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The Determinants of SMEs Capital Structure: Overcoming Supply Constraints

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Abstract

This paper studies the most relevant literature on firms' capital structure, in general, and Small and Medium Enterprises, in particular. Evidencing that SMEs' financing needs to evolve with their age, literature notes that failures in this market stem generally from a shortage in capital supply and from the extreme degree of opacity which characterizes young and small corporations. The forthcoming Basel III regulations will strengthen the future banking environment but probably affect even more financing to small businesses. Given that the imperfections of this market are not only present in periods of economic turmoils but also on a structural basis, finding ways to enhance SMEs' transparency, and designing instrument to reduce dependence from bank credit, should be a priority for future actions undertaken by practitioners and regulators. Following the effective examples of the Indian SMEs Rating Agency, of the Korean corporate bonds market and of the growing phenomenon of crowdfunding, this work analyzes their pros and cons as well as their potential to become worldwide industry standards.

1. Introduction

Small and Medium Enterprises (SMEs) can be seen as those corporations too small to obtain access to traditional banking channels but too big to access microfinance. Traditional theories have described these companies' financing choices as a function of costs and benefits connected to each source of capital, as well as in relation to their age and maturity. However, due to their high informational opacity, SMEs may encounter severe difficulties in signaling the quality of their businesses. Several instruments have been designed to overcome these difficulties, but especially during economic turmoils, even those tools might lead to sub-optimal financing equilibria if the supply side of the channel is blocked. The short-term impact of a credit crunch highly reduces the effectiveness of traditional SMEs financing channels, leaving those companies with an insufficient spectrum of funding opportunities. Up-to-date frameworks, while recognizing the relevance of these issues, still have not agreed on which concrete tools can be designed to help SMEs overcome the impasse.

This work will start by examining the Demand side of the framework, trying to understand how the focus of classic theories, namely the Pecking Order Theory, the Trade-Off Model and the Market Timing Theory has shifted during the last years. Up to today, these theories have received mixed empirical evidence, and most of firms' financing criteria remain still unexplained. Secondly, I will study in detail how SMEs define their capital structure. The most relevant theoretical contributions evidence that small businesses' financing evolves with their age and with the reduction of their informational opacity. In practice, SMEs tend to rely mostly on private capital contributions, and seldom access capital markets due to the lack of verifiable data about their quality. However, several are the instruments practitioners have identified

to increase the ability of SMEs to establish financing relations: among them, the use of personal guarantees as collateral, the definition of appropriate covenants and maturities and the creation of personal relations with capital lenders seem to be the most widely used. Then, with a solid theoretical background, the attention will move to the Supply side of financing, to investigate the role intermediaries, and lenders in general, have in periods of credit tightening. Furthermore, I will study why, in Europe, the provisions of Basel II have not worked and how Basel III will deploy its impact in the years to come. The biggest impact of the forthcoming regulations will likely be deployed over small financing institutions and, consequently, on SMEs. In Europe, the creation of a Small Business Act posed the ground for the definition of less burdensome regulatory requirements for SMEs. To understand if the capital structure landscape will change in the future in the light of the new legislations, the last section of this study investigates whether there is room for the adoption of new financial instruments to serve SMEs' needs, and what could be effective ways to increase their informational transparency. Creating a Rating Agency dedicated to SMEs, and requiring each small corporation to obtain a credit rating may be the key to reduce SMEs' opacity and to pave the way for their entrance in the corporate bond market, today practically inaccessible. The development of SMEs' dedicated stock markets, and the diffusion of the instrument of crowdfunding, may add extra steps in the classical small businesses' financing cycle.

2. Traditional capital structure frameworks

In this section I will briefly present the most widely accepted theories of capital structure, emphasizing on their indications for SMEs' financing. According to the original specification of Jensen and Meckling (1976), the *Trade-Off Model* predicts

that firms' capital structure is defined by a trade-off between debt's benefits and costs. The "tax-bankruptcy trade-off" approach links the benefits of interests' tax deductibility with the costs of bankruptcy, whereas the "agency" perspective describes extra debt as a tool to control managers' behavior given the threat of bankruptcy if debt is not repaid. The *Pecking Order Theory*, as described by Myers and Majluf (1984), states that the first financial decision to be made by a corporation concerns its ability to support business with cash flows generated from internal activities. Should the firm not find enough retained funds to finance positive NVP projects, the recourse to external funding may become necessary, in the forms of debt and equity. At last, the *Market Timing Theory* observes that managers will use those financial tools that appear to be more favorable in the moment they need financing: they will issue equity following a general stock price increase, and look for debt financing when interest rates are low. Firms may raise funds even if unnecessary, if conditions appear extremely favorable, as well as defer financing if none of the markets appears attractive.

These theoretical works have so far received mixed theoretical evidence. For example, in their comprehensive work, Frank and Goyal (2009) study the impact of a series of factors that previous theoretical literature deemed critical in the understanding of firms' capital structure. They find that those firms which i) belong to an industry in which the median firms displays a high leverage, ii) have lower market-to-book ratio, iii) have more tangible assets, iv) have lower profitability, v) are large and vi) compete in a high-inflation environment, tend to display a higher leverage. Five out of these six factors behave as predicted by the static trade-off theory; the behavior of profits, instead, is consistent only with dynamic trade-off

models in which leverage is left free to move and adjusted only if it goes over a certain threshold. On the other hand, even though the pecking order theory succeeds in predicting correctly the effects of profits, it does not manage to explain many firms' financing decisions. Market timing theory, at last, is too little developed to be considered a reliable predictor of firm's behavior. For the interest of this work, what classical theories predict is that the smaller and the less tangible a firm is, the lower the degree of indebtedness one should expect to see. Graham and Leary (2011) strongly believe that none of the extant theories has ever been able to explain thoroughly the observable heterogeneities in firms' financing decisions. Even though the most recent literature used other criteria to explain traditional theories' failure (refined fundamental variables' measurement, higher consideration for non-financial stakeholders, more prominent role to capital supply and financial contracting), it is widely agreed that that it may be too costly to frequently optimize capital structure, thus not allowing for the observation of significant shifts in financing decisions.

3. SMEs financing

Among the unanswered questions in literature, this work attempts to shed more light to the supply side of financing and to financial contracting as drivers of SMEs' financing decisions. Up-to-date studies only explained a portion of firms' financing behaviors. SMEs represent the bulk of developed economies, both in terms of employment and turnover. Due to their characteristics, they are also the most exposed entities to economic fluctuations. To survive the effects of financial turmoils, they shall build a scrupulous knowledge of their financing opportunities. A large enough portfolio of alternative tools would allow them to finance their activities by molding their liability side regardless of supply shortages.

3.1 Sources of Small Business Finance

The fundamental characteristic of small firms in the eyes of financing markets is their high degree of informational opacity. The contracts they stipulate are usually kept private. They seldom access public markets. And most of them do not keep “standard” financial statements. Absent easily accessible data, financial intermediaries find it often impossible to exercise their usual *screening* and *monitoring* functions. If intermediaries mainly collect information about customers, evaluate their quality, tailor contracts to their characteristics and assess ex-post compliance to contractual terms, SMEs may encounter difficulties in signaling their quality and hence to build financing relationships due to their lack of transparency.

The most prominent theoretical work in SMEs literature, written by Berger and Udell in 1998, points out that SMEs financing decisions depend mainly on their sector of activity and growth cycle. SMEs have financing needs and preferences that evolve as the firm grows and becomes more transparent. For the majority of small businesses, different capital structures may be optimal at a certain stage of the cycle, but less effective in others. Most small businesses have their financing needs guaranteed by personal finances of the owners or by other “insiders”. The first projects of a young startup will likely be financed by a mix of *insider finance* and *angel financing*: with the former the authors refer to equity funding provided by the funders or by their families or friends; instead, “angels” are usually defined as wealthy individuals that, in an informal manner, invest huge amount of money in exchange of a part of the company’s stock. At this point, the business idea may still be at an embryonic stage, and the company’s assets mainly intangible. Later on, as a business plan is developed and the product tested, intermediated forms of equity financing take over to expand

the company's scale, mainly in the form of *private equity* and *venture capital*; in the meanwhile, the firm will also heavily rely on *trade credit*, i.e. delays of payments, in the settlement of deals with suppliers. In addition to private equity, SMEs external funding is provided by private debt suppliers, rather than by public markets. As the firm grows, SMEs become more tangible and increase their ability to pledge their possessions as collateral, so eventually manage to access financial institutions' funds. The biggest part of the external debt financing is provided through lines of credit and short-term loans; life-insurance companies, mezzanine debt funds, credit cards, leasing and factoring companies share the remaining (Berger and Udell, 1998; Ayadi, 2005). Nevertheless, previous theoretical and empirical works have demonstrated that the amount of external debt financing is much more relevant for small firms than it could be expected under the "tangibility" hypothesis¹. Indeed, in the moment entrepreneurs use their personal belongings to guarantee firm's loans, part of "external" financing becomes somehow "internal", and personal relationships between local bank branches and individual entrepreneurs become more valuable than physical collateral. Thus, if external financing may even be anticipated to the firms' earliest stages, the "growth cycle" paradigm may be seen a simplifying assumption of SMEs. Moreover, the fact that growing small firms tend to obtain external equity before external debt seems to be evidence against the traditional Pecking Order Theory. Berger and Udell (2003) point at the existence of a significant moral hazard problem for small firms as a plausible reason for this fact – external debt suppliers will never finance small entrepreneurs unless risk can be shared among several individuals (i.e. several equity owners).

¹ See for example Berger and Udell (1998) for a theoretical framework and Graham and Leary (2011) for empirical findings.

In absence of tools to increase SMEs transparency, banks cannot trust their alleged quality and may be obliged to increase the cost to obtain financing. However, small firms and financial intermediaries do have a series of instruments to reduce the informational opacity problem². As verified empirically by Berger and Udell (2003), these include, in detail: a) the use of tangible *collateral* and *personal guarantees*, given that a financial intermediary can better assess the value of the pledged asset rather than of the whole firm on a continuous basis³; b) the application of strict *debt covenants* and shorter *maturities* on contracts for younger and riskier firms; c) the use of *loan commitments (i.e. lines of credit)* to cover short-term needs and be activated over time, unless the firm demonstrates a severe and identifiable financial deterioration, or if found in breach of covenants; d) the refinement of day-by-day contact between borrower and supplier (*relationship lending*) to create a wide database of soft and hard data about the entrepreneur, the business and the environment in which it operates. All these instruments surely represent useful approaches to sustain financing relationships, but might eventually become unfeasible (or even counterproductive) if the firm has no tangible assets not pledge as collateral, if the contracts are designed too strictly or if a single banking relationship leads to exploitation or if the institution has supply shortages.

3.2 Constraints to SMEs bank financing

The phenomenon of SMEs being subject to financial constraints is at the core of the most up-to-date literature. Several surveys on small enterprises⁴ confirm the

² As already highlighted in the first part of this work, these same tools, belonging to the category of financial contracting instruments, have been identified by Graham and Leary (2011) as reasons for the failure of classical capital structure frameworks in explaining firms' financing heterogeneity

³ See Berger and Udell (1998).

⁴ See European Central Bank (2007).

perceived existence of constraints as one of the biggest issues small businesses face in their activity. In perfect capital markets, investment decisions should not depend on funds' availability, but rather on the quality of the projects to be financed. Instead, what happens in reality is that, even without business-related reasons, many small firms face disproportionate costs of borrowing (in terms of fees and interest rates) which cut them off from the external debt financing channel.

The ability and willingness of SMEs' lenders to supply debt financing, as noted, is mostly affected by small firms' informational opacity. Academics have identified several factors influencing the supply of credit to small businesses; among them, as described by Hackbarth et al. (2006), the most relevant factor is represented by the impact of *Macroeconomic Factors*. According to them, macroeconomic conditions have a strong impact on credit risk, on firms' financing decisions and on optimal leverage. Their model predicts that enterprises should restrain from adjusting their capital structure during recessions, but do it rapidly during booms, to benefit from more accommodating economic conditions. SMEs, however, have limited ability to modify their capital structure at will, but rather depend on suppliers' ability to provide them with capital.

The transmission mechanism of monetary policy, which is triggered in reaction to any economic shock, operates to a large extent through the banking channel⁵. If so, macroeconomic events either reduce banks' reserves and thus the supply of credit ("bank lending view"), or reduce the value of assets to be pledged as collateral through higher interest rates ("balance sheet view"). Real and financial shocks, as well as changes in the governmental or regulatory frameworks, are likely to wield

⁵ See Gertler and Gilchrist (1991) and Dolignon and Rogers (2010).

their strongest impact over small firms, the most vulnerable actors in the business environment. As a response to worsening macroeconomic conditions, distressed banks attempt to reduce their risk exposure by drastically cutting their supply of credit to small firms, relatively riskier than bigger enterprises, with the aim of rebuilding their balance sheets and comply to regulatory provisions.

The process of adjusting towards the stringent Basel III requirements, and the combined deterioration of governments' financial positions⁶, are posing a heavy burden on the banking sector and on the functioning of traditional financing channels. The credit crunch of the early 90s in Asia and the US led to similar problems for SMEs that previous regulation did not manage to solve. The next chapter of this work will illustrate the evolution of the most important rules on capital requirements, verifying also empirically the extent to which the recent credit crunch and regulatory changes affected SMEs access to financing.

4. Factors affecting the supply side of capital structure

The classic capital structure literature assumes that firms, absent supply constraints, can borrow as much debt as they will, setting their desired leverage ratio, as long as their debt capacities have not been met. Whenever the net benefit of raising debt increases (higher tax shield, lower financial distress costs), firms act regardless of supply conditions and access the debt channel. Demand seems to be the only variable influencing changes in firms' capital structure. Nevertheless, whenever a financial turmoil imposes constraints over the ability of financial intermediaries to lend resources to companies, the supply side of financing gains a fundamental role. As described by Faulkender and Petersen (2005), if a firm's bank suffers an external

⁶ See ECB Bank Lending Survey (2012).

shock to its capital, independent from demand, this shock is likely to reverse its effects also on the financing firm. SMEs tend to establish a direct connection with a single banking entity, usually on a territorial or reputational basis, and cannot easily move to private to public debt markets because of informational opacity. Hence, a shock to the banking system will have an even more severe impact on their financing than a shock on the public bond market. Even though SME banking is considered one of the sectors with the highest growth perspectives⁷, there are some external constraints hampering the willingness of banks to access this market. Financial crises, and their consequences, represent the most relevant factor to consider.

4.1 The impact of regulation

The recent global financial turmoil wiped off the value of banks' balance sheets and caused the liquidation or nationalization of many credit institutions. Those that survived, bogged down by flat growth perspectives, did so at the expense of severe post-crisis distress due to weakened capital, reduced investor confidence and tougher rules on capital requirements. All these reasons on one hand hampered banks' capacity (and willingness) to lend money to businesses, especially to smaller and riskier corporations, and on the other hand increased their operational costs in the process of restoring confidence and complying with the new stringent provisions of Basel III. Through the traditional channels, firms ended up paying more-for-less given that, to counterbalance their constraints, banks raised lending interest rates and fees, and reduced the supply of capital. Financing a firm signals to the market that the company has solid financial perspectives, and that there is a high probability that it will honor the debt. When banks step back and stop supplying credit, there is less

⁷ See IFC (2010), *The SME Banking Knowledge Guide*, for a thorough analysis of the topic.

information in the market and this leads to higher costs for borrowers. The interesting question is to study how this phenomenon affects firms' financing choices, and to what extent it depends on regulatory changes.

4.2 The road to Basel III

By raising capital requirements for banking institutions, the new regulatory framework aims at strengthening the financial stability of the economy and at restoring the confidence of all economic actors. It is likely that, at least in the short-term, the new stringent requirement will mostly affect the smallest financial institutions, whose business is strictly bound to small and medium enterprises. However, the analysis of the provisions of the new Basel Capital Accord requires some considerations on its predecessors, Basel I and II, whose shortcomings prompted the definition of the new criteria, which are more stringent than before.

Developed by the Basel Committee on Banking Supervision in 1992, the rules of Basel I were designed with the objective of requiring banks to keep sufficient capital to absorb eventual losses without causing systemic problems and, furthermore, to create global regulatory standards. Basel II, released in 2004, dealt with a wide array of regulatory and supervisory issues that its forerunner left unresolved, including accounting standards, liquidity requirements and risk management criteria. Its main principle, the "first pillar", defined a minimum "regulatory capital" to buffer unexpected losses with a complex system of asset risk weighting⁸. The second pillar aimed at stimulating banks to refine their risk-management techniques under a strict supervision of national authorities. The last pillar required banks to disclose all

⁸The three main sources of risk that are identified are credit risk, operational risk and market risk. Banks can choose between a fixed-weights simplified approach (for smaller institutions), the "standardized approach" (risk weights based on external rating assessments) or the "Internal Rating Based" approach (rating produced internally).

relevant information that the market may consider necessary to evaluate banks' activities and risk profiles, quantitatively and qualitatively. The aim of these rules was to help banks absorb unexpected losses such as those that normally occur during a financial crisis. The recent financial turmoil, however, evidenced that the Basel II accord was still characterized by severe drawbacks which hampered its functioning. Among the most important shortcomings, academics and institutions⁹ underlined that: A) Quantitatively, the capital requirements were inadequate (i.e. too low) to tolerate the huge losses incurred during the toughest crisis since the Great Depression; qualitatively, they were not clearly defined (unclear and inconsistent definitions). B) Risk-weighting formulas used excessive simplifying hypotheses; C) Too much freedom was left on assets' risk-weighting, fundamental to the assessment of counterparty risk; rating agencies proved to be too exposed to potential conflicts of interest (reducing the reliability of their evaluations); D) Capital requirements were clearly pro-cyclical, overestimating risks in bad periods and underestimated them in good times; E) Incentives to securitization, which was misused to remove assets from balance sheet to reduce risk-weighting, allowed banks to bypass the rules and reduce their capital requirements, rather than to enhance liquidity.

4.3 The New Basel accord

The new Basel III rules aim at resolving the previously cited drawbacks, mainly by raising capital requirement ratios and by designing instruments to contrast the pro-cyclicality of Basel II provisions. According to Blundell-Wignall and Atkinson (2010), four are the targets that the new rules aim at reaching: 1) *Raising the quality, consistency and transparency of the capital base* by reforming the criteria for the

⁹ See Blundell-Wignall, A. and Atkinson, P. (2010) for a comprehensive review.

definition of capital requirements; 2) *Enhancing risk coverage*, trying to capture both on- and off-balance sheet risks, to remove pro-cyclicality connected to volatility-based risk inputs, to penalize increased counterparty risk and to promote “good” risk taking; 3) *Introducing a target leverage ratio*, with the intention to avoid excessive leverage and subsequent excessive deleverage in crisis situations; 4) *Attenuating the cyclicity of capital requirements* by using forward-looking metrics (stressing expected losses rather than incurred) and by promoting the accumulation of extra “capital buffers” over those requested by law.

In this context, indeed very interesting and potentially effective seems to be the creation of capital buffers to be accumulated in periods of distress and to be accessed should banks’ capital ratios fall below a given threshold. In addition to that, as regards point 2), the new rules increase the risk-weighting attached to off-balance sheet items to counteract the phenomenon according to which banks, under Basel II, used securitization as a tool to reduce the burden of capital requirements.

Nevertheless, the same authors underline that several problems that had been spotted with previous legislations still have not been solved. Namely, little attention (if none) seems to have been given to asset concentration in portfolios (risk weights are still linear to facilitate simplicity) and to alternative risk factors (the model still uses a single global credit risk factor). Moreover, the imposition of a leverage ratio will not stop the phenomenon under which banks, by shifting “promises” to entities with alternative regulatory and tax treatments in the banking environment, elude the risk-weighting system and expand their leverage at will, as they did in the recent financial crisis. Should these issues not be faced in the near future, establishing criteria to penalize this regulatory arbitrage, banks will keep tending towards lower weighted

assets and to transfer “promises” outside the banking system, creating the basis for new bubbles and crises. However, the implementation timeline for the new rules is voluntarily loose, to avoid posing excessive weight on an economic environment that is slowly recovering from the 2007 crisis. The application of the new rules will start in January 2013, and banks will have until 2019 to fine-tune their balance sheets to the stricter requirements. However, at least in the short-term, the most leveraged and small banks, thus the ones with lower capital ratios, may be forced to reduce their lending activity, which is likely to worsen financing conditions for startups and SMEs. Due to their size and scarce resources, in relation to bigger companies, SMEs are those that suffer the most from the costs of stricter regulations.

4.4 The Small Business Act

In this context, potentially disruptive for smaller companies, the European Commission recently developed further measures aimed at facilitating SME’s access to capital markets. Recognizing the prominent role of SMEs in the European economic environment, regulators and Member States defined in the so-called “Small Business Act” a comprehensive policy framework to serve as guideline for National and Community rules, with the objective of stimulating growth, job creation and financial stability. Among its several sections, this piece of regulation gives interesting insights also in the area of financial structure, guiding future regulatory changes towards the simplification and facilitation of mechanisms to access capital. With the support of Member States, the Commission created an environment through which European SMEs will 1) benefit from strengthened loan guarantee schemes; 2) have easier access to EU funds; 3) increase their informational transparency and 4) enjoy a higher intellectual property protection. Each State will work to speed up its

internal bureaucratic procedures, reducing the steps required to access EU funds and facilitating the dialogue between firms and authorities. In particular, whenever a new rule might be able to pose a disproportionate burden on SMEs' ability to obtain financing, each company may require to: i) be exempted from certain obligations; ii) temporarily reduce tax payments or fees; iii) receive direct financial aid to cover high fixed costs; iv) benefit from simplified reporting obligations. Even though the impact of the new stringent capital requirements is likely to wield its strongest effect on small firms' financing ability, there seems to exist some legislative margin (at least in Europe) to design flexible measures aimed at sustaining SMEs financial survival.

4.5 Current lending situation

The most recent ECB Bank Lending Survey (BLS), reporting the situation at the 1st of February of 2012, indicates that most of European banks are currently in an ongoing process of capital reinforcement, as a response to the imminent introduction of the widely analyzed Basel III capital requirements. Surveyed banks pointed at the weak European economic outlook and the sovereign debt crisis as the main reasons for the net tightening of credit standards; in particular, short- and long-term loans to SMEs decreased by 28% in the last quarter of 2011, following a deteriorating trend that lasted all over 2011. As a result, on average banks increased margins on loans, increased fees, increased collateral requirements and reduced the size of their loans. Even though it is projected for 2012 that this process will likely affect more large than small corporations, the picture for SMEs is definitely rough.

5. Enhancing SMEs liquidity

Studying ways to foster SMEs' access to funding implies accepting that either current instruments are not qualitatively and quantitatively sufficient, or that, if

existent, they are not adequate to help small firms overcome their financing constraints. If the traditional framework, according to which SMEs financing needs evolve according to their age and growth cycle, seems to hold in “normal conditions”, empirical evidence (in terms of high failure rate of SMEs during periods of crisis) seems to confirm there exists a gap which can be filled by the introduction of a set of new tools. This financing gap can be closed if both governments and private institutions, in accordance with extant legislations, design specific actions and systems to be deployed, in a joint effort, to enhance SMEs’ market liquidity¹⁰.

The most compelling challenge for regulators and governments is definitely to increase the transparency of small businesses. Lowering SMEs’ informational opacity would be the key to enhance financial institutions’ ability to scrutinize them and establish lending relationships. A comprehensive assessment of extant proposals for alternative financing opportunities seems to be absent in up-to date theoretical works; the following paragraphs, stemming from the analysis of isolated best-practices, will value their potential of adoption on a more widespread basis.

5.1 Rating for SMEs

Faulkender and Petersen (2005) verified empirically that firms with a higher tangibility have a higher chance to obtain a credit rating. Those firms, usually mature, stable and with a wide track record, will have easier access to public debt markets and, thus, will be able to reach a higher degree of indebtedness. Whenever markets are characterized by severe financing shortages, having the possibility to choose among several sources of capital is of the utmost importance.

¹⁰ See IFC (2010).

Obtaining a credit rating is usually considered a too expensive and burdensome practice for a SME to be undertaken. However, given the notorious problems they face when raising funds, approaching a rating agency may be represent a viable solution even for small businesses. Surprisingly, nowadays an example of a well-functioning rating system for SMEs can be found only in India. There, a restricted number of agencies¹¹ built over time relationships with local banks in order to offer significantly lower interest rates on loans to their rated clients. Those institutions fulfill the typical tasks of a rating agency but in a SMEs' environment, assessing the stability, health and riskiness of a firm in order to evaluate its ability to honor future financial obligations. The key aspect of their evaluation method, and which differentiates it to the common approach used for large corporations, lies in the fact that they use a *turnover-based* fee structure (fees are proportional to the size of the business), and that each firm is evaluated *relatively* to a group of similar-sized companies. While the latter does not represent alone such a breakthrough feature, the combination with the former creates a rating process which does not weigh excessively on the firm's finances (being it proportioned to the dimension of the business), and that fairly evaluates each firm according to the characteristics of the sector it belongs to. Moreover, given that these ratings remain valid just for a year and can be easily renewed upon the payment of an appropriate fee, those SMEs willing to access public markets will have their creditworthiness frequently checked, further strengthening personal relationships and triggering a mechanism to enhance public transparency. At last, it is worth to note that the Indian Government sponsors SMEs' rating by providing a one-time subsidy to cover all the process' expenses.

¹¹ Among all, CRISIL and SMERA are the most influential players. See www.crisil.com and www.smera.in for the details of their offers.

If a light evaluative system is set up to assess SMEs' creditworthiness, and if Governments step in to support the process, it is in the best interest of each small firm to obtain a credit rating. Such a system would not rely exclusively on scarce and often incomplete "hard" data. Instead, by combining an evaluation of one-year financial data and of "soft" data, this tool would help overcoming some of the problems identified with Basel II, still not fully solved by the upcoming reform. When sovereign debt crises increase attention over public spending, and with States struggling to provide financial aid to SMEs with their limited resources, such a system would help Governments nurture the small businesses environment in a direct and effective manner, employing public finances in a transparent way.

Ascertained the ability of this instrument to shed light on a firm's characteristics and to enhance its transparency, it is difficult to understand why a SMEs Rating Agency has never been established neither in Europe nor in the US. In the context of reaching an always better assessment of SMEs' credit risk, as promised by Basel III, the creation of such an institution would definitely represent an effective complement to the traditional approaches. The creation of a database of SMEs ratings would spread information in today's scattered SMEs market, broadening the chance of finding potential investors. There is room for further discussion in the future: a proposal of reform of the forthcoming regulatory framework may define SMEs' rating as the fundamental tool to ease information asymmetries afflicting SMEs' funding.

5.2 SMEs Corporate Bonds and the role of Securitization

In the sector of debt financing, it is universally recognized that SMEs tend to rely excessively on bank loans and that one of the main reasons of small businesses' failures lies in the absence of loans availability during crises. Even though many

have been the attempts to reduce the dependence from bank intermediation in favor a more complete access to capital markets, the high riskiness and informational opacity of SMEs appear as difficult obstacles to overcome. In addition to that, due to the high fixed costs connected to the issuance of public bonds, as well as to the minimum size required for the offer to be marketable, SMEs have always been considered unsuitable to access this market. The issuance of SMEs' bonds would be labeled as "junk" and appear today, in the light of the recent scandals, highly unattractive to the public of investors. Given that Basel III requirements will increase the burden for banks financing risky SMEs, a well designed access to the bond market appears as a potential way out. Unlike bank loans, which create a binding relationship with a single financing entity, corporate bonds allow firms to raise money from a differentiated multitude of investors. If most of those investors are generally represented by wealthy individuals, small businesses would even find in *angels* the natural recipients of a bond offer, but could also call on the generalized community of non-sophisticated investors willing to diversify their portfolios.

As reported by Park et al. (2008), the Korean Government designed an instrument which contributed to the strong development of the local SMEs environment during the last decade, as a response to the crisis that hit the Asian market in the 90s. The Primary Collateralized Bond Obligation (P-CBO) program, which started in 1999, used the instrument of securitization to eliminate liquidity constraints in small businesses financing. Being asset-backed securities, P-CBOs are bonds sold by a Special Purpose Vehicle and whose underlying assets are represented by a pool of SMEs' corporate bonds. Those securities are "elaborated" by the intervention of external "credit enhancers" (banks, insurance companies, credit guarantee funds) and

evaluated by an external rating agency, and usually sold in different tranches with different quality. Omitting the details of the product, it is worth to underline that in the way it is designed, a P-CBO manages to pool together a wide variety of SMEs' bonds, characterized by different riskiness, and therefore reduces the aggregate risk of default. If a single company has a too high credit risk, a pool of different SMEs diversifies away most of idiosyncratic risk and may eventually become an attractive and remunerative investment in an investor's portfolio.

The reliability of rating agencies, which have the fundamental role of certifying the quality of the issuance, has reduced drastically during the recent financial crisis. Also in this context, a dedicated SMEs Rating Agency may represent the correct lever to re-introduce a securitized instrument in the market. The financial support of Governments (in the payment of part, or the totality, of fixed expenses and origination fees in periods of financial distress) may stimulate the development of the instrument by reassuring investors on its quality. Governments may even directly purchase P-CBOs, as a means of subsidizing at once a pool of diverse SMEs.

Anyhow, as reported by the European Investment Fund (2011), the securitization market for European SMEs, after years of strong development, has almost disappeared as a result of the recent financial crisis. Most of the traditional structured product were normally present in this market, but the fact that they practically disappeared after the crisis implies that none of them was actually able to support SMEs' funding in the moment they needed it most. This market will regain volume, and become again a useful tool to support SMEs financing needs, only if investors rebuild their confidence in the instrument itself and in the safety of the market, and if their position is supported by the existence of a sufficiently liquid secondary market.

This process will take time, but in this direction goes the effort of global institutions to establish a clear and reliable regulatory framework, in the attempt of increasing the stability and transparency of structured finance operations. In the proposals of Basel III, the provisions of a mandatory additional disclosure of information, of an ongoing rigorous assessment of each market member's position, and of the creation of unified databases are clear steps towards the recreation of a solid ground for financial operations. Creating a European SMEs Rating Agency, as well as introducing a product similar to the Korean P-CBOs, would help injecting new lifeblood in the struggling SMEs debt market.

5.3 Equity and Crowdfunding

As reported by a recent study by Caccavaio, Carmassi, Di Giorgio and Spallone (2012), only 7% of European SMEs accessed equity financing in 2011, and the smallest percentages are reported in those countries where small businesses are more present (as Spain, Italy and Portugal). Listing on a stock market is one of the solutions identified by literature to raise small firms' transparency and visibility in the market. Regulators responded with the creation of ad-hoc stock markets, reducing the high fixed costs and strict listing requirements which always kept SMEs away from going public. Still, except for those countries historically characterized by a strong presence of institutional investors (US and UK), SMEs listing has not yet gained consensus among small entrepreneurs.

The objective of any regulatory change or creation of new instruments is eventually to expand the public of potential investors in small businesses. There is currently a big debate in the US, among practitioners and regulators, about the opportunity of institutionalizing *crowdfunding* as a means for SMEs to raise equity capital. In a

period in which banks reduced capital supply to SMEs, crowd-lending from non-bank institutions globally gained increasing attention. Up to today, this tool has been used mainly in the form of donations or, at the most, of debt. In the EU, instead, it is possible to find a few examples (UK above all) of equity crowdfunding. In April 2012, the US Congress approved the so-called “JOBS Act”, which reduces the regulatory burden for SMEs in the process of obtaining financing. According to this Act, each individual may participate in public capital placements on registered online “funding portals”, avoiding the rigid requirements on public offerings imposed by the SEC. If the concepts underlined by this legislation are exported in other regulatory environments, this simple and direct instrument, which uses internet as a common platform for individual investors to make arbitrary funding contributions to an entity in quest for capital, may soon play an important role in SMEs financing.

The benefits of crowdfunding are evident, as well as the drawbacks. At the expense of being obliged to reveal its innovative business idea, given that the platforms do not guarantee any scheme to protect intellectual property, each company can access a potentially immense crowd of investors. On the other hand, being forced to expose the business to the magnifying glass of the public of investors gives small firms a great tool to reduce their informational opacity. These particular deserving ideas, which might not fit the requirements for traditional financing, are then allowed to receive capital directly from future potential customers, which may act as catalyzers to bring in new investors. The creation of firm advocates may use word of mouth and social media to help the company grow and gain its place in the market. Critics say that single investors may be exposed to inadequate investments to their risk profile and knowledge, and that frauds are just behind the corner. While this may be true,

well-regulated platforms, with third-party evaluations and a system of quality feedbacks, would guarantee the safety of the operation. Then, the market would eliminate bad ideas, and support the good ones. In the framework of Berger and Udell (1998), this instrument may fit perfectly as complement to angel financing in the early stages of a SME's growth cycle. Given that few are those "philanthropists" willing to invest huge amounts of money in small businesses, crowdfunding may represent the future for spurring public equity investments in SMEs.

6. Conclusion

According to a study by the European Commission published in 2007, the share of SMEs in national economies is higher in Spain, Italy, Greece and Portugal than in the rest of Europe. While it would be an interesting research question to understand if the dominant presence of SMEs in an economy is somehow correlated with the causes of a crisis, it is worth to note that these are the countries where the current economic downturn is yielding its strongest effects. Finding ways to support SMEs may be the key to help national economies survive financial turmoils. This study, appreciating the developments in the regulatory settings proposed by the New Basel Accord, underlines that there is fertile ground for the creation of new instruments to fill the gap between SMEs financing needs and current capital supply shortages. Establishing a light rating for SMEs as a prerequisite for accessing public funding would dramatically reduce the high informational opacity afflicting those businesses. The development of a market for SMEs corporate bonds, as well as the creation of safe on-line crowdfunding platforms, could definitely widen the portfolio of instruments to access whenever bank loans, still the most widely financing tool used,

are not available. At last, Governments may have an important role in supporting SMEs by covering fixed expenses, especially in the hearth of a crisis.

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