

Capital Formation and Economic Development

Dr. Sultan Ahmad Taraki¹, Dr. Mesut Murat Arslan²

¹Assistant Professor, Herat University, Economics Faculty, University Street, Heart- Afghanistan

²Professor, YILDIRIM BYAZIT University, Faculty of Political Science, Department of Economic Esenboğa Campus, Ankara- Turkey

Abstract: *Different theories of economic growth and development have approved that There is positive relation between capital formation and economic development. The main objective of economic development is the formation of economic and social overhead capital (or cost) in the economies. Public capital formation can directly influence the rate and productivity of private sector capital formation, and private sector capital formation in the form of new business formation has both direct and indirect impact on economic development.*

Keywords: Capital Formation, Balanced Capital Formation, Unbalanced Capital Formation, Impacts of Capital Formation

1. Introduction

There is a direct mutual relationship among economic development and capital accumulation or formation. Without capital formation, it is not possible to achieve the objectives of economic development such as reducing unemployment, realizing economic stability, and improving the standard of living for all citizens, and so on. On the other hand, economic development accelerates the process of capital formation.

The main objective of economic development is the formation of economic and social overhead capital (or cost) in the economies. These costs cause to improve the production process, which increases the total national product through the provision of more employment opportunities, improve the living situation and reduce poverty (1).

Thus, all nations irrespective of their level of economic development in order to meet their economic development objectives, they need capital formation. The notion of capital formation refers the process of building up or stocking the assets of value, to expand the amount of existing source of wealth or generate new sources of further wealth (2).

The essence of capital formation is equivalent to the accumulation of physical capital stock in an economy through investment on social and economic infrastructures. Any increase in the stock of physical capital can be generated by both gross private capital formation and gross public capital formation. The gross public capital formation accomplishes through two different sources, the government bodies, and the public enterprises (3). Governments by their autonomous investment in the infrastructural projects such as education services, public health services, power supply, transportation, construction of airports, highways, roads, water supply and sewerage, sanitation systems development enhance the productivity of private investment (4).

Khan and Reinhart (5) pointed out that public capital formation can directly influence the rate and productivity of private sector capital formation. Thus, the government has to implement policies to develop an environment in which private capital formation become more profitable because the private sector improvement has a considerable effect on

long-run economic growth and hence on the improvement of living standards.

Several empirical researches concerning economic growth have found a strong positive relationship between the ratio of capital formation and the rate of economic growth. Ndikummana(6) and Hernandez-Cata(7) separately studied the relation between capital formation and economic growth in Sub-Saharan Africa, Asia, and Latin America. They found a critical relationship among the rations of capital formation and economic growth. The studies reveal that during the 1990s, the ratio of total Gross Domestic Capital Formation (GDCF) to Gross Domestic Product (GDP) in Asia, which had a higher average growth rate than the rest of the world, was 27%, while the corresponding ratios were 20% and 17% in Latin America and Sub-Saharan Africa respectively.

To sum up the relationship between capital formation and economic development; capital formation is not only a result of the investment in capital equipment that leads to an increase in production. Indeed, capital formation provides employment opportunities, improves technological growth, which in turn helps the economies to realize economies of scale in production, and intensifies specialization. Furthermore, capital formation provides mechanisms, tools, and equipment for human capital development. Finally, capital formation expands the market and eliminate market imperfections.

2. Literature Review

2.1 Capital Formation Theories

Since the end of World War Two, we have been experiencing a worldwide struggle for the improvement of living conditions in less developed countries. Especially after the quick success of Marshall Plan for the rebuilding of the European economies. Since that time several economists who had been directly involved either in the Marshal plan or were in touch with the United Nations or other International Institutions such as the World Bank have put attention on the economic development and poverty reduction in developing countries (8). They were concentrated around the following question; why did some countries have experience of economic development while others that looked with quite similar features did not develop and remained

underdeveloped? As a result, two different schools of thought namely Balanced Development and Unbalanced Development theories emerged (9).

2.1.1 Balanced Theory of Capital Formation

Several authors have contributed to balanced growth theory like Rosenstein-Rodan (1943), Nurkse (1953), Scitovsky (1954), and Fleming (1955), all these authors are considered as the pioneers of balanced development theory. These scholars argued that underdeveloped countries bounded by a vicious circle of poverty. According to their arguments, in less developed countries manufacturing enterprises have not developed, because in these countries market size is not sufficiently large for their productions. The market size has not expanded because of lower per capita income, and per capita income remained low because industrial firms have not developed. They also claim that individual investment decisions are not able to break the vicious of poverty in these countries. Therefore, they suggest, to break the vicious circle of poverty in undeveloped economies, it is necessary to simultaneously expand industrialization in large part of the economy (9).

Each of the contributors of balanced growth model had interpreted this theory according to their view. To some of them, balanced growth means investing in underdeveloped sectors or industries in order to bring them to the same level as the other sectors of the economy. While for some others, balance growth implies that investment must take place simultaneously in each sector of the economy. However, for the other authors, balance growth means to maintain a balanced development between the industrial and agricultural sectors (10).

Balanced growth has a broad concept. Thus, it implies a simultaneous balance between different segments of the economy, such as balanced development among the consumer goods industries, the simultaneous improvement between consumer goods and capital goods industries, the balance between manufacturing and agricultural sectors, the balance between domestic consumptions and foreign trades. Further, it means the balance between social overhead capital and directly productive investments, and balance between vertical and horizontal external economies. Finally, balanced theory suggests the simultaneous and coordinated growth in all sectors of the economy (10).

Rodan (1943) via Big Push theory proposed that a big push or a sufficiently large program in the form of a large minimum amount of investment is necessary to solve development challenges in developing countries, and to launch them on the path of economic development (10). The core element of this idea is that investments in different sectors support each other in the form of complementary investment. It implies an increase in the production of one sector causes to expand the market size of the others. However, in contrast, if only one sector expands, it cannot be beneficial. While, if many sectors developed simultaneously, each of them could produce a profit. In this way, he wanted to explain the role of coordinated expansion, or a big push, as well as to justify the role of public investment in economic development (11).

The other well-known contributor of balanced growth theory, Nurkse, put more emphasize on presences of vicious circles of poverty in both on the supply and demand sides of the economy in developing countries. He said if these circles are broken then economic development will follow (10). Scitovsky (1954), and Fleming (1955) further clarified some other aspects and the necessary assumptions of the balanced growth theory.

2.1.2 Unbalanced Capital Formation 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 (8). 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 (9). 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.

2.2 Unbalanced Capital Formation as the Research Theory

In this research, unbalanced growth theory will be used to determine key sectors of the Turkish economy and we evaluate how key sectors have been changed as the economic structure of Turkey changed over time. Furthermore, this research is interested in analyzing the impact of key sectors in capital formation for poverty reduction through SMEs development in Turkey. Recently this theory widely has been used in the field of economic analysis by many researchers all over the world. Holz(12) applied backward and forward linkages in Chinese economic policy to determine the continued presence of the state with high-linkage sectors and the strategic withdrawal of the state from low-linkage sectors. Jahangard and Keshavarz(13) identified key sectors of Iran, South Korea, and Turkey by using input-output (IO) tables of these countries. Bekhet(14) searched how production structure in Malaysia economy changed, as the ranking sectors changed over the period 1983-2000, he used four IO tables, which has been published by Malaysia Department of Statistics, Bakhet also employed the Leontief model.

Yay and Keçeli (15) determined the key sectors of Turkey using the application of the General Equilibrium theory. Trinh et al. (16) studied the multi-interregional input-output model of Vietnam. They used 2001 IO table of Vietnam. Their study covered seven regions and ten aggregated sectors. In this study, they showed type I and type II multipliers from national, single, and inter-regional IO models. IO model used by many researchers for the purpose of calculating national linkages coefficients across the countries.

2.3 Capital Formation as the Main Driver of Economic Growth

A considerable number of studies have investigated to determine the main factors of economic growth and development. The researchers used different conceptual and methodological frameworks, each of them emphasizing to a different set of critical parameters. They proposed various insights into the sources of economic growth and development.

The study of economic growth is an essential subject of economic development and can be done both from theory and empirical perspectives. Empirically, we can analyze the economic growth of single country over a period using time series data; also, the dynamic growth analysis can be studied by taking cross-sectional data from different countries and make comparison among the countries. Moreover, the growth of a country can be analyzed from a theoretical perspective through different growth theories developed by different economic schools (17). In order to show the importance of capital formation in economic development, the research focuses on highly aggregated growth and development model.

There have been three streams of development in growth /development theory during twenty's century. The first stream began with the work of Harrod (1948), and Domar

(1947), or classical growth theory. The second stream is related to the development of the neoclassical growth model; this wave is associated with the work of Robert Solow (exogenous growth). The third stream that is known as the new growth theory has begun since the mid-1980s with the seminal works of Paul David Romer in 1986, and Lucas in 1988 (18). The primary focus of these developments theories is to determine the main driver of economic growth, and explain the role of capital formation in economic growth and development.

According to these growth theories investment is the most fundamental determinant of economic growth, and since investment is proportional to the stock of capital. Therefore, these models had an emphasis on capital formation by investing in physical capital, human capital, and technical progress.

2.3.1 Capital Formation in Classical Growth Model

The Classical and Keynesian economic growth theory as represented by Harrod-Domar growth theory have emphasized the role of capital formation and various form of technical progress. Harrod-Domar model developed by British economists Sir Roy F. Harrod in 1939 and Evsey Domar in 1946, independently, but their assumptions and results are identical. They founded their theory on the influential work of Keynes who explained why the market might be unsuccessful to provide full employment (19).

Their growth analysis shows that savings and capital-output ratios are the main determinants of growth. In Harrod-Domar analysis, growth is expressed as the outcome of investment to GDP ratios, and productivity of investment. They explained that investment expands both aggregate demand and aggregate supply in the economy. It means that as the amount of investment increase it will expand the gross domestic capital formation, resulting in more businesses will be established and output increases (20).

In this way, Harrod-Domar analysis shows that both saving rate and capital- output ratios are the main determinants of the growth rate. Still, these indicators are amongst the first aspects that are examined in any proposed or actual growth path (17). According to the Harrod-Domar model, the most obstacle of economic development in less developed countries is the relatively low level of new capital formation in these countries (20).

2.3.2 Capital Formation in Neoclassical Growth Model

Neoclassical growth theory initially has been developed by both Robert Solow and Swan in 1956 independently. The Solow –Swan general equilibrium model is considered to be a typical example of exogenous growth theory, and now their model is known as neoclassical growth theory (21).

Solow in 1956, criticizes classical growth model concerning its assumptions as the model assumes that for producing one unit of output it is necessary to use a fixed amount of each factor of production (labor and capital), as the cause of equilibrium growth. Indeed, this assumption represents a very narrow balance. Solow called it as balance on knife's edge (22). However, the standard neoclassical model solves the mentioned weaknesses of the classical model by creating

the output-capital ratio as an endogenous variable. Likewise, labor productivity growth becomes an endogenous variable as well, as the capital-intensity change. While technological changes consider as an exogenous variable. This modification has many advantages in the economy. First of all, these changes provide the adjustment opportunities of capital-output ratio through substitution of capital to labor or vice versa (18).

The founders of this model primarily were interested to represent economic growth as a result of capital formation, and they considered the case of technical improvement briefly in their original papers, but Solow in his famous study (1957) examined technical improvement for the period 1909 - 1949 in the United States. He surprisingly found that a large percentage of the growth in output per labor hour over that period came from technical progress. Here Solow's main conclusion is that technical progress appears to be natural when it comes to scale effects, it causes to change the production function, so does not have any effect on marginal rates of substitution at a given capital-labor ration (22). To show the relationship between economic growth and capital formation the research will concentrate on Solow economic growth model as the representative of the neoclassical growth model.

Solow in his model highlights that by existing flexible technical coefficient for factors of production there would be a tendency for the capital-labor ratio to modifies itself during the time toward the equilibrium ratio. He describes if the outcome of the initial ratio of capital to labor is high, then capital and output increase than the labor and opposite is true. Solow's study toward an equilibrium path or steady state can be started with any capital-labor ratios.

It can be realized from the Solow model that the problem of economic development and poverty reduction in overpopulated and underdeveloped economies can be solved through capital formation. Since the model describes that in any economy the total output (GDP) is a function of the factors of production (capital, labor), the labor or population continuously increases at an exogenous rate which is not predictable in the model. Therefore, economic improvement and poverty reduction in an overpopulated, poor economy is directly related to capital formation at a higher rate more than the population growth rate.

2.3.3 Capital Formation in Modern Growth Model

Modern (Endogenous) economic growth theories have been developed in response to both theoretical and empirical shortcomings of the neoclassical model. A group of well-known scholars like Romer, Lucas, King, Rebelo and others has developed models in which steady growth can be generated endogenously. According to these models, economic growth can happen without any exogenous technical progress at rates which might be related to tastes and technology parameters and tax policy (23).

The solution of the various problems of the neoclassical growth model needs to improve the production function in a way that allows for self-sustaining endogenous growth. Since one of the main drawbacks of the neoclassical model is related to their assumption that long-run growth in per capita income is entirely exogenous. In the lack of exogenous technical improvement, income per capita would

be static in the long-run, and this problem arises from the implication of diminishing marginal return to capital (24).

Therefore, in order to solve the problem and to provide long-run endogenous economic growth, the related researchers proposed that it is necessary to change the assumption of diminishing marginal product of capital to an increasing or at least to a constant return to capital. The solution was taken place through a radical change in the Solow's model by entering human or knowledge capital in the production function. In this regards the founders of endogenous growth model have developed some important points by focusing on the following three fundamental mechanisms. The basic endogenous growth mechanisms are as follows (23).

- 1) The positive externality of physical capital formation
- 2) Human or knowledge capital formation in the sense of labor-force scales; as Arrow's model indicates that model with increasing return can be compatible with perfect completion if a private return to capital is diminishing.
- 3) Development of patent system in an imperfect competition market.

These three mechanisms together provide never-ending growth. Romer (1990) pointed out that the firm market power supports the increasing returns to capital. Through a modification in neoclassical production function and its assumptions, the endogenous growth model highlighted many growth opportunities for physical capital and knowledge capital (24).

To describe the importance of capital formation in modern endogenous growth theory for economic growth and development, the research is focused on the AK model as the representative of endogenous growth theory.

According to Pack 1994, most of the contributors of the endogenous growth model have represented their theories by using equation $Y = AK$ Romer in 1986 Lucas in 1988, and Rebelo in 1991. In this equation Y is total output, A is known as an expression which shows the factors that affect technology, K indicates total stock of capital formation in the economy, which reflects both physical, knowledge or human capital. In this case, the marginal product of capital is not be diminishing anymore; it is constant. This is achieved by invoking some externality that offsets any propensity to diminishing return. This model highlights that any increase in the rate of capital formation (real investment by firms and in human capital by individuals) could bring about sustained economic growth and development (26)

2.4 The Process of Capital Formation

The process of capital formation encompasses the following three interrelated stages (27):

- 1) Encouragements to increase the volume of real savings in the economy;
- 2) Mobilization of savings using financial and credit services institutions;
- 3) Investment of savings.

As the process of capital formation indicates, capital formation is not an easy task. Particularly in less developed countries, the problem of capital formation becomes two-fold; the first problem is about improving the propensity to saving of the citizens in this group of countries. The second problem is concerning, how to utilize and where should utilize the amount of saving. The answers to these questions lead us to the sources of capital formation, which are categorized into internal and external sources. There are many domestic sources of capital formation in underdeveloped countries that need to improve: growth in GDP, stimulating of domestic savings, and establishing of financial institutions (10).

2.4.1 Saving

Saving is the first stage of capital formation. In this step individual households, firms and government institutions set aside a part of their current income or the available resources for future consumptions, or to allocate them for future investment in capital goods like buildings, capital equipment, new businesses, machines, roads, schools, hospital, and so on. Savings provide essential economic effects in any economy both at the household and national levels. For instance: in United States savings protect the households against the life events and help them to increase their wealth. While in national level savings support the financial market in establishing the world largest, and most liquid financial market, and provide a dynamic entrepreneurial economy (27).

The volume of saving in any economy is related to some factors such the ability to save, will to save of economic units and the incentives of increasing rate of profits and the government's role as a saver. The ability and willingness to save in a country depends on the level of income, the size of the family and the standard of living. Incentives of increasing rate of profits are depended on some incentives that should provide for producers, such as protect them against their international competitors. Finally, the government could save by adopting some fiscal and monetary policies (28).

2.4.2 Financing

The second step of the capital formation process is the mobilization of savings to investment project through financial institutions. There is a sizeable cross-country empirical evidence concerning the positive relationship between financial market activities and the level of economic development. The studies revile that the share of financial services in economic development increase over time, as the societies' living conditions improve consumers and businesses request better quality financial services (29).

Financial institutions development plays a significant role in the mobilization of saving in less developed countries. Since well-functioning financial institutions are not developed in underdeveloped countries, therefore a large percentage of current unspent income in these countries is hoarded in the form of cash, jewels, gold, land, and so on. Thus, to stimulate capital formation in less developed countries, it is needed to establish financial institutions where small savers safely and with high confidence be able to deposit their savings. In this regard, the Central bank can fulfil a

significant role by setting up a well-developed capital and money markets (10).

2.4.3 Investment

The third stage of capital formation process is the utilization of saving into productive investment projects. In this stage, entrepreneurs play an important role with their productive investment. They improve production capacities and provide new employment opportunities. Moreover, the productive investment brings about modern production methods, which supports technological progress and helps to realize the economies of large-scale production along with intensifying division of labor and specialization. Finally, productive investment increase machines, tools, equipment, and methods for human capital formation (10).

The rate of investment in developing economies is quite low due to some reasons. First of all, in these economies, the factors that determine the level of investment are not developed very well. Indeed, investment increases with any positive changes in the level of savings, and the number of financial institutions to collect and mobilize the savings to investment. However, in these countries savings are insufficient due to the low rate of per capita income and extravagance expenditures. Therefore, the ability and willingness to savings appear to be considerably limited. On the other hand, owing to political and economic instabilities, high-income class and almost all middle-income classes are interested in accumulating certain types of durable consumer goods like jewelry and precious ornament as a form of personal saving and investment. Since these kinds of consumer goods constitute the excellent sort of savings and storage of values in the countries which are characterized by political instability, inflationary pressures and absent of well-developed financial institutions. Therefore, the level of investment in such countries is inadequate (30).

Consequently, the capacity of developing countries to undertake productive investment seems to be very limited. Thus, such circumstances cause to arise many questions about the capital formation in developing countries. For example, how developing countries will be able to increase the rate of capital formation? How will these countries be able to achieve economic development and breaking the vicious circle of poverty? And so on.

Hirschman (1958) pointed out that the problem of economic development is not just about finding a single key factor such as capital, abilities, information, technology, or institutions and put it into the economic process. In contrast economic development is concentrated to find and realize latent capacities and scattered resources in any national economy. Therefore, the fundamental problem of economic development involves in producing and energizing the entrepreneurship activities to collect the scattered resources, realize latent capacities and know how to efficiently use the economic resources, which are currently using very poorly in the economy (31).

Economists have long recognized the situation of existing hidden and unutilized resources as well as disguised unemployment as the main characteristics of underdevelopment economies. So, in such circumstances,

underdeveloped economies are able to mobilize vast hidden reserves of unskilled labors from the agricultural sector and combine them with underutilized resources. In this way, these countries can form capital, develop entrepreneurship, and provide other prerequisites of economic development (32).

According to Hirschman, it is needed to put distinguish between the problem of cyclical unemployment in the developed country and the problem of development in a developing country. During a recession in developed economies unemployed labor exists side by side with an unutilized capacity of plant and equipment. The solution of the cyclical unemployment problem in developed economies just it is needed to reunite the unemployed labor force with existing unutilized capacities through a binding agent similar Keynesian remedy. While in underdeveloped countries there are disguised unemployment, but there is not existing unutilized capacity. Hence, the problem in underdeveloped economies is structural rather than cyclical (32). As it mentioned above in underdeveloped countries, there is not idle capital or skilled worker resources that carry out and to be utilized. Whereas as it pointed out that underdevelopment economies not only have disguised labor force in the agricultural sector, they also have unutilized capacity in savings, latent or misdirected entrepreneurs, and a wide variety of usable skills. Here the task, which has to be done is to combine all of these ingredients; this task is a little bit harder than the recombination of idle factors of production.

2.5 Impact of Capital Formation on Economic Development

Capital formation supports economic development in various ways through a fuller utilization of available economic resources. Efficient allocation of available resources leads to an expansion in the volume of national output, income, and employment. Hence capital formation solves many economic challenges like inflation, trade balance deficits, and makes the economy free from the problem of foreign debts. Developing countries mostly suffer from trade balance deficit. These countries typically export primary products such as raw materials and agricultural products. While their imports comprise manufacturing, semi-manufacturing, and capital goods. Thus, domestic capital formation is considered one of the best solutions for trade balance deficit. In this regard capital formation effects on economic development through the creation of new business formation in import-substitution industries. Import-substitution industries not only reduce the imports of manufacturing and semi-manufacturing commodities also opening many other chances for domestic investors in the other economic sectors of the economy (10).

Consequently, by producing various types of consumer and capital goods, the volume of import decreases, and the exports of manufactured goods will start. Therefore, capital formation helps the economy to solve the problems of trade balance deficit, control inflation, and reduce unemployment.

According to Fritsch (33), capital formation affects economic development by establishing new firms. New firms represent an entry of new capacities into the market,

which can affect economic development both directly through the demand side and indirectly via the supply side of the economy.

Supply-Side conditions commonly reflect the willingness and desirability of investors in business formation, here the investors comprise wages, skill, technological change, industrial organization, and overall business environment, which also determine the competitiveness of the industry. While the demand-side conditions include domestic consumptions, international trade, and demand for foreign direct investment (34).

2.5.1 Direct Effects of Capital Formation

Capital formation through business development directly stimulates economic development. New business development reduces unemployment via new job creation and increases economic productivity through intensifying competition in the demand side of the economy. Furthermore, capital formation affects poverty reduction by generating new income. The most critical direct impacts of capital formation on economic development can be described, through both new job creation and productivity improvement.

2.5.1.1 Effect through Employment growth in Demand Side

Capital formation through new business creation has a direct impact on local employment growth. The direct effect of capital formation on local employment growth by definition is positive in short-run. This effect refers to the new job opportunities that create within the new firm for both entrepreneurs and new employees immediately at the first and following years. While the medium and long-run dynamics effects of capital formation on employment growth are related to indirect effects (35).

Birch (1979) was the first scholar that studied the impact of capital formation on employment growth. He found that small and particularly new businesses are the main employment generation in the United States (33). Birch study initiated many studies concerning the impact of new business formation on employment growth.

Stel and Suddle (36), studied the relationship between a new business formation and regional employment growth in the Netherland. They used new regional data for the period 1988-2002. These researchers found a positive direct effect of new firm formation on regional employment growth.

There are also many forms of indirect effects of new business formation on employment generation that may have positive or negative effects on employment. For example, one may think that employment will decrease as a result of competition among existing and new firms. However, there is also a positive effect.

2.5.1.2 Effect through Productivity Improvement

Capital formation through new business formation boosts economic productivity in any economy by intensifying competition between new and existing enterprises. Competition among these entities leads to survival of the most productive firms. Even though overall employment will decline, but new business can foster productivity. This

effect of the business formation may not occur immediately in short-run, but it will happen in the medium run. Economic productivity increases due to two different reasons. First new entities intensify competition in the market and hence reduce the market power of existing firms, and induces them to increase their productivities or leave the market. Secondly, just firms with a high degree of competitive advantage will enter the market and successfully continue with their operations (37).

As we mentioned above new business formation in overall has a positive effect on productivity, but this effect can sometimes be negative in the initial years, probably because of adjustments to routines and strategies in response to the new entrants. In general, a positive relationship is very strong for firms with high-growth ambitions and an innovative one, and this effect is considerably weaker for firms with low-growth ambitions. Productivity effect describes that competition generally increase the productive use of factors of production and natural resources in an economy that intensifies economic development.

2.5.2 Indirect Effects of Capital Formation

Capital formation through new business formation imposes further effects on economic development. These effects, which are rather indirect in nature stem from intensified competition between new entry and existing firms pertain to the supply-side of the market (39). Indirect effects of capital formation could be classified into the following supply-side effects (40). Figure 2.1 indicates an overview of the different effects of new business formation on economic development.

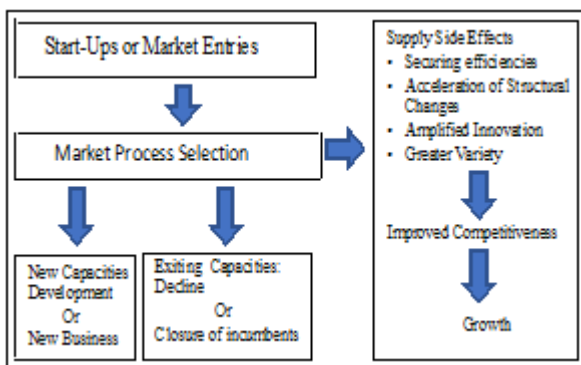


Figure 2.1: New Business Formation and Market Process

Sources: (33)

2.5.2.1 Effect Through Securing Efficiency

Securing efficiency in any economy can be protected by establishing a market position in the competitive market. So not only the actual entry, likewise the very possibility of an entry motivates the existing firms to operate more efficiently (33). Kritikos (38), argues that capital formation via establishing new businesses formation induces the existing firms to secure their efficiency. The newly created firms will try to increase their market share in the domestic market. They can achieve their objectives through the shrinking of the market position of the existed firms in the economy. Hence as a result of new business formation, the market power of existing firms will shrink and be enforcing them to produce more efficiently or leave the market. In such circumstances, only the firms who produce more efficiently

than the competitors are able to grow, while inefficient producers have to exit the market.

2.5.2.2 Effect through Structural Changes

In principle, new businesses formation plays an important role in structural change across sectors and within the manufacturing industry as well as in the relationship of employment growth.

Industrial structural changes generally accomplish by income level of manufacturing enterprises. For instance, as the establishment of new manufacturing firms increased in the market and joined by existing firms, the new firms challenge existing firms and enforcing incumbents to improve their products and production technologies constantly. The firms that do not have enough financial and knowledge resources are not able to undergo necessary internal improvements; thus, they have to leave the market and substitute by the new entrance. This process has been called, creative destruction by J.A. Schumpeter (33).

On the other hand, the creative and fittest firms those who are well equipped with adequate financial and knowledge capital remain to survive and governing economic growth, by restructuring their products and production technologies (37). Impacts of capital formation through new firm formation on structural changes in any economy is manageable by the supply and demand sides conditions.

2.5.2.3 Effect Through Amplifying Innovation

New business formation theoretically has relation with innovations, particularly if new business formation has connected to market creation or new production method (37). There are ample empirical studies concerning essential innovations that have been introduced by new firms. Fritsch and Mueller (38) found that new firms can play a significant role in driving structural improvement by exploring new markets in which new firms are able to produce diverse good and services through the innovative entry.

Furthermore, a new firm can be developed based on exploitation and exploration methods. As Schmitz (1981) pointed out, new firm formation based on exploitation strategy relies on imitation of an existing business idea, while new firm formation on exploration strategy is always trying to find new ideas. However, it would be better to use resources into both imitation and the direct production of new knowledge methods. In fact, by implementing this method individuals will obtain private benefits through the accumulation of new knowledge (40). Capital formation through new business formation amplifies innovations by inducing incumbents to explore new markets or new production methods.

2.5.2.4 Effect Through Product Diversification

Capital formation through new business development dramatically increases consumer satisfaction and protects the markets against economic shocks. If the new entry firms introduce new products, or new techniques of production, which are different from the existing firms in the markets. Thus, newcomers improve economic diversity and lead to greater accessibility and problem-solving methods. Economic diversity increases the probability of growing new

suppliers, those supply goods and services that match better with the consumers' needs and preferences. Improved diversity due to finding new suppliers may encourage and intensifies division of labor as well as stimulates more innovation in other sectors of the economy. Hence, new firm formation creates substantial impulses for economic development (33). On the other hand, new business formation also can be motivated through industry development (41).

According to the knowledge spillover theory of entrepreneurship, the entrepreneurs enlarge their investment based on the knowledge that is produced by the existing firms in the economy. For instance, assume that as a result of the R&D activities of existing firms new knowledge is created, and the incumbents avoid the commercialization of the created knowledge. In such a circumstance, the entrepreneurs will find opportunities to extend their investment in development of new firms based on the existing knowledge, by completing the construction process of new firms based on current knowledge. Then again knowledge and routines are spillover to other sectors of the economy, which causes to create increasingly new businesses in the economy. There are two different basic implementations of this theory. First, in economies with a high rate of knowledge production the rate of new firm formation must be strong. Second, new firm formation disseminates knowledge, and indirectly contribute to products diversifications in the economy (37).

The effects mentioned above are rather indirect in character and bring about supply-side improvements. Therefore, these effects are not only related to the industry in which the new firms are formed, but also these effects may be observed in downstream industries that use the improved supply as an input in their production processes. Moreover, these effects will not remain limited to the region in which new business is developed; they also can appear in other regions. Indirect supply-side effects are considered as the main drivers of competitiveness improvement of the respective industries that may stimulate employment growth and increase social welfare (33). The supply-side effects are the reasons why we should expect positive employment effects of the new business formation.

3. Conclusion

Since the end of World War II, a growing attention received to the capital formation theories of economic development as a framework for poverty reduction in less developed countries. As a result, two schools of capital formation (Balanced and Unbalanced) has emerged. Although these schools have completely different ideas about capital formation and poverty reduction, both of them support industrialization strategies for breaking the vicious circle of poverty. Capital formations the process of energizing entrepreneurship activities to collect the scattered resources which require legalizing latent capacities and know how to use the economic resources efficiently, this process stimulates economic development both directly and indirectly. The direct impact of capital formation operates through employment creation in demand side and productivity improvement. The indirect impact works

through the supply side of the market which stimulates economic development by increasing efficiency, structural changes, and amplifying innovation.

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Author Profiles



Dr. Sultan Ahmad Taraki, Assistant Professor, Herat University, Economics Faculty, University Street, Heart- Afghanistan



Dr. Mesut Murat Arslan, Professor, YILDIRIM BYAZIT University, Faculty of Political Science, Department of Economic Esenboğa Campus, Ankara- Turkey