5. Potential criticalities regarding the use of approaches

5.1. Market approach

International and local practices are converging towards generally recognized standards. IVSC recognizes the following approaches: market approach; income approach; cost approach (IVSC, 2017). The following part of this paper investigates the adoption of the valuation methods belonging to the quoted approaches, often directly or indirectly promoted at a local professional level as well.

The adoption of the comparable approach proposes some clear issues in the valuation of SMEs. IVSC states that "[t]he market approach provides an indication of value by comparing the asset with identical or comparable (that is similar) assets for which price information is available" (IVSC, 2017, IVS 105, 20.1). The relevant identified valuation methods are: Comparable Transactions Method; Guideline publicly-traded comparable method.

In general terms, it is difficult for SMEs to be eligible to apply this approach, as many smaller enterprises can be unique in the market (AECA, 2005; Aznar *et al.*, 2016). Even when this is not the case, the market valuation methods can be subject to natural restrictions, as comparable assets are not existing (Heaton, 1998). IVSC affirms, for instance, that the comparable transaction methods can have natural limitations -and this should imply the application of adjustments- when the transactions dealt with are not recent enough, the assets are traded in non-active markets, comparable assets have significant differences, information is not reliable. All the recalled conditions can normally occur in the valuation of an SME.

The guideline publicly-traded method is not easy to apply for SMEs as it uses information on publicly-traded comparables that is obviously not often present for private enterprises. Public companies have different business models, and available data can be compared, only if adjusted with considerations that may be excessively discretional. Even financial data are often determined on different bases; while public companies apply internationally general accepted standards (IFRSs or US GAAPs), SMEs usually adopt local GAAPs.

It is very important to lastly observe that Small and Medium Sized Practices, that are often the first professionals involved in the valuation of SMEs, may sometimes lack the resources to obtain useful information to apply comparable methods, due to specific constraints.

This does not mean that the market approach cannot be applied to the SMEs valuation, even if it is quite evident that the preliminary collection of appropriate comparables is, especially in this circumstance, crucial and has to be carefully contextualized.

5.2. Income approach

As of today, the income approach is probably the most used approach in valuing businesses. It "... provides an indication of value by converting future cash flow to a single current value. Under the income approach, the value of an asset is determined by reference to the value of income, cash flow or cost savings generated by the asset" (IVSC, 2017, IVS 105, 40.1).

Despite stating that there are many valuation methods referring to the income approach, IVSC explicitly examines only the DCF, which values businesses as the summation of the discounted net cash flows -available to owners (free cash flows to equity) in the equity side or to the enterprise (free cash flow to the enterprise) in the asset side- and the terminal value, appropriately discounted (Fernández, 2013).

Sometimes the corporate "personalization" creates inevitable problems in the data interpretation as well. This analysis originates from the investigation of previous financial reporting, meant as "the starting point for the projection of future developments and for undertaking plausibility considerations" (IDW, 2008). The determination of the steady state income requires a careful normalization of cash flows and earnings.

This issue, examined above, requires attention in the determination of estimated cash flows, distinguishing "operating" cash flows from personal cash flows.

The adoption of DCF for SMEs is differently considered by the literature. Some authors consider it as the most valuable approach or the most appropriate approach if referred to smaller businesses (Heaton, 1998; AECA, 2005).

A recognized issue in adopting the income approach for SMEs, specifically referring to the DCF valuation method, is the determination of the discount rate and its variables. This issue arises especially from the fact that SMEs do not often have business plans and from the determination of the discount rate.

As regards the preparation of business plans, reference should be made to the considerations expressed in the previous paragraph.

In relation to the determination of the discount rate, the main criticality is that the applied formulas are usually based on public data that are naturally referred to public companies (Cheung, 1999). The adoption of the asset valuation perspective usually applies the WACC (Weighted Average Cost of Capital) as the discount rate.

$$\text{WACC} = K_e \times \frac{E}{D+E} + K_d \times (1-t) \times \frac{D}{D+E}$$

K_e = cost of equity
E = equity
D = debt
K_d = cost of debt
t = income taxes

It is beyond the scope of this paper to investigate the determination of the above-mentioned formula, except considering whether it is functional to its adaptation to the SMEs.

Having said that, the formula can be created only where data are publicly available and consequently relies on information referred to the public companies. According to this, the collected values could need to be adjusted when applied to SMEs.

The specific risk of the investment in SMEs represented by the cost of capital is usually lower for a public company than for a private company. This is motivated by the evidence that an investment in an SME normally reflects higher risks, due to the exposure to a less organized structure, lack of data, the illiquidity of the enterprise and the concentration of risks (OIV, 2015).

As regards the organizational and governance peculiarities, reference should be made to the considerations expressed in the previous paragraph.

Also, the appropriate determination of the Capital Asset Pricing Model (CAPM), necessary to estimate the discount rate under a levered and unlevered side, can be controversial. CAPM appeared to be applied by 90% of professionals using the DCF in their business valuations. It measures the minimum return that an equity investor can accept to enter the operation, that is the cost of equity.

The generally recognized formula states that the cost of equity equals the addition of a risk-free rate and the result of ß, as a measure of the volatility of the investment return in relation to the market as a whole (systematic risk), and the equity risk premium (excess return), given by the difference between the risk of return and the risk-free rate:

$$K_e = r_f + \beta \times (r_m - r_f)$$

R_f = free-risk rate
ß = beta
r_m = expected market return

The determination of the cost of SMEs' equity is a subject that has been studied for decades (Boyer and Roth, 1976). Some authors argue that the applied formula should be adjusted if referred to smaller enterprises in order to reflect some conditions that are not considered in the determination of the above-mentioned values.

Other authors and professional bodies have focused their attention on the determination of cash flows. AECA, the Spanish professional body, has addressed the lack of information, concentration of risk and illiquidity of the investment (AECA, 2005).

Beta assumes the existence of a list of peers in the market. The lack of a reliable peer group should require an adjustment to obtain a reliable systematic risk measurement. Specifically, beta measures the appreciation of risk for a diversified portfolio. The diversification naturally reduces the impact related to the performance of a specific company. Usually, the owners of SMEs do not diversify the risk and concentrate instead its capital on "their" operations. In many cases, minority interests do not exist. When this occurs, beta -meant as the market risk- provides an overrated measure of the ownership risk. In order to establish an appropriate level of risk, Damodaran has proposed to take into consideration the non-systematic risk, if the owners have not diversified their risk, by the determination of the "total beta" (Damodaran, 2002). This is computed as an adjustment to the original beta.

Damodaran's total beta is computed as:

$$\text{Total Beta} = \frac{Market\ Beta}{\rho_{jm}}$$

ρ_{jm} = correlation between the firm's equity and the market index

Market beta = ρ_{jm} (σ_j / σ_m) equal to the product of (i) ρ_{jm}, and (ii) σ_j / σ_m as the relation between σ_j = standard deviation of the firm's equity return and σ_m = standard deviation of the equity market return.

The formula highlights that the lower the correlation, the higher the total beta.

Regardless of what the literature has developed by the total beta, the body literature is not unanimously in favour of the adoption of total beta and has evidenced that experts do not consider the adjustments to the market beta in the estimate of private companies (Petersen *et al.*, 2006; Kasper, 2013).

Moreover, even if it is difficult to generalize, the cost of debt is usually considered higher than in larger companies for the reasons mentioned above, and specifically for the embodied higher risks, and due to the smaller investments (Badertscher *et al.*, 2017). The adoption of total beta for the valuation of private companies has been widely debated and, as mentioned, the theoretical and empirical effects are not generally accepted (Von Helfenstein, 2009 and 2011; Kasper, 2013).

5.3. Cost approach

As explained by IVSC "The cost approach provides an indication of value using the economic principle that a buyer will pay no more for an asset than the cost to obtain an asset of equal utility, whether by purchase or by construction, unless undue time, inconvenience, risk or other factors are involved. The approach provides an indication of value by calculating the current replacement or reproduction cost of an asset and making deductions for physical deterioration and all other relevant forms of obsolescence" (IVSC, 2017, IVS 105, 60.1).

The generally applied valuation methods are:

- replacement cost method: a method that indicates value by calculating the cost of a similar asset offering equivalent utility,
- reproduction cost method: a method under the cost that indicates value by calculating the cost to recreating a replica of an asset, and
- summation method: a method that calculates the value of an asset by the addition of the separate values of its component parts (IVSC, 2017, IVS 105, 70.1).

The summation method is sometimes considered as an appropriate method for the valuations of SMEs (Liberatore, 2010; Behringer, 2012, as mentioned by Bensh *et al.*, 2013). The adoption of the summation method (otherwise named as net asset value) could be due to the inappropriateness of the adoption of the market and/or the income approaches.

The method can *de facto* be lacking from the perspective of the determination of the intangible capital. In order to limit this distortive effect, practitioners usually apply diversified methods to adjust the value of SMEs arising from a pure cost approach. The category has been formalized by the Union des Experts Comptables (UEC, 1961) and then reproduced in several methods. One of the most known method, which can mix the net assets valuation and the income perspective, aggregates the net assets value and the measurement of the goodwill (badwill):

$$W = K + an\neg i\ (R - Ki)$$

K = net assets value
an¬i (R - Ki) = goodwill, where, in detail:
n = time horizon
i = cost of capital
R = normalized expected earnings

It is true that the methods that combine cost approaches and income approaches (Guatri and Bini, 2009) are progressively emphasizing the income component rather than the net assets component (OIV, 2015).

6. Conclusions and Recommendations

Based on the considerations presented in this paper, the first question we should address is whether *ad hoc* methods or standards for the valuation of SMEs are actually needed. The different sources of literature have discussed how to apply the valuation methods to SMEs, and sometimes determined adjustments to be used in the application of the original models but have proposed very few separate methods. Professional bodies have identified specific criteria within the standard models. The creation of different sets of valuation would likely damage the value of the valuation. It would probably result in the creation of two different categories with diverse levels of approach, which would appear quite an anomaly from a professional perspective.

Additionally, standards and best practices are usually recognized at a local level, either formally or informally. Each departure from the used approaches could create more difficulties than benefits. Academia often proposed, as mentioned above, appropriate deviations from the original models. Nevertheless, the proposals may sometimes bring to more relevant solutions from a purely theoretical point of view, which are however less feasible in practical terms.

The valuation of SMEs does not need *ad hoc* standards. Technical standards are often principle-based. In this case, standard setters, professional bodies and/or practitioners should aim to orient the standards in order to find practical solutions that ensure the appli-

cation of best practices to the SMEs environment, as it has already happened.

The adaptation should allow to determine a scalable application, especially when the process is driven by public companies' experience. The "scalable approach" is already known, for instance, in the audit context, where practitioners and auditors have debated over the last years how the International Standards on Auditing should be applied to SMEs.

An adaptation of standards to the reality of SMEs and SMPs does not alter the rigour of a model but allows to apply the technical requirements in the circumstances of SMEs, which present -as observed in this paper- peculiarities and specific considerations.

It is evident that practitioners should always take into consideration the entity's specific characteristic to re-produce the required value firm. In conclusion, it is always the practitioner's task to "weigh up" the peculiarities of an SME. For instance, a non-large private company may have comparable entities in regulated markets. In this specific context, the market approach would be applicable. If a public company is an *unicum* in the market, the comparable valuation method is not applicable. To this purpose, the comprehension of the context is crucial to determine the value of an enterprise, irrespective of its size; and this approach is likely to be even more important in the valuation of smaller enterprises.

Lastly, it is important that SMEs are not considered as a marginal sector, as they are the crucial engine of local economies and their appropriate valuation needs to create an effective market where valuations play a significant role.

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