The Role of SMEs in Capital Formation, Equitable Growth and Income Distribution in Developing Countries

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Abstract: The expansion of a productive private sector is one of the critical concerns of the economic development in developing countries in order to increase gross domestic capital formation (GDCF) to alleviate poverty. Private sector development may take many different forms, but the results may be quite different in terms of equitable development and social inclusiveness. One of the most efficient ways of private sector development is the promotion of SMEs instead of large firms. In the research unbalanced capital formation is used as the research theory. To complete the research intersectoral linkages used as the research methodology. There are ample kinds of evidences concerning the role of SME in capital formation in developing countries.

Keywords: Unbalanced Capital Formation, intersectoral linkages, SMEs Definition, Impacts of SMEs Capital Formation, Equitable Growth and Income Distribution, SMEs’ Challenges

1. Introduction

One of the most concerns in economic development is the expansion of a productive private sector in order to increase gross domestic capital formation (GDCF) for poverty reduction. Private sector development may take many different forms, and its outcome may be much different in terms of equitable development and social inclusiveness. One of the most efficient ways of private sector development is the promotion of SMEs instead of large firms. SME development contributes to render a more balanced industrial structure and income equality (1).

There are ample kinds of literature concerning the importance of SMEs promotion policy and SMEs contribution in achieving the Sustainable Development Goals (SDGs), through promotion a comprehensive and sustainable economic growth, provision of employment and decent job opportunity for all, sustainable industrial development, encouraging innovation, supporting income equality (2).

According to Biggs (3), SMEs at least have three unique contributions to economic growth and development. First, and probably the most commonly stated claim is the role of SMEs in employment generation. SMEs provide a large percentage of the new generated job, particularly create employment opportunity at relatively lower capital cost than those generated by large firms. Therefore, SME development policy is more reliable with economic conditions of developing countries for employment generation and poverty reduction. Second, SMEs development advances competition and increase flexibility in the industrial structure of the economy. Consequently, SME development policy promotes a greater economic dynamism and makes faster and cheaper the adjustments process against the economic shocks.

Currently, SMEs constitute the most significant percentage of total enterprises. Thus, this sector is considered as the major source of employment generation and economic growth in almost all economies (4).

SMEs play a crucial role in capital formation through expanding the components of gross domestic capital formation; both gross domestic fixed capital and change the stock of capital market.

2. Unbalanced Capital Formation as the Research Theory

Hirschman (1958) employed the term of unbalanced growth in his major work on economic development. Since Hirschman’s seminal work has published considerably later than the Rodan and Nurkse ideas, hence, their doctrines have some similarities and dissimilarities. First, Hirschman also supported an industrialization strategy; secondly, he has accepted the existence of the vicious circle of poverty in developing economies. Also, he shared an optimistic opinion that less developed countries have significant hidden and talent resources. Nonetheless, in contrast to Rodan and Nurkse ideas, Hirschman advocated a big push for only limited certain key sectors. With the idea that by inducing development in key sectors first, overcapacity would be created in these key sectors, while supply bottlenecks would simultaneously increase production difficulties elsewhere in the economic structure. These bottlenecks will cause new investments opportunities for private sectors to resolve the supply bottlenecks (5). In this way Hirschman deliberately supported the unbalancing of the economy, creating disequilibrium situations, based on the following reasons.

First, Hirschman mentioned that there are limited resources in less developed countries, and this limitation would necessitate prioritizing some areas of the industry over other for the use of limited human and financial investment funds. So, unlike the advice of both Big Push and Balanced growth theories; it is not possible to simultaneously improve all economic sectors in developing countries.
Second: deliberately unbalancing the economy and creating excess capacity in some area and intensifying shortages in other areas, he believed that the pressures created would result in subsequent reactions that would speed the development process by opening profitable investment opportunities for new entrepreneurs, through backward and forward linkages.

In Hirschman’s discussion linkages was an integral part of his analysis. These linkages refer to the effects of one investment on the possibility of new investment at earlier and later stages of production. For example, through forward linkages investment in a firm can motivate new investment in another firm that uses the first firm's output as an input in its production process. Similarly, through backward linkages, one firm's investment can motivate investment in the second firm, which produces input for the first firm (6). That is why that Hirschman advocated industrialization in leading sectors instead of simultaneously industrialization in several sectors, and then through backward and forward linkages, the leading sectors spark industrialization to the rest of the economy. This growth is called unbalanced, because it does not occur everywhere, but happens only in specific sectors, which then pulls the others along.

3. Research Methodology

In this research inter-industrial (backward and forward) linkages method is used as the research method. These linkages refer to the effects of one investment on the profitability of another investment in upstream or downstream of the production process. Therefore, investment by SMEs through forwarding linkages will cause an increase in the investment of others that use the former SMEs output as an input in their production process. Likewise, the same is true for backward linkages that SMEs’ investment can motivate private investors to in new SMEs, which produce inputs to other firms (6).

According to unbalance capital formation theory the channels that SMEs can effects on capital formation in developing countries are extensive. Hirschman as the founder of unbalanced growth theory distinguished between two categories of capital formation, the Social overhead Capital (SOC), and the Direct Productive Activities (DPA).

He believes that the distinction between these two categories of capital formation has to be judged, not by their logic, which is far from compelling. In fact, the judgment must be based on their theoretical and practical usefulness. SOC includes those principal services that in the absence of them the function of primary, secondary, and tertiary productive activities is not possible. According to this broad definition, the SOC comprises all public services such as law and orders, education, public health, power supply and water supply, irrigation system, drainage system and so on. While capital formation through DPA includes different types of private sector investment, which are done in all economic sectors like manufacturing, agriculture, commerce and services sectors (7).

In order to accelerate capital formation in developing countries through direct productivity activities, Hirschman encourages private enterprises (SMEs) to invest in leading sectors of the economy. Although he has accepted the existence of vicious circle of poverty in developing countries; However, he argued that industrialization through some certain key sectors in developing countries is possible, and then these key sectors will positively affect other sectors in the economy, trough backward and forward linkages (6). Hirschman proposed and structured a mechanism for capital formation based on inter-industrial linkages.

Hirschman recognized and appreciated the role of governments in the motivation of capital formation in developing countries. Nevertheless, he recognized that the government is rarely an autonomous agent in capital formation, but the government can alter the pattern of investment by its regulatory interventions. For example, through tariff and taxes. Thus, he says that the structure of capital formation in developing countries is the product of an interaction between private entrepreneurs’ activities, individuals and the public sectors who are also responsible for creating specific public-enterprise capital and complementing, regulating, encouraging private capital formation (6).

Hirschman formulated a typology of linkages which are affecting capital formation. Some other economists examined this pattern of capital formation and industrialization of developing countries. They also support the idea of investment in leading sectors. They suggest that other things being equal, any sector whose industrialization has a significant role in reducing the production cost of the final good, this sector is a key sector. Investment growth in the key sectors will cause to change the vicious circle of poverty into a virtuous one.

4. Definition of SMEs

Since the last quarter of the 20th century the term of SMEs widely used in the determination of economic development policies, and it implies that a considerable range of business activities occupies the gap between micro enterprises and large firms. These business activities bring particular economic opportunities and challenges, which are entirely different from those of the two groups. Furthermore, the claim that SMEs development is the backbone of economic growth in both developed and developing economies has become a very hot debate for papers, presentations, and prevalent articles about private sector development. However, the claim that SMEs are the main driver of economic growth most often has been made without any precise data to support the claim, and often without any attempt to know what is an SME. Though both claims as mentioned above are true, however passively acceptances of these claims are more harmful to private sector development in developing countries (8).

SMEs consist of a range of different enterprises of various sizes, which are found in a wide range of business activities. SMEs ranking from a single artisan who produces agricultural instruments for a village market, to a little-sophisticated computer engineering or it, can be a firm, which produces software packages for local, national, and foreign consumers, also, it can be a medium size automotive part manufacturing enterprise that supplies its products to...
multinational automakers enterprises in both national and international markets. The owners of the firms may or may not be rich; the firm may be active in a variety of markets such as urban, rural, local, national, and international, the firms may be embodied with different level of skills, and capital. The firm may be equipped with different type of technology. It may operate in the formal or informal economy (9). Therefore, having a universally and widely accepted definition for classification of national SMEs is very important and necessary.

Furthermore, the main purpose of SME definition is to provide an instrument for the targeting policies, provision of national statistics on SMEs serves as the foundation for directing state support for SMEs development and targeting a broader range of policy measures.

International development organizations and national governments have defined SMEs separately (10). Since there is no any universally accepted definition for SMEs, thus we can think about a national definition as well as an international definition of SMEs.

4.1 National Definition of SMEs

National governments define formal SMEs, which are legally registered and operate according to the countries’ prevailing law and orders. Different countries use different definitions for SMEs based on their level of economic development. National definition not only differs among the countries, but it also differs between the national economic sectors. For example, small business size standards are much different across industry such as construction, manufacturing, mining, transportation, wholesale trade, retail trade and services (11). The size of the firm depends on the market in which the firm operates. For instance, according to UK national SME definition, a small firm is defined as an independent unit, managed by owners or part owners, and having a relatively small market share. So, a firm could be small in one sector where the market is enormous by having too many competitors, while a similar business size could be thought a large business in another sector with fewer operating firms with small market size. Likewise, the national definition of SMEs in North America (the small business act) defines a small business as an independently owned and operated firm, which is not dominated in its market share but recognizes that the definition will vary within the industries (12).

Most of the national governments in SME definition commonly used statistical quantity data such as a total number of employees, total annual sales, total assets or annual turnover and the total of the balance sheet in term of their national currency or only they use the number of employees. For example, United State, Canada, and Mexico have used a definition and classification of SMEs based on the number of employees, which varies according to the sectors (13), Australia for this purpose has used a definition based on the number of employees. Japan has characterized and classified registered SMEs based on the number of employees and investment (assets) that varies across the industries. While the South Korea Republic has defined SMEs based on the number of employees and annual sales and capital (14). Turkey has used a definition based on the number of employees and total annual net sales (15). Bangladesh has used a definition based on employees and fixed capital (16). All criteria that are used by different national government summarized in table 4.1.

<table>
<thead>
<tr>
<th>Economy</th>
<th>Business</th>
<th>Criteria</th>
<th>Micro Enterprises</th>
<th>Small Enterprises</th>
<th>Medium Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>United State &amp; Canada</td>
<td></td>
<td>Employees</td>
<td>&lt; 20</td>
<td>20 - 99</td>
<td>100 - 499</td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td>Employees</td>
<td>&lt; 5</td>
<td>&lt; 20</td>
<td>&gt; 20</td>
</tr>
<tr>
<td>Japan</td>
<td>1- Manufacturing, Construction.</td>
<td>Employees</td>
<td>Up to 20</td>
<td>up to 300</td>
<td>up to ¥ 100 million</td>
</tr>
<tr>
<td></td>
<td>Transportation</td>
<td>Capital</td>
<td>Up to 5</td>
<td>up to 100</td>
<td>up to ¥ 100 million</td>
</tr>
<tr>
<td></td>
<td>2- Wholesale</td>
<td>Employees</td>
<td>Up to 5</td>
<td>up to 100</td>
<td>up to ¥ 100 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3- Services</td>
<td>Employees</td>
<td>Up to 5</td>
<td>up to 100</td>
<td>up to ¥ 100 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4- Retail</td>
<td>Employees</td>
<td>Up to 5</td>
<td>up to 50</td>
<td>up to ¥ 50 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td>Employees</td>
<td>&lt; 10</td>
<td>&lt; 50</td>
<td>&lt; 250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net Sales</td>
<td>1 million TL</td>
<td>8 million TL</td>
<td>Up to 40 million TL</td>
</tr>
<tr>
<td>Republic of South Korea</td>
<td>1-Manufacturing</td>
<td>Employees</td>
<td></td>
<td></td>
<td>&lt; 300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td></td>
<td></td>
<td>≤ $ 8 million</td>
</tr>
<tr>
<td></td>
<td>2- Mining, Construction, Transportation</td>
<td>Employees</td>
<td></td>
<td></td>
<td>≤ $ 3 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td></td>
<td></td>
<td>≤ $ 200</td>
</tr>
<tr>
<td></td>
<td>3- Seed &amp; Seeding production, Fishing, Electrical</td>
<td>Employees</td>
<td></td>
<td></td>
<td>≤ $ 20 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fixed capital excluding land</td>
<td>TK 50000 - 500000</td>
<td>TK 0.5 - 10 million</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Services</td>
<td>Employees</td>
<td>25</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fixed capital excluding land</td>
<td>TK 50000 - 500000</td>
<td>TK 0.5 - 10 million</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>Employees</td>
<td>25</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td>Fixed capital excluding land</td>
<td>TK 50000 - 1500000</td>
<td>TK 15 - 200 million</td>
<td></td>
</tr>
</tbody>
</table>

The table is made by the author.
4.2 International Definition of SMEs

International development organizations like the World Bank, European Union, International Finance Corporation, and Development Banks, each of them has own official definition of SMEs. The representatives of international organizations in the formal discussions concerning SMEs are thinking according to the context of their organization (8). Most of these international organizations use a different statistical definition of SMEs. They usually use the number of employees, the value of sales as well as the total of assets. Some of the international organizations give a very general definition to SMEs (8). While some other organizations like the World Bank, the European Union (11), and International Finance Corporation (17) give a very detailed definition of SMEs.

In the following table, the criteria used by different international financial and development organizations are summarized.

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Criteria</th>
<th>Micro Enterprises</th>
<th>Small Enterprises</th>
<th>Medium Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank</td>
<td>Employees</td>
<td>&lt;10</td>
<td>&gt; 10 ≤ 50</td>
<td>&gt; 50 ≤ 100</td>
</tr>
<tr>
<td></td>
<td>Total Assets</td>
<td>≤100,000</td>
<td>&gt;100,000 ≤3 million</td>
<td>&gt; $3 million ≤15 million</td>
</tr>
<tr>
<td></td>
<td>Total Annual Sales</td>
<td>≤100,000</td>
<td>&gt;100,000 ≤ $30 million</td>
<td>&gt; $3 million ≤15 million</td>
</tr>
<tr>
<td>International Finance Corporation</td>
<td>Employees</td>
<td>&lt;10</td>
<td>10 &lt; 50</td>
<td>50 ≤ 500</td>
</tr>
<tr>
<td></td>
<td>Total Assets</td>
<td>&lt; $100,000</td>
<td>&gt; $100,000 ≤3 million</td>
<td>&gt; $3 million ≤15 million</td>
</tr>
<tr>
<td></td>
<td>Total Annual Sales</td>
<td>&lt; $100,000</td>
<td>&gt; $100,000 ≤ $30 million</td>
<td>&gt; $3 million ≤15 million</td>
</tr>
<tr>
<td>Africa Development Bank</td>
<td>Employees</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Total Assets</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Total Annual Sales</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

The table is made by the author

As the table shows, there are many differences among the above definitions of SMEs given by international financial and development organizations. If we compare the three criteria denoted in above table (numbers of employees, total assets, and total annual sales) we can see substantial difference between World Bank's definition and the European Union (EU), not only differentiations are in the number of employees in medium-sized enterprises, but the most critical inconsistencies are in financial criteria. Besides differences in denomination (EUR/USD), which are reasonable, the financial criteria, which used by the two organizations are much different. The World Bank used total assets and total annual sales, while the European Union used total annual turnover and balance sheet total. The two criteria do not have comparability basis, based on this very reason each country has its national definition of SMEs.

5. How Does SMEs Effects on Capital Formation

SMEs affects capital formation through an increase in the physical capital stock of a nation. The national physical capital stock, which is called gross fixed capital formation can be grown by both public and private investments (18). According to Adekunle and Aderemi (19), some of the current literature has confused the term of investment and capital formation. They argue that investment can take place in the various field of economic activities such as investment in financial assets, human capital development, real assets, and it can be productive or unproductive. Capital formation through additional investment in non-financial assets has been held to boost the value of the economy and increases the gross domestic product by providing further employment opportunity in the economy.

In this regard, SMEs are considered the primary source of capital formation in all economies particularly in developing countries. Recent studies indicate that SMEs constitute 99% of all operating firm in OECD courtiers, these enterprises employed 70% of the labor force on average, involve between 50-60% of the value added on average. In emerging economies, SMEs provide job opportunities up to 45% of employment and produce 33% of national output. However, by considering the contribution of the informal sector, SMEs' contribution increases to more than 50% of employment and GDP in all economies irrespective of their income level. SMEs development also plays a significant role in economic diversification, which is particularly essential for resource-rich countries (2).

SMEs development boosts domestic capital formation through directing private investment into productive direct investment. Capital formation naturally leads to the production of goods and services, thus provides employment opportunities, generates new income and national output growth.

5.1 SMEs Effects in Capital Formation Through Private Investment

Taken individually, a single SMEs have only a little impact in private capital formation. However, private SMEs make up more than 95% of firms all over the world excluding the primary agriculture sector. Hence SMEs have a considerable weight in economic development through private sector investment in productive sectors (9). For example, SMEs constitute 99.8% of active enterprises in the Turkish economy (15). Likewise, the contribution of SMEs in the total enterprise in the EU Member States is remarkable. The ratio of SMEs in the total enterprise in EU member countries changes from 99.5% in Luxemburg and Germany to more than 99.9% in other member countries like Portugal, Italy, and Greece (20).
Indeed, economic growth in any economy is strongly related to a country's ability to invest and make efficient and productive utilization of its economic resources. In this regard, the SMEs have an essential role both to increase the contribution of private investment in the quantity of domestic capital investment, and to the efficient allocation of resources (21).

SMEs increase the contribution of private investments in gross domestic investment in different ways. SMEs stimulate the establishment of new SMEs through inter-sectoral linkages. Furthermore, SMEs acquire external capital through mobilization of savings via equity, venture capital, banking credit (22).

The critical factor that supports SMEs to operate more successfully is the accessibility of financial resources. In developed countries, SMEs are protected with numerous funding sources like banking credit, leasing, factoring, stock exchange, venture capital, and so on. Each of these funding resources has its advantage and disadvantages. Among the others venture, capital and equity are the most important source of capital formation in developed and developing countries. For example, there are 800 venture capital funds in the United States, and these funds in 2010 invested nearly $179 billion in 3,276 SMEs (23). In the Turkish market, venture capital fund is introduced by June 2012. Currently, 323 venture capital funds are supporting SMEs in Turkey (24).

5.2 SMEs Effects in Capital Formation through Resource Mobilization

SMEs have a unique role in domestic resource mobilization. Thus, SMEs promotion considered to be an important trigger for domestic resource mobilization, both directly through their immediate effect on employment, income generation, and the decentralized provision of goods and services, and indirectly by enhancing productivity and economic growth (1).

Domestic resources have two principal sources, which are public revenues and private finance or savings. Public revenues have the variety of sources of finance such as taxes, bond receipts and other sources of public income (25). Public revenue is crucial for equitable development and poverty reduction in developing countries. In fact, these countries need a substantial amount of public investment in health, education in social and economic infrastructures. Therefore, governments of developing countries have to raise their revenues in order to finance demanded services by their citizens, which will enable them to eliminate poverty. The expansion of public revenues is not an easy task for the governments of developing countries. Particularly at a level which is needed to finance all demanded services, without the direct support of the private sector. Thus, the governments of these countries have to find reasonable and productive solutions for the domestic resource mobilization.

Suryahadi and Adrianto (26) proposed that a relatively more comfortable solution for the governments in developing countries would be to reform their economic policies. They can approve business-friendly policies, rather than to increase the public revenues to increase the public sector spending. Therefore, the governments of developing countries must promote private sector through SME development policy as soon as possible, because private firms boost government revenues, national income and reduce poverty.

The second major source of a domestic resource is a private saving. Thus, the next problem in developing countries is how to mobilize and efficiently use the private savings. In this regard, the main problem is not related to the low level of private saving, but the major problem is the lack of attention about the effective use of private finance for SMEs development in these countries (25).

According to the World Bank Group and other development institutions, SME development policy is essential for private savings mobilization to increase economic growth and to reduce poverty in developing countries. The World Bank Group approved more than $10 billion for the period (1998-2002) to support SME promotion policy in developing countries. The development institutions argue that SMEs support economic development based on three critical reasons. First, SMEs increase competition and entrepreneurship, thus have a positive externality on economy-wide efficiency, innovation, and total productivity growth. From this point of view, direct support of SMEs by the governments enhance social benefits in the economy. Second, supporters of SME development policy often claim that SMEs are much productive than large firms. Finally, some researchers argue that SME development policy further increases employment than large firm promotion, because SMEs are more labor intensive (27).

The SMEs through domestic resources mobilization have a double impact in capital formation: first, SME development encourages business savings and facilitating their most effective utilization. Secondly, private savings mobilization by SMEs stimulates individuals to increase their savings and making their savings available for financing the appropriate growth-promoting investment (28). Unfortunately, SMEs in developing economies mostly remained underdeveloped, and face with a number problem.

5.3 SMEs Effects on Capital Formation Through Public-Private Partnership

SMEs potentially can play a crucial role in infrastructure development in developing countries through Public-Private Partnerships (PPP). The term of Public-Private Partnership explains a range of feasible relationships between government and private institutions concerning the development of infrastructure and other social services. Moreover, this term presents a framework in which the private sector recognizes the role of government in ensuring that the social obligations are met, and successful sectors and the public investment's objectives are achieved (29).

A well-developed public-private partnership allocates the tasks, obligations, and risks between both public and private partners in an optimal way. The public partners in a PPP are public institutions like ministers, departments, municipalities, or state-owned enterprises, while the private...
partners could be different types of private firms (local, national, or international), NGOs or community-based organizations (CBOs).

The public-private partnership is considered as a desirable alternative policy for developing countries that are mostly confronted with the macroeconomic problem like government budget deficit, excessive public debt, and undeveloped infrastructures. This policy enables the governments of these countries to open the door for private investment and attract them to invest in infrastructure development. In fact, PPP policy supports government budget and reduce the burden of public debt in developing countries (30).

The implementation of PPP policy, which encourages the private investment in public projects not only benefit the government but also provides numerous investment opportunities for private firms. As the Asian Development Bank estimated, infrastructure development in Asia needs $8 trillion during 2010-2020. Thus, the implementation of PPP policy in developing countries provides a considerable investment opportunity for private firms (31).

In Turkey, the implementation of PPP was accomplished in 1994. This policy in Turkey coordinates with a complex network of regulatory such as Treasury and some other institutions involved in the process, like “Ministry of Finance, State Planning Organization, Privatization Administration, Public Procurement Agency, Line Ministries and in some cases the Municipalities.” According to Turkey regulation, PPP can be formed in any part of the economy, which needs advanced technology and a significant amount of financial resources.

The contracts of public-private partnership can be taken in many forms, and it depends on the projects. Through the implementation of PPP development policy in developing countries, the private sector has invested up to $64 billion only in infrastructure development project during 2000-2004 (29).

Among the various benefits that PPP policy provides for developing countries, this policy can support local capacities and expertise, encourage increased competition, thus facilitates economic growth. To maximize the economic benefits which are produced by PPPs projects, it is necessary to promote the involvement of SMEs in these projects. Although PPPs are mostly large and complex, however, there is some policy mechanism that applied by the government and large firms to encourage the involvement of SMEs in PPP projects. SMEs can actively participate in transportation infrastructure development in the PPP project through subcontracting, SMEs can play a significant role in global value chains through the collaboration between the public and private sector. Furthermore, the SMEs have tremendous opportunities in the wastewater treatment sector, with small hydro, water treatment, supplying wind power, solar PV, Geothermal and bioenergy, and so on.

Since SMEs undertake most of the private sector investment in economic activity throughout the world, therefore these enterprises as the subcontractors of large firms play a significant role in capital formation through PPP system in developing economies.

5.4 SMEs Effects on Capital Formation Through Foreign Direct Investment

Most often argues that the competitiveness and productivity improvement of SMEs in developing countries is related to the capacity development of SMEs through technology modernization. Technology modernization has a broad meaning and involves products, process, and management. Technology development can take place inside of the firm, or it can be obtained from outside sources, including foreign direct investment (FDI) by integrating domestic SMEs with multinational companies through subcontract agreements (32). There is a common belief that FDI through multinational companies plays a critical role in SME development of host countries, by providing the subcontractors SMEs with a set of productive assets, which contains long-term foreign capital, entrepreneurship, technology, skills, innovative capacity, managerial knowledge, organizational and export marketing (33).

Mucchielli and Jabbour (34) pointed out that multinational companies support SME development in host countries through backward and forward linkages, based on two different assumptions. First, multinational firms need to improve the design, the quality of the product and on-time delivery. Therefore, multinational companies mostly impose quality control on the products and support the suppliers by improving their production process and through the provision of reliable information. Second, multinational companies provide technical support to the suppliers through vertical integration.

In economic development literature, FDI is considered one of the most important sources of technological transformation to the national industry in developing countries. Hence the governments of developing countries often are attempted to transfer modern technologies through the provision of subcontracting arrangement between SMEs and large firms and multination companies (32). For example, the share of high tech of large multinational companies in the Turkish economy is estimated to be 32%. This significant share of multinational companies has horizontal spillover and competition effects, which causes to expand the market size and improve the competitiveness of Turkish SMEs (35).

5.5 SMEs Effects on Capital Formation Through Human Capital

Human capital is considered as a set of intangibles assets like skills, abilities, talents, and experiences, which are built up by a person through the time. The holder of this capital is able to work more efficiently or will be able to find a job for himself or can provide job opportunities for others. Human capital in the same way of physical capital can be acquired, preserved, and developed by some sort of investments. Where investment in physical capital is costly in term of direct payment, and for human capital investment can be more costly because of both direct payment and opportunity costs, in term of the individual's time. Human capital like
physical generates profit for the holders (36). Human capital involves all types of investments that are accomplished to increase human abilities including formal education, informal education, on-the-job-training, and learning by doing (37).

There are many sources of literature that have revealed that human capital is one of the core elements of long-run economic growth through both the level effect of human capital on total production as a result of labor productivity growth and the rate effect by contributing to enhanced competitive advantage through innovation improvement and technological development (38).

Among the others, SMEs have a remarkable and robust impact on human capital development in developing countries. SME increases the human capital via two different ways. First, these enterprises employ educated professionals, provide them with the opportunity to apply their knowledge and skills in the production process of goods and services, in turn, and compensated them with higher salaries and income. In this way, SME creates incentives for investing in human capital formation, irrespective of whether it is affected through formal and informal education. Secondly, SMEs increase human capital through providing professional training to many people through informal education (1).

In Turkey, SMEs play a considerable role in human capital formation through professional training. For example, OSTIM as one of 280 industrial zones in Turkey, through providing job opportunities for more than 65000 workers and establishing eight technoparks has a significant impact in human capital development by providing vocational training (39).

6. Role of SMEs in Equitable Economic Development

Over the past decades, the statement that SMEs are the engines of economic growth and development has often been repeated. In addition, also it is asserted that SME development is the primary driver of equitable economic development and poverty reduction in developing countries. One of the strong reasons, which can support the role of SMEs in providing equitable economic development is industrialization. Historically industrialization has been considered as the most important driver of economic growth and modernization. It has kept its significance for developing economies by providing them with the principal means to increase their capacities and factor productivity. Industrialization process successively supports a sustainable improvement in the standard of living and reducing poverty, on the other hand, manufacturing SMEs through industrial linkages support other sectors in developing economy especially agriculture (40).

Mazumdar (41), popularized the role of SME in the equitable economic development. According to him, SME development helps developing economies in achieving equitable economic development in three different ways. First SMEs increase the role of non-farm employment in agricultural growth, that means a decentralized labor-intensive growth in agriculture sector based on the seed-fertilizer revolution produces new demands and linkages, which causes to motivate the growth of non-farm economic activities in local industries, trades, and services. Secondly, SMEs support non-agricultural household enterprises. Finally, SMEs support modern manufacturing and service in national economies. He argues that SME development in developing countries accelerates equitable growth and reduces inequality in the distribution of income.

Without any doubt, economic growth and inequality cannot be treated individually. Instead, growth has to be equitable and provide more and equal opportunities for all people. Furthermore, common accessibility to public goods, services, and necessary infrastructures are remarkably important for equitable economic growth (42).

6.1 Role of SMEs in Equitable Economic Growth

SMEs development expected to be an essential and desired equitable economic growth path for developing countries. Mazumdar (41) described the role of SMEs in generating equitable economic growth based on two arguments: The factor proportion argument and the growth rate argument. According to factor proportion argument SMEs are accepted to be more labor-intensive than large firms. Thus, this feature of SMEs leads to a choice of technology that more closely resemble the factor market in the economies with a relative scarcity of capital and abundant in the supply of labor. Likewise, based on the growth rate argument, SMEs development is considered to be a fundamental instrument in developing a broad base of entrepreneurship. While large firm development is critically important in the promotion of modern business practices and will be significant in R&D. However, the growth of large firms usually is coupled with the extreme concentration in big cities. This type of industrial concentration increases the public and private costs, threaten to reduce the growth potential of the big cities. In the opposite, SME development can create many growth poles in small town and rural areas, which can serve as the basis for further economic growth in developing countries (41).

There are many studies to reveal the role of SMEs in the equitable economic growth in developing countries. Asian development bank in its report concerning SME development in Pakistan, emphasizes the critical role of SMEs in economic growth, employment generation and ensuring equitable distribution of income. The report emphasized on SME development policy in developing countries. Hence these countries need a suitable industrial foundation to stimulate growth. For instance, Taiwan as a developing country with a vibrant SME sector achieved both record-breaking economic growth and a shallow level of inequality. Likewise, South Korea has obtained economic growth, and reduced inequality as the weight of SME sector increased (43). The SMEs involve 99.9% of the total enterprises and provide about 87.5% of employment opportunities in the South Korean economy (44).

SME sector has consistently recorded a higher rate of growth and employment creation in the industrial sector of developed and developing countries. There is a universal development bank in its report concerning SME development in Pakistan, emphasizes the critical role of SMEs in economic growth, employment generation and ensuring equitable distribution of income. The report emphasized on SME development policy in developing countries. Hence these countries need a suitable industrial foundation to stimulate growth. For instance, Taiwan as a developing country with a vibrant SME sector achieved both record-breaking economic growth and a shallow level of inequality. Likewise, South Korea has obtained economic growth, and reduced inequality as the weight of SME sector increased (43). The SMEs involve 99.9% of the total enterprises and provide about 87.5% of employment opportunities in the South Korean economy (44).

SME sector has consistently recorded a higher rate of growth and employment creation in the industrial sector of developed and developing countries. There is a universal...
consensus among researchers and policymakers that the significant advantage of SME sector is its employment potential with low capital cost. Particularly in developing countries, SMEs are the only realistic employment source for millions of poor people in urban and rural areas (45). According to EU, SMEs are both socially and economically significant, because these enterprises represent 99% of total enterprises in European union member countries, and provided 99 millions of decent jobs, thus SME significant contribution in entrepreneurship and innovation in EU member countries (4).

SMEs are considered as the major contributor to GDP growth and employment generation in developing economies. For Example, SMEs constitute 99.91% of total enterprises and 97.1% employment, 55.6% of GDP and 59.9% of investment in Indonesia. Likewise, this sector involves 99% of all business units, 20% of GDP 60% of formal employment that is, 56.4 million posts of the job (46). Although the contribution of SME in the Turkish economy has mentioned, recent publication indicates that Turkey as an emerging economy has recorded the fast growth of employment in SME and large firms (47).

6.2 Role of SME in Equitable Income Distribution

It is generally, but often implicitly, assumed that economies with a large percentage of SME production in their total GDP probably have more equitable income distribution. It is understandable that the ratio of capital in manufacturing value added substantially increases with a shift toward large enterprises (LEs) development strategy, because of two reasons. First, LEs are capital intensive economic enterprises. Secondly LEs most often operate in an oligopolistic market. These features provide them with a market power to determine price above marginal costs. In such circumstances, the expectation of a sizeable unequal distribution of entrepreneurial income is completely predictable. On the other hand, substantial wage differences among SMEs and LEs means that a large percentage of output produced by SME sector than LEs, this leads to more of the wage bill belongs to workers in lower wage group of labor-intensive enterprises. Thus, this advantageous effects of SMEs on the distribution of labor income could be a strong argument for SME development policy than the efficiency effects (41).

Beck et al. (27) pointed out that SMEs have the ability to intensify competition, and entrepreneurship thus these enterprises have an external benefit on entire economy efficiency, innovation, and aggregate economic productivities. Therefore, the policymakers of developing countries have been encouraged in SME sector development through international funding and the results of economic growth analysis, in order to achieve more equitable economic growth and help to minimize the incidence of the high level of poverty (48). Since the sustainable growth of the SME sector is vital for enhancing per capita income and consumption, new job generation, and poverty reduction (49). As it motioned in the previous section, the World Bank approved more than $10 billion to support the SME sector in developing countries.

Furthermore, there are many shreds of evidence worldwide that show the role of SME development in alleviating the development challenges including inequality of income distribution in the economies. For example, South Africa has been faced with some development problems such as high levels of unemployment, poverty, income inequality, crime, and corruption. According to Fatoki(50) unemployment rate was 25.2%, the poverty rate in this country 13.8, and its Gini coefficient was approximately 0.65 based on expenditure data, while it was 0.69 based on income, which was one of the highest levels of inequality in the world. Other development challenges like crime and corruption also were remarkable. The country in 2014 was ranked 72nd position out of 177 countries in crime and 42th out 100 countries in transparency. Based on the study, which has been conducted by Asian Development Bank and the Organization for Cooperation and Development in 2014. SME development was proposed to be a basic instrumental solution for development problems of South Africa. Fatoki(50) analyzed the critical role that SMEs can play in South Africa's development problems. He reached to the same conclusion that SMEs are expected to play an important role in South Africa’s development challenges.

7. Challenges Faced by SMEs in Developing Countries

SMEs are an integral part of any economy and contributed a critical role in supporting stable economic development. SME development has a significant impact on upholding the economic growth especially that of developing countries. The development of this sector needs a combined effort of private entrepreneurs, government, and financial institutions (51). Although the SME sector is considered vital for economic development in developing countries, the growth of SMEs in these economies is facing some severe challenges.

Plentiful researches have been done to explore the challenges that SMEs are facing in developing countries. Each of the researchers investigated the SMEs challenges from different aspects in their studies. They have identified the problems and proposed the solutions (52). Among the others, Pandya (53) divided all challenges that SMEs are facing in developing countries into two broad categories such as organization specific and system specific. Hussain et al. (51) have focused on the low accessibility of financial resources, low human resource capability, and low technological capability. The most critical challenges that SMEs are facing in developing countries has described below.

7.1 Financing Constraints in Developing Countries

SMEs’ insufficient accessibility and cost of finance are mostly considered as one of the most critical barriers to the growth of SMEs in developing countries. Financial constraints are the major challenges that have related to the high rate of SME failures in developing economies (53). The results of a cross-country empirical survey over 71 countries on SMEs' financing which accomplished by Beck (2007), reveals that the 35% of all SMEs in the sample, mostly developing countries have ranked the cost of finance as the...
major constraint than the other features of the business environment. Even it was scored higher than the tax rate and macroeconomic instability. However, the other SMEs in the sample also ranked the cost of finance as a substantial obstacle to growth. On the other hand, access to financial resources is ranked as a major restriction on growth by nearly 30% of SME in the sample. In addition, the financial constraint is one of the few features of the business environment that directly affects the firms' growth (54).

Moreover, many other studies indicate the insufficient accessibility of SMEs to financial resources in developing countries. For example, Hussain et al. (51) describe that SMEs in China achieve merely 12% of their capital in the form of bank loans, while their counterparts in Malaysia and Indonesia acquire 21% and 24% of their capital as banking loans respectively.

As 2012 data shows SMEs access to bank loans in some Asian and Pacific developing countries have improved, especially among the members of Asian SME Finance Monitor countries the ratio of the lending scale of SME to GDP is relatively large. This ratio is 38.9% for South Korea, 33.7% Thailand, 20.1% for Malaysia, while this ratio remains quite low in other Asian countries. For example, it is 7.8% for Cambodia, 6.7 for Bangladesh, and 4.8% for Kazakhstan (55). However, in Turkey, most of SMEs have access to finance, but the total volume of credit extended to SME are not enough (56). The share of SMEs in total banking loans is 26% in Turkey (57).

7.2 Low Technological Capability

The low technological capability is recognized as one of the main obstacles to SME growth in developing countries. Indeed, low technological capability prevents the SMEs of developing countries from completely grabbing the benefits of modern technology. Owing to this very reason SMEs in developing countries remained with a low level of productivity, low-quality products and exporting to small and local market. In fact, all these massive problems originating from using conventional technology due to the limitation of the human capital (53).

In the Turkish economy, a low technological capability is one of the most challenges to SMEs growth. Insufficient knowledge and using low levels of technology are prevalent in the SMEs sector of the Turkish economy. A clear majority (89%) of manufacturing SMEs are active in medium-low and low-level technological industry sectors (58).

7.3 Low Accessibility to Human Capital

The SMEs growth or failure does not only depend on the accessibility of financial resources or modern technology. However, the SMEs prosperity and development also related to the abilities and knowledge of the human capital of entrepreneurs and its staff. Human capital helps the SMEs in any economy to increase competitiveness and productivity. Moreover, human capital enhances the innovative abilities of the SMEs (53).

Unfortunately, one of the major restrictions on SMEs development in developing countries is low human resource capabilities. In fact, human resources in SMEs of developing countries are relatively weak regarding their knowledge in market analysis, marketing skills, product, and process innovations as well as in the field of business planning and financial management. Thus, SMEs are required to design capacity building programmers to enhance the entrepreneurial and managerial skills of their staff to increase the effectiveness of SMEs sectors in developing countries (51).

Turkey as a developing country has a substantial, but unused potential for entrepreneurship development. One of the relevant reasons for refraining from starting a new business in Turkey is lack of technical knowledge concerning the preparation of business plans. Therefore, entrepreneurship is commonly desired, but it seems more difficult for a young entrepreneur. On the other hand, a relatively high rate of social security premiums in Turkey than other developing countries increases the cost of skilled labor in the Turkish economy, in comparison to the counterpart’s economies. This problem combined with the low level of employees’ technical capability, generate difficulties to improve the competitiveness of SMEs in Turkey (58).

7.4 Low Quality of Managerial Capital

Managerial capital consists of four skills such as administrative skill, technical skill, human skill, and citizenship behavior, all together called managerial capital. Access to such capital is considered as a comparative advantage for all enterprises especially for SMEs (59). The managerial structure of SMEs is substantially different from the large firms, in the large firm senior managers have the ability to delegate some of their responsibilities to the second or third level managers. Hence, they have free time to focus on knowledge management. While the situation of SMEs is entirely different from the large firms, in the case of SMEs the managers most often are the owners of the firm, and the process of decision making is much shorter. It implies that if the SMEs managers equipped with the managerial capital, they can increase the productivity and competitiveness of their enterprises (60).

Managerial capital can affect the production function of enterprises in two different ways. First, based on the argument that firms with superior managerial input are capable to improve the marginal productivity of the other inputs. Second, managerial capital effects on production functions through its influences on the decision making about the choice of quantitative and qualitative of both capital and labor inputs that firms buy or rent. Thus, if SMEs have limited access not only to physical capital as well as to managerial capital, the manager experiences can solve the administrative problem of the firm and the capital constraint. In order to show the impact of managerial capital on firms’ production function, we can incorporate the idea of managerial capital into endogenous growth theory, through the assumption that managerial capital is part of the intercept shifter A, in the production function $y = Ak^\alpha(1-\beta)$. This production function explains that a high level of other
factors of production cannot increase the level of output if managerial capital is meager in SMEs (61).

There are evidences that managerial capital in developing countries is relatively lower than developed countries. Therefore, SMEs in developing economies are often poorly managed, which considerably reduces the SMEs productivity and growth. This problem becomes more severe as the size of the firms’ increases to 100 employees or more because a larger number of employees necessitates a standard management system (62).

7.5 Poor Governance Environment

SMEs’ productivities are negatively affected through relatively poor legal and crime prevented systems as well as by corruption in developing countries. Since the performance of legal systems is weak in these countries, hence protection of property rights and enforcing the contracts are mostly problematic. Therefore, anti-trust policy is not strong as it is in developed countries (63). For example, Yang (64) analyzed the impact of governance environment on SME performance in Latin America and the Caribbean (LAC). The region has characterized by a large number of SMEs per capita at the national level, and also LAC contains a higher proportion of SMEs relative to other regions in the world. In his study, he found that in LAC region innovative SMEs are obstructed by poor governance environment.

Paunov (65) analyzed the impacts of corruption on the ownership of quality certificates and patents by small and large firms. He found that corruption has significantly negative impact on firms’ ownership of quality certificates in sectors, which utilize quality certificates more intensively. Şeker and Yang (66) conducted an empirical study to analyze the effect of bribery on the firm’s growth. They found that the growth rate of SMEs severely affected by bribery. Owing to these reasons one of the essential challenges of SME development in developing countries is poor governance environment.

7.6 Volatility of Macroeconomic

Economists are principally concerned regarding the high rate of output fluctuation in economies because they believe that output fluctuation is related to other negative characteristics of underdevelopment. The global economic experiences indicate that consumption volatility is even higher than output fluctuation in most of developing counties relative to developed countries. Hence the costs of economic volatility on the economic growth of developing countries appear to be very high. There are many shreds of evidence that a higher economic volatility rate reduces the rate of economic growth. There is no doubt that the high rate of macroeconomic fluctuation tends to reduce investment in physical and human capital (67).

Loayza et al. (68) pointed out that the negative impact of economic volatility on the economic welfare of developing economies is twofold. This is because not only the impact of macroeconomic volatilities on developing economies is twofold. Moreover, these economies face more macroeconomic volatilities than developed economies. They also believe that macroeconomic volatilities originate from three different resources such as exogenous shocks, domestic shock, and weaker shock absorbers. Among other negative impacts of macroeconomic volatilities on the economic development of developing countries, Tybout (63) puts more emphasis on the adverse effect of domestic price fluctuation on SMEs development.

Conclusion

SMEs affects capital formation by enhancing the physical capital stock of all economies, especially of developing countries. Recent kinds of literature reveal that SMEs constitute 99% of all operating firms in advanced countries, these enterprises provided job opportunities for 70% of the labor force on average and involve between 50-60% of the value added on average. While in developing countries, it is hard to determine the exact number of SMEs because of existing of robust informal sector. However, SMEs employed up to 45% of the labor force and produce 33% of the total national output. Thus, by considering the contribution of the informal sector, SMEs’ contribution increases to more than 50% of employment and GDP in all economies irrespective of their income level. SMEs effects on capital formation in different ways such as through increasing private investment, resource mobilization, inducing public-private partnership, encouraging foreign direct investment and human capital formation. Furthermore, SMEs development policy promotes equitable economic development and income distribution in developing countries.

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