International Journal of SME Development
Issue 02 | December 2016

A Theoretical Framework for Analysing the Growth and Sustainability of Small and Medium Enterprises (SMEs)

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Abstract

This paper analyses the socio-economic factors that play an important part in determining the size of firms and their relative efficiency. The primary purpose is to put together various strategic, theoretic, and empirical issues which constitute the building blocks for formulating an integrated theoretical framework to explain the case for SMEs and their roles and contributions in the process of national economic growth. The important conclusion reached is that the traditional theory of firms fails to take into account all the relevant forces which are of fundamental importance in determining the efficient size of firms in general and making an economic case for small firms in particular. As such, the "stylized firm" portrayed in the traditional theory remains far from the one that operates in the real world confronting various challenges and uncertainties. This gap between the firm in theory and the small firms of the real world is far wider. Hence, there is a need for developing an integrated economic theory of small firms and designing appropriate policies for supporting their growth and sustainability.

Key Words: Small and medium enterprises, traditional theory of firms, economies of scale, transaction costs, flexible specialization.

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The author is highly indebted to an unanimous referee for his valuable comments, but the usual disclaimer applies.

1.0 Introduction

The overwhelming presence of SMEs in the industrial landscape of economies of all types and sizes is a universal phenomenon. Their role and contributions in the process of economic growth and social progress is on record globally. Studies and researches galore to document them empirically. However, a coherent and integrated theoretical framework required to highlight their strengths and weaknesses precisely and elaborately is conspicuously missing. It is to fill this gap; the present exercise makes a modest attempt.

In contrast to the conventional wisdom of considering the existence of SMEs as a "transitory phenomenon", there is a case for developing a theoretical construct for the small enterprises, based on due considerations provided to the importance of external economies of scale, collective efficiencies, as well as issues of technical, productive, social, organizational and behavioral aspects of firms which, while being neglected in traditional theories, deserve attention for examining the case of small firms.[i] Most observers believe that SMEs are young and relatively fragile. They make a shoe-string, start as small units grow big or wither away due to facing insurmountable operational constraints. However, this stereotype image of the SMEs is neither the full picture nor universally true. Indeed, contrary to the misconceived perception of considering the SMEs as a "vanishing breed" liable to wither away with progress in industrial growth, they grow, survive and sustain as dynamic entities even in the citadels of the industrialized world.

SMEs die prematurely in numbers, especially those started as "distress-pushed" or "survival-driven" self-employment seeking units in the developing countries. But there are those which are "entrepreneur driven" typically seeking to exploit business opportunities perceived and capable of driving structural transformation of an economy through innovation, employment creation, and productivity increase. The process of economic transformation of the Taiwan Province of China is often cited as a classic example based on this viewpoint.

Another school of popular thought looks at the SMEs in a small vs large context, emphasizing on their certain relative merits (i.e. relatively high labour intensity) compared to their large counterparts. Such narrow perception ignores thereby many positive intrinsic virtues of SMEs which are specific to smallness per se. This line of argument often leads to meaningless debates as to their relative economic efficiencies which are outcomes of many important determinants other than the enterprise size alone. Contrary to these popular beliefs and naive approaches, the rational approach should be to identify the numerous merits and advantages of smallness such as agility and innovativeness, entrepreneurial drive, specialization, cutting-edge technology, market segmentation etc. which facilitate their growth, expansion, and sustainability by competing as well as complementing with their large-scale counterparts (i.e. working as sub-contractors and value-chain system partners). Unfortunately, these issues are mostly ignored in the traditional theories of firms, which consist of economic theories that explain and predict the nature of firms, companies or corporations including their existence, behavior, structure, and relationships to the markets.

In tandem with the resurgence of SMEs as vehicles of entrepreneurship and leading source of new job creation, and also sources of innovation, competitive power and economic growth since 1970s in the U.S. and in the OECD countries in the 1980s and beyond, there has been a significant shift in the consensus towards the superiority of SME-led entrepreneurial economy to that of the large enterprises-led, old managed economy (Audretsch and Thurik (2001)[ii]. As such, there has arisen the need for focusing the increasingly growing role played by the SMEs in the local, national and global dynamic competition process and dismantling the belief that SMEs are a transitional phenomenon unworthy of receiving attention of economic theory.

Given this background, the present paper attempts to analyse the concepts, tools, theoretic issues and empirical evidence relevant to develop a theoretical framework for analysing the growth and development of SMEs and their contributions to the process of economic growth. As to the data and methodology, the paper is based on an extensive review of the existing theoretical and empirical works. Thus, it is a review article expected to benefit the students, researches and other readers interested in the subject.

The paper is structured as follows. The introductory section is followed by a review of literature which unfolds the historical process of evolution of the SMEs to a position of prominence in the development literature as an important subject of research, analysis, and of policy significance. It has revealed how and why SMEs emerged as instruments of commendable significance in creating jobs, promoting entrepreneurship, innovation and dynamism, challenging the traditional 'Fordist' approach to industrialization and economic growth after 1970s. In section three, the primary focus of analysis is to explore how the SMEs fit into an economy and contribute to the process of economic growth. The economic, technical, organizational, behavioral and other factors facilitating growth, expansion, and developmental roles of the SMEs are critically discussed and elaborated in this section. Section four highlights the core inner strengths of SMEs from the demand/market side perspectives which enable them to grow, exist and prosper as indispensable components of the national economic systems

and perform relatively better than the large-scale enterprises. This reinforces the case for developing a new theoretical framework for analyzing the role, functions, and contributions of the SMEs as independent economic units. The contents of these two sections constitute the building blocks based on which the basic foundation of an integrated economic theory can be established to make the economic case for SMEs.

2.0 Rise of SMEs into Prominence in the Academic Research and Studies and Policy Making Circles

The ascendancy of the SMEs in the world of serious academic research and studies, policy making circles, and international donors' club as potential candidates deserving promotional policy support was not smooth. On the contrary, it had evolved through periods of ups and downs. The most difficult periods were the late 1950s and early 1960s when the SMEs were almost written off from the rapidly growing development literature as marginal economic entities. A. P. Julien writing in 1998 noted that only a few isolated researchers took interest, albeit a marginal one, in small businesses. Though small business researchers became more numerous after 1960s, their works were being viewed either as eccentric or at best as spending time on something not worth the effort.[iii] Supporting a similar notion, Loveman and Sengenberger (1991) noted that the idea that small and medium enterprises might be regarded as the key to economic regeneration, and a road to renewed growth of employment and the fight against mass unemployment, may have seemed eccentric or even absurd. As noted by Thurik and Wennekers (2004), during the post-war years, SMEs mattered, but increasingly less on grounds of economic efficiency and more for social and political purposes. This is also the time when renowned scholars such as Schumpeter (1942) and Galbraith (1967) convinced the economists, intellectuals and policy makers of the post-war era that the future was in the hands of large corporations and that small businesses would fade away as the victims of their own inefficiencies. It is only since the last two decades that the SMEs are being treated as the key to economic regeneration and the road to renewed growth of employment and the fight against mass unemployment and poverty and hence of social and political stability.

A gradual but a steady shift from the invincibility of large-scale businesses as the vehicles of industrialization, towards the potential important roles of SMEs as instruments for creating new jobs, promoting entrepreneurial economy, innovation and being a competitive power since 1970s and beyond, dethroned the Fordist approach to mass production. The pervasiveness of large-scale enterprises as vehicles of modern industrialization was seriously shaken by an economic downturn which had hit the market economies of Western Europe and the USA. There were spectacular examples of large enterprises running into economic difficulties and shedding employment, which has occurred in nearly all countries. The dominant figures of large-scale modern industrialization based on mass production, market expansion, Keynesian-type demand management policies and Taylorist type work organization is built on an extensive division of labour met with unexpected setbacks and has failed to deliver the desired benefits, particularly in terms of spurring high growth, employment generation, and broad-based socio-economic development, Brich David (1979) documented the vulnerability of large-scale enterprises to the economic turbulence of the 1970s and noted that the SMEs created the majority of new jobs in the USA. On the contrary, the SMEs sailed through relatively well and proved instrumental in creating new enterprises and generating employment opportunities (Senjenberger, 1990).

Until 1970s, market stability had permitted the exploitation of economies of scale of large-scale production. The growth of the industrialized nations was dynamised by the prevalence of social and political forces working to ensure market stability required for successful mass-production. Hence, the post-war model of economic development was dominated by large corporations, using mass-production technologies in an environment of stable prices. Following 1970s when instability began to be features of markets, the dominance of the mass-production model was thrown into crisis. From 1980s, a movement away from rigid mass production lines and production of standardized goods towards a more innovative and flexible system of multi-purpose machines and skilled workers by multiplicity/plurality of small firms better able to respond to conditions of changes came to dominate.

As empirical evidence of the shift in economic activity away from large enterprises to small enterprises, the most impressive evidence cited by Carlsson 1992-1996 is the significant drop in the employment share of the largest 500 US firms (in the so-called "Fortune 500") from 20 percent in 1970 to 8.5 percent in 1996. Similar changes also occurred in the European nations since early 1990s as reported by the European Network of SME Research (ENSR 1993-1997) and the European Commission (2002) highlighting proliferation of small enterprises and spread of SME entrepreneurship.

A host of factors are advanced as explanations for the shift towards smallness by eminent scholars such as Acs and Audretseh (1993) and Carlsson (1992). Two sets of explanations are put forward by these scholars. The first includes

fundamental changes in the economy since 1970s onward, such as (i) intensification of global competition, (ii) increase in the degree of economic uncertainty, and (iii) the growth in market segmentation. The second explanation put forward by Carlsson (1992) emphasizes technological progress leading to "**flexible automation**" which has various effects facilitating growth and development of small firms.

Industrial enterprises enjoying benefits of "**flexible specialization**" are characterized by high and multitalented skilled workers, flexible machineries which embody latest technologies, and small batch production of a range of specialized products manufactured for the global markets. Peore and Sable (1984) identify four organizational forms of enterprises characterized by flexible specialization. These are: (i) adaptability to production techniques while remaining specialized in the production of goods; (ii) limited entry into the markets served; (iii) high levels of competitive innovations; and (iv) High level of cooperation with limited competition among firms over wages and working conditions encouraging greater cooperation among them.

While these changes in the world economy were instrumental in causing structural shifts from large to small firms, Piore and Sable (1984) emphasize market instability as an important factor which resulted in the demise of mass production and the promotion of "**flexible specialization**". This fundamental change in the way towards technological progress led to the occurrence of vast diseconomies of scale, paving the way for SME growth to take advantage of technological spin-offs, segmented markets and emerging consumer demands. To these were added an increase in labour supply and lower real wages, relaxation of entry regulations and an overall environment of entrepreneurialism (Brock and Evans, 1989).

These shifts away from large-scale production undertakings were not confined to manufacturing industries alone; they were widespread, engulfing the entire economy. According to Loveman and Sengenberger (1991), the industrial restructuring was accompanied by decentralization and vertical disintegration (breaking up of large plants and business) and the formation of new business communities. Among other factors favoring emergence of small firm growth were, overall shift towards knowledge-based economic activities (Audretsch and Thurik, 2000), globalization and technological advances, and role of public and private policies promoting the small business sector.

We turn next to explain the determinants of the role of SMEs in an economy and their contributions to the process of economic growth. The primary focus here is to analyse how the SMEs fit into an economy and continue to exist as important components of the overall economic system.

3.0 Determinants of the Role, Functions, and Contributions of SMEs in the Process of Economic Growth

The SME resurgence in the global business landscape has been associated with many important positive consequences in the advanced industrial countries including the US and OECD member states. Acs (1992) lists them as the following from a broader perspective: (i) vehicles of entrepreneurship, (ii) routes of innovation, (iii) industry dynamics and (iv) job generation. Elaborating on these issues, the important SME roles in the economy are identified by noting that they serve as agents of change by their entrepreneurial activities, being the sources of considerable innovative activities, stimulating industry evolution through creation of new enterprises and diversities in the industrial sector, and the most important of all being the major contributors to new job generation. The OECD survey of SMEs (1997) claimed the SME contributions to have been particularly important in net job creation, value addition, and exports overtime.

An important caveat that needs to be added at this point is that over and above economic importance of the SMEs, they perform important normative functions by providing economic opportunities not only generally, but especially to marginal groups such as women, ethnic minorities, the young and the elderly. It is also argued that working in SMEs engenders personal values that are related not only to economic activities, but also to non-economic normative values, such as independence and self-reliance. An avalanche of empirical studies are now available which present factual evidence on the varying degrees of contributions of the SME in both developed and emerging economies in terms of their relative shares in national GDP, industrial employment, value added and exports.[iv] The statistics provided on the SME contributions in different countries thus confirm the SME existence as a universal phenomenon worldwide.

After these brief highlights on the empirical point of view, we turn to provide a theoretical analysis on the birth, growth, and sustainability of SMEs by comparing the conventional economic wisdom with alternative approaches leading to multi-causal frameworks. In the process, let us first take up the case of definition of firm sizes, especially SMEs, to show that the common practices used to define SMEs overlook many important issues that help to explain the process of emergence and competitive survival of these enterprises.

3.1 Definition of SME: Narrow Perspectives

SMEs are extremely heterogeneous entities. They can be identified in a wide array of business activities, i.e. a single artisan working in a village market, the coffee shop at the corner, the internet cafe in a small town, a sophisticated engineering or software firm selling in the overseas markets, and a medium-sized parts and components manufacturer selling to the multinational automaker etc.[v] This points to the fact that within the traditional "general category of small firms", there exists a plurality of small firms which are identified by Tommaso and Dubbini (2000) as the following:

- Rural firms operating in the context of a regional economy,
- Urban firms cross-cutting formal and informal sectors,
- Small independent firms operating in isolation and serving local markets,
- Sub-suppliers operating under indirect control of large firms,
- Highly specialized firms, and
- Firms operating directly in the international markets offering niche products.

Connecting these specifications and empirical regularities, our aim is to develop a unitary interpretive framework required for establishing a new independent theory of small firms within a complex taxonomy of elements. In the light of the increasingly greater role played by the SMEs supported by enough empirical evidence, it must be admitted that the case for these economic entities can no longer be considered as a transitory phenomenon unsuitable for attention of an integrated economic theory.

Though statistical definitions are used across the globe based on selected quantitative criteria to define the SMEs, such definitions are inadequate to unfold the various qualitative features of these enterprises. The SMEs are conventionally defined using three quantitative indicators, such as:

(i) capital investment in plant and machineries
(ii) number of persons employed per enterprise
(iii) value of annual turnover or sales[vi]

But all such quantitative indicators suffer from various shortcomings and fall short of being adequately satisfactory measures of enterprise size.[vii] As such, they are incapable of describing the important economic, social, psychological, behavioral and organizational characteristics of the SMEs which play important roles in explaining why and how small businesses emerge, develop and continue to sustain. The important qualitative and operational features which distinguish the SMEs from their large counterparts and also exhibit their intrinsic strengths and weaknesses include the following:

(i) A dominant organizational feature of the SMEs is that they are owned and managed by a single individual or a group of persons. There is thus, a strong link between the enterprise and the entrepreneur which is inseparable in most cases from each other. While this exposes them to greater risks at times, the deep personal attention of the entrepreneur makes him strongly committed to the success of businesses.

(ii) Another specificity of small businesses is the presence of a family aspect resulting from a high incidence of family members. This characterizes small firms with positive (a cordial work atmosphere) as well as problematic (generational succession issue) consequences.

(iii) The dominant presence of the owner-manager in all spheres of business facilitates quick and flexible decision-making, but involves a lack of delegation of authority which makes him despotic or a `loner' at times.

(iv) A closely related feature is that in contrast to a formal hierarchy of management style practiced by the large firms, there is hardly any division of managerial functions in the SMEs due to the absence of middle management for a key role.

(v) Another distinct regularity observed by the researchers in the SMEs relates to their financial practices and constraints. Due to scale barriers, policy biases and institutional rigidities have restricted access to institutional credit. High barriers to entry into formal credit markets at affordable costs make them suffer from cash-flow problems that are more sensitive to recession from the liquidity point of view[viii].

(vi) Empirical research (Hans, E. Hanser 1998) also highlights a higher worker turnover, low worker earnings, lack of defining career paths for human resources etc. as distinctive characteristics of SMEs. Tomasso et. al (2000) notes however, that the SMEs often benefit from certain flexibility in the application of service rules for the workers which permit them to practice greater organizational flexibility.[ix]

(vii) Two more important aspects of the smallness of firms that emerge; firm extensive empirical literature are the close relationships between small firms and innovation and their privileged positions to exploit the potentials of "collective efficiency" resulting from clustering and networking systems.[x]

In the light of the specificities and regularities highlighted above, the limitations of the traditional theory of firms become clearly evident in explaining the organizational, functional and behavioral aspects of SMEs which are fundamental to the development of a theory of small firms.

A digression on a brief discussion of some of the essential features of the traditional theories of firms is warranted at this point to clarify how the various theories of firms have been developed primarily to explain the behaviour and characteristics of large firms, which are not typical of those of the owner-managed enterprises or small firms.

The theory of the firm is basically concerned with how individual firms combine quantities of 'factor inputs' to produce 'outputs' of goods and services. The classical theory of firms was developed as a profit maximization theory which is attributed to Marshall (1868). The basic assumption made was that firms or owners of firms would set the marginal cost (MC) of production to equal the marginal revenue (MR). Mathematically, this gives a maximum amount of profit, if profit is defined as total revenue minus total costs over a given period of time. If the classical theory of firms is accepted, then the main objective for owners/managers of firms is profit maximization.

However, extensive debates about the theoretical and methodological validity and realism of the assumption of profit maximization can be traced as far back as the 18th century, to the arguments between the classical and the historical schools. Since then, a large number of models have been developed to explain the behaviour of business organizations and their managers in terms of their goals and objectives. The classical theories of firms postulating both profit maximization in the short-run as well as maximization of wealth or value of the firm in the long-run as the primary objectives, are built around the explicit concept of marginalizm came to be criticized by Lester (1946) and Machlup (1947) as being much too narrow and unrealistic. Lester argued that the oversimplification of a business into two simple variables. (i.e. marginal revenue and marginal costs) makes the theory useless.

Subsequently, broader theories of firms came to be proposed. The most prominent among them being the models that postulate the primary objective of the firm is the maximization of sales, maximization of management utility, and satisfying behaviour.[xi] A detailed discussion on the behaviour and objectives of these alternative models of firms is not within the purview of the present exercise. All these new and broader models stress some common relevant aspects of the modern large-scale corporations (i.e. maximization of sales revenue (Baumol, W.J.), maximization of managerial utilities (Williamson, O.E. or Behavioural Theory in Cyert R.M. et. al. 1963) and that of striving for some satisfactory goals in terms of sales, profits, growth etc. under a "principal-agent" (i.e shareholders and managers) relationship. They do not provide a satisfactory alternative to the theory of the firm (i.e. moving away from abstract simplification of the classical theory) and construct a more realistic framework for analysing firms' behaviours (Simon, H. A. 1949).[xii]

Millions of firms of varying sizes and types of ownership operate in the real world of corporate business. For example, the Joint Stock Company was and still is the normal method for business ownership of large-scale firms. This is in sharp contrast to the millions of owner-managed firms (comprising dominantly single individuals and few partnerships) where there is a separation of ownership from control or that of principals from agents. In the traditional theories of firms, all models explaining firms' behaviours assume that businesses are a complex combination of individuals with different aims and objectives. This is true for large Joint Stock firms, but it is not the case for small firms which generally have single owners or a small number of partners. This calls for the urgent need to develop a conceptual and analytical framework within which to explain small-firm growth.

Besides the general approach based on the microeconomic theory underlying the marginalist analysis used to explain the behaviour of firms, there also exists the industrial economics approach which has developed a number of growth models for analysing the behaviour of firms. Reviewing selected major theories of growth of industrial firms propounded by Penrose, E.T. (1959), Marris (1963), Hay and Morris (1979), Taylor and Thrift (1982), O'Farreu and Hitchens, D.M N.N (1988) noted that the industrial economics literature on the growth of firms is concerned primarily with large firms and their development, from the perspective of differentiated management structures which are non-typical of the owner-managed enterprises. According to their view, a tendency of the industrial economics literature is to implicitly assume the small firm as a microcosm of large enterprises in terms of behaviour and strategy, although there are fundamental qualitative differences between large and small firms which need to be reckoned while developing alternative conceptual and analytical framework for analysing growth of small firms. Validation of the issues discussed here require presentation of case studies of firms from the real world, but time and resource constraints did not permit us to do so for the present exercise.

3.2 Economic and Technical Issues Facilitating Birth, Growth and Development of Small Firms

Four important economic factors (also termed as four elements that tend to constitute an economic theory of SMEs which put the concept of "Fordism" to questionable validity) are identified as the building blocks which construct an economic theory explaining the size of firms.[xiii] These are: (i) **technical and allocative efficiency**, (ii) **transactions costs**, (iii) **market power**, and (iv) **Life-cycle of the firms**. Under the technical and allocative efficiency approach, economies of scale of a technical (i.e. reduction in average unit costs of production in large-scale enterprises) nature are considered as the most important determinants of optimum size of firms (Viner 1932, Baumol 1982). Large businesses generally emerge where the cost savings from scale economies are prevalent. However, the important organizational factors such as entrepreneurial and managerial efficiencies (i.e. efficiency of control, communication and coordination etc.) may influence firm size, creating diseconomies of scale and resulting in trade-offs between the advantages of coordination and the costs of communication. It follows from the above, that the optimum size of firms is determined by the combined effects of technical economies of scale and diseconomies resulting from organizational techniques. The organizational diseconomies explain the existence of small enterprises and efficiency of allocation of given resources which include management capacity, knowledge, and information flow.

The Second approach is based on the theory of **transaction costs**. The fundamental explanation for the firm size and its distribution offered by this approach is the minimization of transaction costs which according to Ronald Coase (1988) is determined by the relationship between managerial efficiencies (costs) as among larger and smaller firms and the **market transaction costs** of arranging contracts among firms for the provision of productive inputs. Essentially this involves the question of organizing production of a firm under managerial command by direct employees or by transaction by contracts through the market where production is achieved by someone else's employees. According to coase, R. H. (1937), if there were no market transaction costs, there would be no firms. Conversely, as market transaction costs diminish there are greater opportunities for separate firms to individually manage different productive tasks (Priest, G. L. (2002). This tantamounts to amending Adam Smith's aphorism to read: the demand for the division of labour is limited by the extent of the market; the supply for the division of labour is limited by the relationship between managerial costs and market transaction costs. According to this view, businesses survive as small entities where their organizing capability better succeeds in managing specialization in production and where the managerial efficiencies are not overwhelmed by the market transaction costs.

Another twist in the approach also involves the cases of 'cooperation' between large firms and SMEs and that of 'integration' in the presence of particular conditions. More directly interpreted, independent firms which choose to cooperate rather than merge will benefit from the advantages of loose integration, while avoiding facing relatively high costs dictated by the bureaucratic structures of merged entities. In the countries where market transaction costs are lower because of cooperative relationships between firms, the size distribution of firms will reveal the existence of a large number of small and medium firms.

The third approach to determination of firm sizes and their distribution is based on the market power of firms. Under this approach, size distribution of firms is derived from conditions of imperfect competition where size distribution reflects market power and its competitive structure. In this scenario, firms of varying sizes thrive on the differentiation of costs, tastes and products which are outcomes of techniques of production used, changes in consumer tastes, and levels of flexibility of operations. As all small firms do not have the same level of flexibility, only SMEs of particular sectors i.e. electronics and various products of intricate design and appeal to individual consumer tastes will thrive in the markets of imperfect competition.

The fourth and final approach consists of theories that analyse the process of dynamic competitive process, such as the **life-cycle of the firms** where their age and growth play an important role on their competitive survival. Firms generally emerge and enter the market as small entities and begin to grow through learning and experience. Smaller and younger firms face greater risks and turbulences than their big counterparts. However, the dynamism of SMEs depends on the nature of the technological regimes which tend to favour bigger firms which are in the market for a longer time with better access to critical inputs. Nevertheless, younger firms enjoy greater advantages when innovation generates from knowledge and information flows which are not exclusive preserves of the larger firms.

The four theoretical approaches described above explore variations in firm size and their distribution constitutes a standardized set of tools and elements which ignore many complexities and diversities other than technological scale economics, firm size, and efficiency etc. as the basis for theoretical explanations. Beyond these narrow perspectives of the traditional theories of firms, there are a whole lot of organizational, behavioral, human resource centric and institutional aspects which need to be highlighted to explain the growth and existence of SMEs (O' Farrell, et. al 1997).

4.0 Determinants of the Size of Firms: Demand Side Perspectives

We have so far been considering the economic case for small firms from the supply-side viewpoints. But the discussion on the determinants of the size of firms would remain incomplete if we did not highlight the demand side issues. Even if it is technologically possible to reap the benefits of economies of a large size, it may not always be possible to produce in bulk at the minimum efficient scale. In other words, small markets require small firms, because there are no large scale advantages if markets are dimensionally fragmented and demand is not sufficiently vast allowing large-scale operations.

Many products and services command on limited markets as there exists limited consumer demand for particularized products or services. In such cases a limited demand can be satisfied by firms of a limited size-hence, a small business. While limited demands can also be satisfied by large businesses, it may be feasible only where the business is able to coordinate production by keeping the **coordination costs low**. Thus, an initial role of small businesses is to cater to the limited demand of the limited sets of consumers for particularized products or services where coordination costs prevent satisfaction of that demand by larger businesses. Large businesses emerge only where the cost savings from scale economy benefits prevail.

Again, the advantages of a large size are reduced when markets are geographically dispersed leading to prohibitive transport costs (involved in moving between different markets which add to production costs). As geographical dispersion of demand implies dispersion of supply, there may be no sense in trying to concentrate supply in large enterprises.

If demand is unstable and fragmented for goods and services in some sectors where both large and small firms can operate, it is more difficult as well as more costly for large businesses to adjust to changes in the quantity produced as well as to the changes in quality and technology (Acs Z. et al, 1988).[xiv] On the contrary, small businesses can better adjust to such changes because of using different machinery and plants that are easily adaptable, and also because of a hands-on management style, efficient information flow and quick decision-making etc. which provide them with the advantages of "**flexible specialization**". These in-built flexibilities of small firms give them distinct advantages over their large counterparts in keeping their adjustment costs low.

In addition to the question of instability of demand, there is the issue of "**market niches**" explained by Penrose, E. T. (1959) which suggests that an economy generates different types of market spaces, some of which are not suited to large-scale production. The small market segments may be created by local customs (i. e. religious practices), luxury requirements (i. e. demand for Rolls Royce), highly specific usages (i. e. racing yachts), or locational considerations (isolated populations etc.). Such markets may be inaccessible to large corporations, or demand a type of production that is highly specialized or at least not profitable enough for the big businesses.

Thus, there are types of goods that encounter a specific demand which would be difficult to be satisfied by large firms because of diseconomies of scale. As such, small firms tend to enjoy the advantages in serving the markets for goods that meet the special client needs. In the industries characterized by high degree of product differentiation, the SMEs enjoy the competitive advantages to carve out their own market niches. In such cases, flexibility takes the shape of ability to meet special client requirements both in terms of products and after sales service provisions.

Progress in globalization, internationalization of markets, and increasing competitive pressures in both domestic and foreign markets compel the firms to specialize. This type of dynamics offers increasingly greater market spaces to the small firms, capacitates them to specialize and enables them to offer products which are sophisticated and highly customized. Further, along with rise in the standard of living and increase in spending habits, and spread of individual and collective tastes from customized towards extremely differentiated and high value-added products has led to increasing market segmentation. All these offer substantial advantages to the productive systems characterized by the presence of plurality of small firms.

The multiplicity of "**market niches**" is also associated with the increasing speed of economic changes and growing uncertainties which are difficult to be handled by industrial concentration. On the contrary, such uncertainty and risks induce the firms to operate in groups or constellations or in systems that are more flexible and hence quickly adaptable to changes. Needless to reiterate, the SME operations are better suited to deal with these conditions.[xv] Carlson (1989) and Schuman et. al. (1985) claim that the SMEs compensate for the absence of scale economies by greater flexibility especially in periods of rapid and at times sudden and unpredictable changes.

Next comes the issue of "**collective efficiency**" to analyse which we change the attention from the individual firm as the unit of observation to a complex system

of firms. Collective efficiencies derive from both external economies of Marshallian tradition developed outside the firms and internal economies of scale developed within the firms, particularly through joint actions among the plurality of small and medium firms. The economies arising from an increase in the scale of production of any kind of goods, dependent on the general development of industry and those dependent on the resources of individual businesses dependent on their organizations and efficiencies of their management. The former may be called external economies, and the latter internal economies.

Collective efficiency takes the form of cost savings and productivity advantages. An example is the presence of a specialized labour market in a specific district or existence of specialized machinery in which case the individual firm saves on labour seeking or specialized machinery costs. Here, we have an example of an externality arising from the spatial concentration of a plurality of firms and without the mediation of market transaction costs. In general, the presence of a plurality of activities of a similar type and relating to the same industry guarantees a local supply of raw materials, machineries, and specialized skills and various professional services at relatively less costs and ready availabilities. Such spatial concentration gives rise to an externality which reduces costs for individual firms. These may also be termed as economies arising from locational concentration and those of agglomeration of production enterprises of varying sizes.

5.0 Concluding Remarks

The "stylized firm" portrayed in the traditional economic theory remains far from the one that operates in the real world. This gap between the firm in theory and the small firms of the real world is far wider. In fact, the traditional theory does not treat the SMEs explicitly and as such no theoretic framework emerges to explain the economic case for them. Given this analytical lapse and the ever expanding role of the SMEs in the local, regional, national and global competitive dynamics, there is an indispensable case for the economists to develop a new theoretical and analytical approach for meticulously examining the contributions of the SMEs in the process of economic growth.

By making a modest attempt to perform this task in this paper, we have examined how and why small firms fit into an economy and what determines their successful and competitive roles in an economic system as compared to big business. Our analysis of the concepts, various economic, technical, organizational and behavioral tools, and theoretical and empirical issues have shown that the SMEs are worthy of receiving attention of a systematic economic theory to examine variations in firm size and their efficiency. It seems evident that the traditional theory of firms fails to consider the influence of all relevant factors which are of fundamental importance in determining the size of optimum firms in general and that of development of a theory of small firms in particular.

Another important lapse of the traditional theory lies in branding the SMEs with a general label, "small firms" ignoring the fact that there exists a plurality of firm types in the SME community lacking in homogeneity which have significant influence on firm size, behavior, and performance. It is only by identifying and recognizing the complex small firm taxonomy based on a combined analysis of their production as well as market relationships which define the matrix of firm types. The policy makers will be able to make targeted policy interventions in favour of the small firms by considering these factors carefully.

At least two important caveats must guide the policy formulation process, such as (a) fitting specific policy support requirements of the multiplicity of SMEs, and (b) at the same time ensuring coherence and sustainability of the policy package which must guarantee a conductive environment to encourage and facilitate free entry and exit of small firms.

Footnotes

i The terms 'SMEs', 'Small firms' and 'Small business' are used interchangeably throughout this paper, unless otherwise specified.

ii For a comprehensive discussion on the distinctive features and characteristics of the concepts of old "managed economy and the emerging entrepreneurial economy," see, A. R. Thurik (2008).

iii A notable exception being the seminal works of Staley and Moorse (1965) which provided the foundation as a pioneering effort on the understanding of the merits of economics of small-scale industries.

iv Some of the leading authentic sources providing statistical evidence on the relative contributions of the SMEs in various dimensions of an economy on a global scale include: Beck, T et. al. (2007), Aygagari, M. et. al. (2013), Kushnir, K. et. al. (2010) and so on:

v For a detailed and an in-depth analysis of the concepts, issues, and theoretical context and empirical evidence required to develop a new and independent theory of small firms, the reader is referred to Tommaso, et. al. (2000).

vi Some authors also use amount of technical equipment (i.e. number of spindles and looms in textiles) and amount of energy and power used for size classification of firms. For a comprehensive survey on these issues, see, Ahmed Momtaz Uddin (1976).

vii A critical analysis of various shortcomings affecting these measures of firm size is available in my (1976).

viii For a succinct survey of empirical literature on these issues, see my (2008 and 2009).

ix Unfortunately only limited number of studies are noted (Kok g. D. et. al. 2013) to have been carried out on the earnings differentials of the employees of SMEs and large enterprises and of job security as well as overall quality of jobs of the employees which preclude strong generatisations on these issues.

x These are some of the common organizational, functional, and behavioral characteristics which differentiate the SMEs from their large counterparts. However, these special features may not be universal for all SMEs and may also not be always identifiable. Nevertheless, these special features of the SMEs need to be taken into account for SME policy making and strategy development.

xi Salvatore and srivastava (2012) notes that still other objectives might be pursied to take advantage of economies of scale or scope to pay tower prices for inputs to better face risks, to raise capital more effectively (corporate firm) and to gain xii For a succinct summary of the reviews of various theories of firms and their behaviours, see Crossan, K. (Undated), and Salvator and Srivastava (2012).

xiii Discussions in this section have benefited greatly from the ideas developed by Tomasso et.al (2000)

xiv However, in case of quantitative change-induced high demand exceeding normal expected demand levels big firms may arrange to purchase products from small firms where both sizes can co-exist in the markets suffering from fluctuating demands (Tomsso et. at. 2000).

xv These types of changes and segmentation in consumer demand and market characteristics have led to decentralization, sub-contracting, and outsourcing phenomena which also have opened new opportunities and spaces for small firms (Ahmed, M. U. 2010).

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