

**T.C.  
ISTANBUL COMMERCE UNIVERSITY  
GRADUATE SCHOOL OF FOREIGN TRADE  
DEPARTMENT OF INTERNATIONAL TRADE PROGRAM**

**THE EFFECT OF CAPITAL ACCUMULATION ON ECONOMIC  
GROWTH IN SOMALIA**

**MASTER'S THESIS**

**ABDIWAHID IBRAHIM HASSAN**

**200024686**

**Istanbul, 2022**

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**Advisor by:**

**Assoc. Prof. Dr. Mustafa Emre CIVELEK**

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## **ABSTRACT**

This study aimed to determine how 1980–2020 capital accumulation in Somalia affected the country's economic development. This research uses the OLS technique to analyze the correlation between investment and economic expansion. OLS technique is used to analyze the correlation between investment and economic expansion in this research. World Development Indicator and SESRIC data were mined for their time series information.

The researcher utilized FDI, GDP, and Inflation as covariates to examine how these factors affect unemployment, and we looked at total saving, GDP, and gross capital formation as independent variables. Unemployed workers were used to quantify unemployment, real GDP was used to evaluate production, foreign direct investment (FDI) was used to evaluate net inflows at constant prices, and the GDP deflator was used to quantify price increases.

The study's primary conclusions are that gross capital creation and saving contribute positively to economic development, whereas foreign direct investment has a negative impact.

**Keywords:** capital accumulation, foreign direct investment, economic growth.

## OZET

Bu çalışma, Somali'de 1980–2020 yılları arasında sermaye birikiminin ülkenin ekonomik kalkınmasını nasıl etkilediğini belirlemeyi amaçlamaktadır. Bu araştırma, yatırım ve ekonomik genişleme arasındaki ilişkiyi analiz etmek için OLS tekniğini kullanmaktadır. Zaman serisi bilgileri için Dünya Kalkınma Göstergesi ve SESRIC verileri çıkarıldı. Araştırmacı, bu faktörlerin işsizliği nasıl etkilediğini incelemek için ortak değişkenler olarak DYY, GSYİH ve Enflasyonu kullandı ve bağımsız değişkenler olarak toplam tasarruf, GSYİH ve brüt sermaye oluşumuna baktı. İşsizliği ölçmek için işsiz işçiler, üretimi değerlendirmek için reel GSYİH, sabit fiyatlarla net girişleri değerlendirmek için doğrudan yabancı yatırım (DYY) ve fiyat artışlarını ölçmek için GSYİH deflatörü kullanıldı. Çalışmanın birincil sonuçları, brüt sermaye yaratma ve tasarrufun ekonomik kalkınmaya olumlu katkıda bulunduğu, buna karşılık doğrudan yabancı yatırımın olumsuz bir etkiye sahip olduğu yönündedir.

**Anahtar Kelimeler:** Sermaye birikimi, doğrudan yabancı yatırım, ekonomik büyüme.

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## **DEDICATION**

I certify that this thesis is written solely to meet the requirements for a master's degree. It had never been submitted to another university before. In this paper, all supplementary materials and resources are acknowledged and referenced properly.

Abdiwahid ibrahim Hassan

30/12/2022



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## LIST OF ABBREVIATIONS

<b>OLS</b>	: Ordinary Least Squares
<b>SESRIC</b>	: Statistical, Economic and Social Research and Training Centre for Islamic Countries
<b>FDI</b>	: Foreign Direct Investment
<b>TS</b>	: Total Saving
<b>GDP</b>	: Gross Domestic Product
<b>GCF</b>	: Gross Capital Formation
<b>ROI</b>	: Return On their Investment
<b>FAO</b>	: Food and Agricultural Organization
<b>TS</b>	: Trade Surplus
<b>TFP</b>	: Total Factor Production
<b>EPGEG</b>	: Effect Of Productivity Growth On Employment Generation
<b>GSP</b>	: Gross State Product
<b>BEA</b>	: Bureau Economic Analysis
<b>EGA</b>	: Endogenous Growth Approach
<b>GFCF</b>	: Gross Fixed Capital Formation
<b>HCF</b>	: Human Capital Formation
<b>PGR</b>	: Population Growth Rate
<b>GFI</b>	: Gross Fixed Investment

## 1. INTRODUCTION

Capital accumulation is a way of acquiring additional capital stock in the productive process. It can involve fixed physical capital (machines and factories), portfolio (shares, bonds, and cryptocurrencies), and other fixed assets such as housing. It may refer to either wealth growth or more riches development. It is possible to separate it from savings due to the fact that accumulation focuses on increasing the stock of required actual investments. In contrast, savings do not necessarily include any investments at all. Capital accumulation is the current value minus the amount invested (Aderemi, 2012). Figure 1 clearly illustrates capital accumulation. As the figure shows, with 5% of property growth and 6% of rental yield, the investor gained almost one million increases in wealth.

The term "capital accumulation" describes the process through which the value of an asset increases over time as a direct consequence of investments made or profits earned. The production of profits or other forms of income for an organization is the one and only purpose of accumulating capital. Therefore, the act of a company purchasing assets that will produce value or making investments that will generate profit may be referred to as capital accumulation. There are a variety of channels via which people and businesses may amass financial resources. For instance, a company might get value from an asset by collecting rent, capital gains, and interest payments. Increasing one's wealth may also be accomplished via the process of making investments.

This preamble is necessary because, historically, talks about capital accumulation and economic expansion have been naively misconstrued on several occasions. This study does not argue that the rate of growth may be induced simply by increasing the stock of capital. Additionally, it is not stated that a lack of money is the lone or even the biggest obstacle preventing economically developing nations from achieving their full potential. Due to the multifaceted nature of economic expansion, it stands to reason that any one cause or collection of variables may either foster or stifle expansion, depending on the specifics of the situation.

Foreign currency shortages, a lack of technically skilled personnel, a lack of entrepreneurial and management aptitude, and a failure of State initiative have been shown to be more substantial impediments in the national and international contexts of many of the under-developed economies. The current article wants nothing more than for attention to be paid to the importance of capital accumulation in the expansion of the economy.



Inasmuch as the drive to amass wealth originates from the need to establish a distinct line of production, capital formation serves as a means to an end rather than the end itself. Yet, state administration has a great deal of sway over it and may shape it in a number of ways, making it a very significant factor. Given that most nations' current planning involves investments, this takes on added significance. The percentage of wealth concentration, or the portion of current income set aside to invest in the production of products and activities for upcoming expenditures, is a crucial policy decision. A nation's preference among now and upcoming expenditures is reflected in this decision.

Investing choices in the individual sector are made at a very local level, leading to a regional average that reflects what people have accomplished as a group in practice yet may not exhibit any deliberate selection or planning aspect of deliberate choice or strategy. A sector in which the government not only regulates development via budgetary, financial, and industrial policy but also has a direct impact over stock issuance, international currency distribution, and other precious elements of manufacturing like concrete and metal, and coal, is radically unique. In addition, however, is the government service, which funding may either encourage or prohibit growth in a given area depending on whether it is competing with or supportive to personal service development in that area. Government funding is often used to build infrastructure like roads and electricity plants, which may perform a greater significant impact.

Not only should highlight, that wealth may be replicated, but also other important facets to consider. The region's "lumpiness" is an essential feature. Negligible funding choices don't start the self-sustaining phase of financial development that high injections of funding causing fundamental improvements to do. When we couple the "lumpiness" issues with the reality that property is not a constant once it is generated, we get some very serious fallout. Of course, there are funds that may be put to many uses, but in most cases, the assets they affect become more specialized after the fact; for example, after an infrastructure has been constructed, it cannot be used to produce steel. Funding errors are difficult, if not impossible, to undo, thus it's crucial to proceed with great prudence and prudence when allocating funding capital.

Due to the heterogeneity of newly formed equity, various categories can be established to categorize it based on factors such as (a) the process division or market of use, (b) the longevity or existence of the property, (c) the physical concentration with regard to the domestic and international element, and (destination, which in a region like Pakistan or Italy, due to the

regional area of the two chambers and/or wildly differing levels of growth, may presume a fantastic importance. To put it another way: "funding that is either "independent" or "inspired," "lon-Tange" or "summary," or "production" or "consumption" funding. The two main categories of funding in response to rising trend are (i) routine maintenance and (ii) investments made with the explicit goal of boosting output "potential as a result of a decrease in the percentage of surplus ability to ordinary production or as a result of an increase in trend for, or increase in the cost of, consumer goods. Funding in "production" may result in the introduction of previously unavailable resources, an increase in the quantity of already available resources at a reduced cost, or an improvement in the value of currently available commodities. There is also the possibility of subdividing wealth into "initiator" and "matching" forms. Massive "initiator" expenditures in the car sector have spurred similar spending in leather and aluminum production, oil refineries, street construction machinery, gas and facility centers, and so on.

Somalia has significant short- and long challenges related to preserving a sustained and reasonably strong GDP development rate. Somalia has to spend extensively in new enterprises, information, intellectual resource, and facilities to carry up the economic pace it has recently seen. This is in addition to replacing and upgrading its outdated financial assets in the energy and non-sectors. Although strong GDP increases each earnings to at least the level of intermediate nations, it may be seen as a desirable goal since it can be used to alleviate hunger and further advancement. A reasonably strong rate of financial development is required to enhance the requirement for employment in light of the fact that generational and gender characteristics predict a pretty high rate of expansion of worker supplies in the following generation. Fast birth rate of 2.6% per year pushed the total number of people in the world from 26 million in 1966 to approximately 66 million in 2010.

Historical trends indicate that population growth will moderate over the following century, with projections placing it at 1.65 percent. When compared to the overall population growth, the increase in people of labor age (aged 15-64) will be around 2.6%. The World Bank predicts that by the year 2010, the global population would have reached 75.9 million. The number of people of employment age will increase from its current forecast of 43 million by the end of 2002 to 51 million. The volume of individuals in need of employment will expand rapidly in the not-too-distant future for reasons beyond simple population growth, such as the anticipated growth in the female employment sector engagement rate. Rising jobless and hunger, especially

within the young, are two undesirable societal outcomes that might emerge from failing to attain a reasonable pace of economic development.

Somalia confronts significant challenges on its path to the upper middle class, while having the financial power for an above-average income rise and the ability to enter the list of elevated nations like South Korea. Participants have a set of fundamental freedoms that must be recognized and safe guarded by law frameworks and judicial power; this is the basis for societal and financial development. The primary obstacles in strategy and leadership are the establishment of organizations and the introduction of mechanisms to lessen volatility and processing fees in order to boost productivity and encourage increased involvement from non-governmental organizations. After the aforementioned basic foundation is in exists, growth-friendly monetary factors have a considerably higher chance of succeeding.

Following several successive rounds of inadequate rainfall, 90% of Somalia is facing terrible desertification, including failing agricultural yields, pervasive droughts, and a reduction in animal output. This is the worst drought the nation has witnessed in minimum 40 years. Huge numbers of people are being forced to abandon their houses due to the climate, and the nation is on the verge of starvation as a result. The conflict in Ukraine has increased international bread and energy costs, exacerbating the problem. The increased product costs are having a disproportionate impact on hunger and contributing to widening income disparities. there is a strong emphasis on human security in the most recent Somalia Economic Update (SEU) analysis because of the importance it is perceived to play in reducing hunger and boosting equity. Somalia requires to participate in an embedded, surprising, and knowledgeable public safety structure that safeguards residents against dangers across the lifespan and encourages encompassing initiatives in order to fully realize the country's massive unrealized prospect in terms of its residents' public resource.

The study also emphasizes the demand to shift focus from social help to building initiatives as Somalia emerges from its fragile state. Harmonization of observing and analysis, capacity development, organization development, and administrative coherence in sectors like prioritizing and qualifying, reward ratios, and material interchange is strongly recommended for both emergency relief operations and state security net systems. The linkage of the global security net with state institutions is crucial for alleviating the unemployment problem and

establishing lasting endurance in a situation of restricted budgetary flexibility, such as that in Somalia.

In general, a corporation's value rises as its physical and intangible assets bring in cash. A company's capital might grow due to the interest it earns on its investments. It is possible for people and businesses to amass wealth via investing. For instance, a person makes an investment in a business with the expectation of financial gain. Capital accumulation may be accomplished by purchasing stocks, bonds, or even other businesses. Another way businesses and people can make money is via the return on their investments (ROI). Another method of amassing capital is acquiring investment assets, which implies a rise in the value of a company's holdings of such assets. Investments, savings, and purchases are other means of building wealth.

The financial statement is a reliable indicator of a company's fiscal health. Most businesses primary source of revenue is the sale of goods and provision of services. However, companies that want to amass money need to come up with creative solutions beyond just saving and spending to build capital. Cash flow statements in financial statements reveal a company's capital buildup. The income statement may also reveal whether or not a firm is making enough money to begin saving or investing.

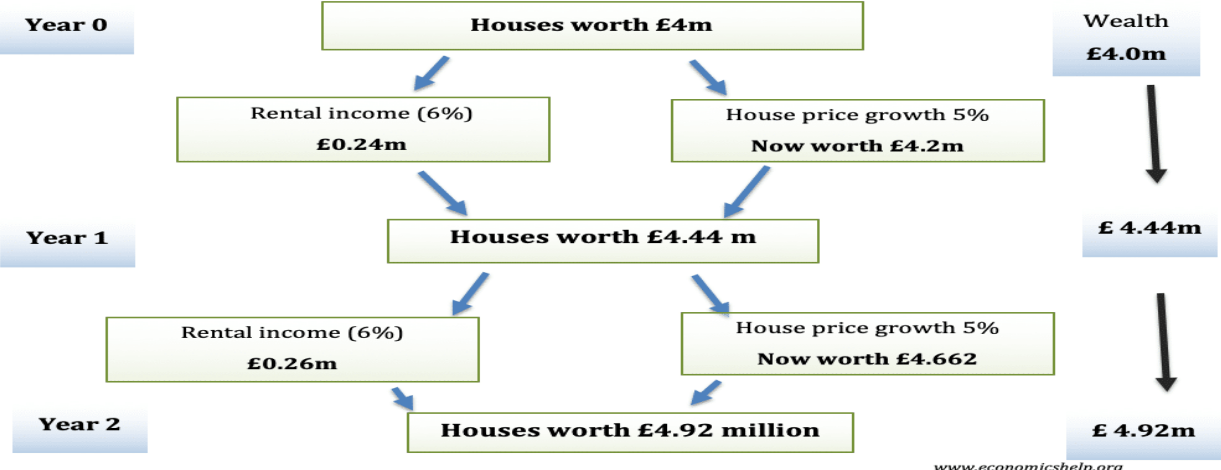
Businesses may also amass wealth by purchasing bonds, stocks, properties, and other securities. The profits or interest earned on these holdings help build the firm's monetary reserves. Accumulating capital for investments includes earning money through savings and investments and any capital gains. When it comes to capital accumulation, companies that spend heavily have an edge. Building wealth is a goal shared by corporations and their shareholders. Many investors set out to amass wealth by constructing varied portfolios. Institutional investors, including banks and insurance companies, also aim to build their wealth via investment vehicles like plans, brokerage accounts, and other diverse investment vehicles.

The phrase "accumulation of capital" has several meanings in Marxist literature, including the development of the proletariat through time, the concentration of riches by the bourgeoisie, and the widespread replication of capitalist social relations (organizations).

According to this interpretation, the growth of capital includes the growth of the working class since ownership of capital is founded on command over labor (a "law of accumulation"). In the first volume of *Das Kapital*, Marx illustrated this idea with an illustration taken from Edward Gibbon Wakefield's concept of colonization.

As a result, capital accumulation generates economic growth. It is established by increasing saving ratios, maintaining good banking and loan systems, avoiding corruption, and creating sound infrastructure to make investment more worthwhile. Economic growth refers to the rise in Gross Domestic Product. Thus, the essential causality is (profitability→ accumulation→ growth) (Juan Pablo Mateo 2013).

Figure 1.1: Economic growth

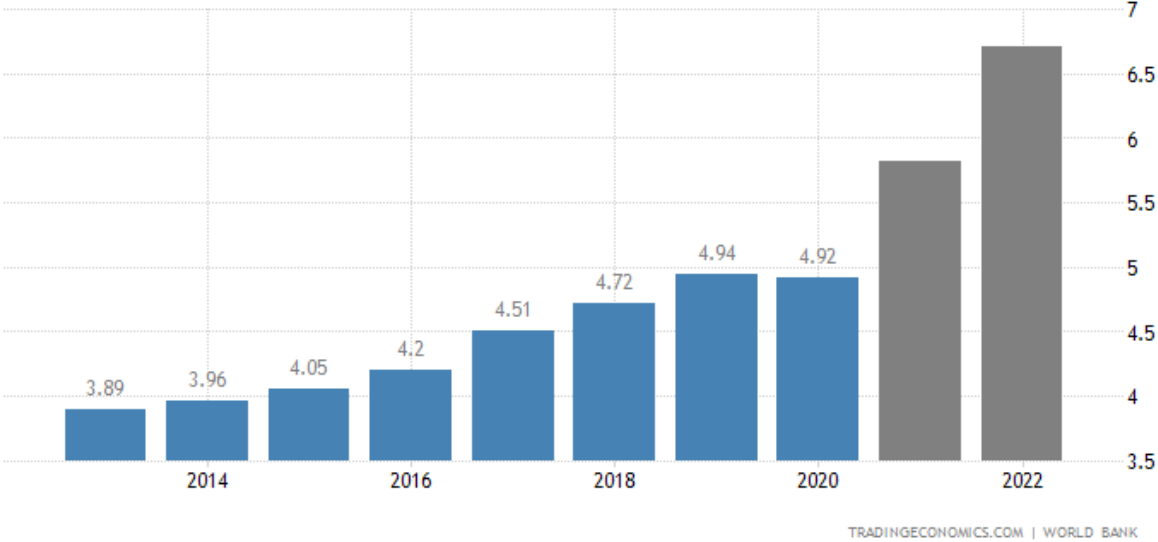


For instance, throughout the last several years, the economy of Somalia has shown only moderate growth, and it continues to be susceptible to ongoing shocks. The actual annual GDP growth rate was an average of 2.5 percent between 2013 and 2017. The shift was in place despite unfavorable weather conditions, which led to a significant decrease in agricultural production at the end of 2016 and the beginning of 2017. Shocks connected to the weather have led to the deterioration of land, decreased agricultural output, the death of animals, and forced relocation, all of which have impacted disadvantaged communities and diminished their capacity to adapt. For Somalia to improve and maintain its economic growth and break free from its cycle of chronic poverty, the country has to strengthen its ability to absorb the effects of shocks. Development alone has not been sufficient to alleviate poverty. As shown in figure 1.2, the

nation’s GDP has been gradually rising from approximately 0.21 to 0.22, but it fell by about 0.02 in the year 2020. This can be compared to the growth that occurred from 2017 to 2020.

Therefore, in this study, the researcher is dedicated to finding out how capital accumulation affects the economic growth of Somalia.

Figure 1.2: Real GDP – Data from World Bank



### 1.1 Problem statement

Capital investment, human capital formations, and savings rates have been studied extensively in an effort to determine how these variables affect long-term economic growth. Karl Marx's theory These features are crucial for long-term income progress, as supported by both external growth and internal growth. (Dennis Brown&Anuli Rejina, 2016).

Because of Somalia's government's inability to engage in certification programs or produce accurate documents, the country's economy is having difficulty expanding. Instead, businesses are forced to develop novel, sometimes expensive, alternatives. Sesame was in high

demand in Somalia before the Famine. According to Food and Agriculture Organization (FAO) regional director Luca Alinovi, a merchant informed him that he was forced to carry sesame from Somalia to Indonesia and nationalize it before selling it in Germany.

Several dangers might impede progress. Despite signs of improvement, economic development in Somalia is still precarious, and the country's chronic security problems continue to hamper economic activity. Concerns over national security, an increase in oil prices, a lag in the implementation of structural reforms, and political and policy uncertainty are all potential risks that might impact economic expectations. Therefore, the researcher is interested in learning how capital accumulation contributes to the economy's expansion.

## **1.2 Purpose of the Study**

This study aims to examine the effect of capital accumulation on economic growth in Somalia.

## **1.3 Objectives of the Study**

The objective of this study is to measure the relationship between Capital accumulation on Economic growth in Somalia by evaluating certain variables, such as GDP, foreign direct investment (FDI), trade surplus (TS), and gross capital formation (GCF).

## **1.4 Scope of the Study**

This research examines the link between capital accumulation and economic development by tracking changes in a number of different factors throughout the period 1980-2020. Only Somalia is the subject of this investigation

## **1.5 Significance of the Study**

A study will help financial sectors like banks know how capital accumulation is essential to economic growth. Also, it provides the country's private sectors with lots of information about capital accumulation in economic growth. They need to make more improvements because there is weak data on capital accumulation.

## **1.6 Organization of the Study**

The remaining parts of this study will be organized as follows: the second part will provide an overview of the existing research, and the third section will discuss the data and methods. In the fourth section, the findings and their respective interpretations are discussed. The research outcomes are discussed in the last part, which brings the whole thing to a close.



## **2 LITERATURE REVIEW**

The research project on capital accumulation and economic expansion in Somalia has reached its second and last chapter with this one. Capital accumulation is one of the most important variables promoting economic progress. This research focuses on capital accumulation's influence on economic development in Somalia, even though several other factors cause economic growth. The topics in this chapter are arranged in a manner that is consistent with the themes. The build-up of financing, alternative energy production, and economic expansion is the primary topic of discussion in this chapter's first half. This part of the report is titled "Effects of Productivity Growth on Employment Generation. (EPGEG)"

Economic growth and the amassing of capital go hand in hand. The final section examines how investments in fixed assets contribute to economic growth. The accumulation of capital, adjustments, and structural shifts are all topics covered in the fourth sector, which focuses on the role of economic take. The fifth section will focus on the money and the expansion of the economy accumulation in Brazil. The sixth section will discuss growth, monetary growth, capital accretion, and permeability in Mozambique. According to the "Endogenous Growth Approach," Construction of a Capital Stock and Nigeria's economic growth are intertwined. After the chapter, a summary of the literature is provided.

### **2.1 Capital accumulation, renewable resources, and economic growth**

Wei-Bin Zhang (2011) A dynamic economic model that makes use of physical capital and renewable resources is proposed in this piece of writing. However, unlike most baroque productivity concepts with dispatchable assets, which most of the extravagant productivity concepts with dispatchable assets, that are premised on a partial equilibrium establishment and misuse of physical wealth generation, the model proposed in this study incorporates the complexities of clean energy assets and wealth creation and income development. On the contrary, these models don't require regular capital accumulation into account.

Neoclassical growth theory and standard dynamic renewable resource models are combined with an alternative home behavior method to create the model. Physical accumulation, resource change, and labor division are all dynamically intertwined in this paradigm. As a result of the study's enhanced economic structure, several interactions between

economic factors may be uncovered that have not before been observed in the current literature on economic development using renewable resources. Models of dynamic systems may be simulated to show equilibrium points and motion.

## **2.2 Capital accumulation, productivity, and economic growth**

The one that has been put to use is The Bureau of Economic Analysis generates estimates of each state's Gross State Product (GSP), and those estimates are used to calculate each state's total output (BEA). The most notable aspect of the Solow growth model is the forecast that all economies with the same investment and labor force growth rates would converge to an equal steady-state level of production per worker. The next section provides further detail on the types of factors that were considered: capital accumulation, economic growth, investment, saving, consumption, and productivity capital accumulation and economic growth by Nicholas Kandor, King's College, Cambridge capital accumulation and economic growth by Nicholas Kandor, King's College, Cambridge In theoretical modeling, specific theories describing the causal interrelationships between different magnitudes or forces are referred to as "modeling components."

The chain of events that occurs as a result of their interactions with one another. Iare all in agreement that a fundamental condition for any model is that it should be able to describe the distinguishing aspects of the economic process as they appear in the actual world. This is a point on which Iare all in agreement. The Impact of Rising Productivity on the Formation of New Jobs, the Accumulation of New Capital, and the Expanding of the Ugandan Economy Jimmy Alani, Member, (Iacsit, 2012).

The length of time covered by this study, from 1972 to 2008, allowed the researchers to investigate the consequences of rising productivity on employment levels, the accumulation of capital, and overall economic development in Uganda. In the empirical analyses, the method known as econometrics was utilized.

First, the study concluded that an increase in productivity may have caused the slowdown in economic development and that an increase in productivity might have been the root cause of both unemployment and the depletion of capital assets.

Second, the study discovered that the rise in labor productivity and the expansion of capital productivity could have been the root cause of unemployment, leading to a slowdown in both capital accumulation and economic growth.

Third, the study concluded that technological advancement might be responsible for economic development, the accumulation of capital, and employment. The Index Terms - Accumulation of capital, economic expansion, and

The Influence That An Increase In Capital Has On The Expansion Of The Economy (Syed Shoaib Ahmed 2005) This article explains the accumulation of capital and its relevance among economic variables.

Since its influence is more powerful and consistent than that of any other economic factor, there is a close connection between it and the process by which the economy grows. Additionally, it analyzes the need for one of the non-economic drivers, namely political stability, for the accumulation of capital. There is no correlation between capital accumulation and the economy's expansion so long as there is no political stability. Naturally, the accumulation of capital is reliant on the stability of the political system in such a manner that if the link between the two variables is severed, economic progress would come to a halt for an extended period. The purpose of this study is to provide sufficient data to support the claim that a politically stable environment is required for the accumulation of capital, which in turn is required for economic progress.

$$y = f(l, k, t)$$

where  $y$  = National output

$l$  = labor

$k$  = Capital

$t$  = Technological change

Accumulation of capital is recognized as playing an important role in all economies and has been doing so for a very long time. This is especially true in situations where classical ideologies dominate economic thought and economic policy formation. All of the countries around the globe, without a shadow of a doubt, place a huge amount of importance on the process of capital accumulation. They do this by centering their attention on the need to increase

the amount of investment that is concerned with the outputs. Empirical Evidence Derived from African Growth Episodes Regarding the Importance of Capital Accumulation, Adjustment, and Structural Change for economic take-off (jean-claude & berth elemy, 2001)

### **2.3 Capital accumulation and economic growth**

Given that conversations about capital accumulation and economic development have often been misunderstood in the past, a caveat is in order to set expectations. The current research does not argue that an increase in the stock of capital alone is sufficient to trigger the required rate of return. For the purposes of this article, when discussing a country's economic situation, the term "growth rate" refers to the annualized rate of change in economic output over a certain time frame. Instead of adopting a definition of economic development in terms of consumption, investment, etc., which have all been found deficient in one way or another, the researcher chooses the greatest long-term rate of growth as the indication. In the context of this discussion, "capital" refers to "reproducible wealth employed for the purposes of production." By using the phrase "reproducible," it is made obvious that the researcher referring to man-made things like buildings, roads, homes, machinery, equipment, and stockpiles, rather than naturally occurring things like trees or water. Our goal is to compile a comprehensive list of all the capital items in a given community, irrespective of who owns them or where they came from domestic or foreign. (S. A. ABBAS, 1959)

A Look at the Situation in Brazil Over the Long Term with Regards to Capital Accumulation and Economic Growth Juan Pablo Mateo<sup>1,2</sup> (1950–2008) This article examines Brazil's economic expansion from 1950 to 2008 and offers some conclusions. It demonstrates that the debt crisis and the following neoliberal restructuring that has taken place since the late 1980s were precipitated by a decline in both the profit rate and the output/capital ratio. Because of this, there has never been a break in the connection between profitability and investment, and as a result, the ability to produce surplus has remained the driving force behind the particulars of capital accumulation during both the import substitution and the neoliberal periods. Utilizing a Marxist methodology, this essay's objective is to analyze the dynamics of capital accumulation and economic development in Brazil between the years 1950 and 2008 from the viewpoint of the profitability of capital. As a result, the emphasis of the article is on the connection between: (1)

the valorization process, also known as the potential to produce excess, which is expressed in profitability, and (2) investment, which is reflected in the capital stock and the output/capital ratio. (S. A. ABBAS, 1959)

Both Terry Roe and Xinshen Diao (2004). Non-homothetic preferences to reflect the shifting proportion of household spending on modern versus traditional retail food as incomes rise; (b) technological differences between the modern and traditional sectors from farm gate to retail outlet; and (c) the significance of the rest of the economy in the process of growth, both as a producer of capital goods and as a competitor for the employment of the economy-wide workforce.

Even though the savings rate fell from 23% of disposable income (table 1) to around 8.8%, towards the conclusion of the 30th period it was revealed that the stock of capital in the economy had virtually doubled, causing gross domestic product (GDP) per capita to expand by almost 30% (figure 3). To keep the rate of GDP growth modest, this analysis ignores the effects of rising factor productivity. Figure 3 shows that as a consequence of increased investment, commercial agricultural exports almost tripled throughout the study period. The National Tax Journal (1993)

## 2.4 Capitalist Production and Accumulation

Marx defines capitalist production as the method through which owners lend their assets for monetary considerations with the sole expectation of recovering the principal plus profit. Below is the formula Marx used to define the usual mode of production under capitalism:

$$M \rightarrow C \left[ \frac{M}{I} \dots P \dots C' \right] \text{ or } \left[ \frac{C}{\Delta C} \rightarrow M \left[ \frac{M}{\Delta M} \right. \right.$$

Thus, production in a capitalist economy can be seen as consisting of three phases: (1)  $M \rightarrow C$ , the transformation of money-capital into the components of production, namely the means of production,  $m$ , and labor-power,  $l$ , (2)  $p$ , the activity of production, also known as the creation of new utilities via the application of labor-power, and (3)  $C' \rightarrow M'$ , the re-transformation of the newly generated utilities into their money form, also known as the conversion of money.

The may be said that the second step, p, belongs to the realm of production, whereas the first and third phases, M-C and C'-M', respectively, belong to the realm of circulation.

Marx believed that his formula, which he called "AM," could pinpoint the source of the capitalists' surplus wealth. Many economists have postulated that the habit of buying cheap and selling costly led to the invention of AM in the C'-M' realm of circulation. Marx did not agree with this since he reasoned that if one individual benefitted more from AM owing to selling, then another person must have incurred a loss due to acquiring AM. As a result, Marx concluded that, due to the predetermined value of completed items in a market economy, AM could not be generated from M by simple trade. Because of this, it became evident that while AM is realized in the domain of circulation, it was originally created as Ac in the sphere of production via the application of labor force. If we look at it another way, for any given productivity ratio to wages, AM is proportional to the cost of today's labor power, 1. This is true across the board for the whole system.

## **2.5 Capital and Space: Capital's Crisis-Spatiality**

The accumulation of capital and the nature of its relationship to space can't be studied in isolation from the contradictory nature of capital; this is a precondition for doing so. The contradiction may be broken down into four distinct categories. Each of these is a facet of the fundamental conflict, which may be summed up as the tension that exists between social relations and productive forces in a capitalist society. The use of space is essential to the process of temporarily relocating (or at least partially alleviating) certain types of conflict. (R.J. Das, 2009)

First, the environment provides supplies of fuel and raw commodities for capital accumulation, as well as a place to unload trash, yet the unquenchable need for profit drives capital to the detriment of the ecosystem. Think about all the smog that is produced by cars and other vehicles. This contributes significantly to the environmental emergency. It's worth noting that some of it could be explicable by the need to save room. Capital is attempting a geographical solution, which might result in the domestic environmental concerns being transferred elsewhere (Think about how the Dutch floriculture industry, which was a major source of environmental pollution, has moved to less developed nations). No country or continent is no country or

continent that is immune to environmental issues. We're also feeling the effects of the pollution there. A geographical resolution is impossible. (R.J. Das, 2009)

The Second apparent conflict exists between capitalism and "non-capitalist economic activity." Some of them (like subsistence production in tribal territories) may be located in areas that are inaccessible to the spaces of capital accumulation, rendering them "outside" of these areas. But they are closely attached to capital's spaces via commerce and because they provide workforce (during the summer) to the world's major capitalist apex, It aids in preserving poverty pay and increasing investment income (for example, by purchasing some of the items they require or selling some of what they make). Some contemporary economic geography writing inspired by postmodernism tends to underemphasize this articulation in favor of seeing these areas as "alternative economic spaces" or regions of empowerment. When these areas are appropriated for commercial, colonial, or other forms of capital accumulation, it is important to remember that they may also serve as possible terrains of resistance against this process. However, this does not always make them anti-capitalists. (R.J. Das, 2009)

The third and most crucial political divide is between capital and labor. A repetition of capital's dominance over labor is embodied in its accumulation. Space is a weapon in the capital's assault on labor. Much like expense technologies is utilized to produce comparative surplus value, so too is relocation to areas with a higher profit margin. Real estate investors and developers may make substantial extra money off of prime real estate locations and spaces. Capital may be moved around if there is an unequal distribution of profitable possibilities across space. Yet the potential for class conflict is simply amplified by this process. Just as capital seeks to use space and globalize its struggle against the working class (by, for example, labor, like capital, seeks to utilize geography and globalize its battle against it (by having various pieces of a product created in different areas to liberate itself from dependency on labor in any specific space and to limit working class conflicts to the local scale) (although with less success so far). (R.J. Das, 2009)

The dilemma of excess accumulation emerges as a corollary and consequence of the labor-capital conflict. Competition among capitalists leads to accumulation, or the reinvestment of profits to increase production capacity, and the subsequent growth of productive forces. Since a result, commodities are created regardless of market constraints, as human requirements and the means to satisfy them are not open to democratic group decision-making. While it's true that

capitalists manufacture an ever-increasing volume of items, they want to increase their profits as much as possible, which they may do by lowering workers' pay and thereby diminishing their purchasing power (on anything other than luxuries). It's because of this that there's a problem with excess output or build-up. The available cash much exceeds the number of promising investment prospects. The method is in place but is not being exploited to its full potential (excess capacity). (R.J. Das, 2009)

The overaccumulation dilemma is being approached as a potential candidate for resolution through the spatial fix. The spatial fix may be expressed in a variety of ways. The first is the construction of the physical environment shaped like cumbersome funds that are corrected in place. These are examples of fixed capital, which include things like physical factories and fixed social and physical infrastructure, and Their ability to boost profits and wealth is undeniable. Benefits (benefit = increase to the increase of accumulation) from initiatives in such areas tend to accrue slowly over the course of many decades. As a result, fixing these fields may soak up excess money over a long time, which helps with over-accumulation over-accumulation issue. The answer, however, raises several formidable difficulties. If the constructed environment helps to generate profits, then it also helps to generate an excessive amount of wealth. In the event that it does not, the value of the money that has been invested in it may decrease. (R.J. Das, 2009)

The issue of excessive accumulation may also be solved spatially by moving it elsewhere, perhaps even overseas, and, if necessary, by resorting to the coercive state power of (new) imperialist governments. However, spatial fixation is not without its issues. Overaccumulation may be alleviated in the long run if surplus capital is invested in developing new regional economies in other countries. Furthermore, these area economies may fall prey to the territorial repair and begin competing with the mother country, much as the United States did with Great Britain. What is happening today is fascinating. The Chinese government's actions are making the global overcapacity crisis worse. According to estimates, there is now overcapacity in over 75% of China's sectors now huge over 75% of China's sectors, according to estimates, all due to the large flood of MNC investment into China in the mid-1990s. The steel, automotive, cement, aluminum, and real estate industries are most affected. (R.J. Das, 2009)

Alternately, to avoid being outcompeted, it is possible to establish a dependent space economy that will only serve to absorb the over accumulated surplus. And then, with the use of

imperialist state power, this economy can be coerced into producing whatever the home nation needs, in whatever numbers are necessary. This is because there is no natural environment for the development of a space economy, and hence can't take in enough surpluses to solve the problem. This sentence is clearly contradictory. There is a risk that the new territory won't be able to absorb enough surplus from the home nation if it expands at the same rate, or that it will compete with the home nation to get rid of its own excess. Whether or whether the new area grows freely may determine which outcome occurs. The eventual outcome will be a worldwide spread of the capital problem. (R.J. Das, 2009)

There's no way around the issue that excessive accumulation causes. Capital's attempts to geographically address the issue sparked a political and economic conflict between sovereign nations, which in turn escalated into a power struggle over who would shoulder the crisis's brunt. The stakes in this game of dubious repute are the export of unemployment, inflation, and untapped economic potential. Trade conflicts, dumping, tariffs and quotas, limits on capital flow, immigration rules, (neo)colonial invasion and domination over-dependent economies, and physical devastation through war are only some of the solutions that have been tried. The poorest and least powerful nations feel the effects the greatest. The process of creating capital results in both potential sites of wealth accumulation and potential sites of wealth destruction. The exploitation of territory by capital for their own benefit, or "spatial fix," is as much a component of the history and geography of the world as the financial gain and the development of technology, and its tale is etched in the same blood and flame. (R.J. Das, 2009).

## **2.6 Growth, capital accumulation and economic porosity in Mozambique**

With a 20-year average growth rate of 7.5%, Mozambique is one of the top three sub-Saharan African countries in terms of attracting foreign direct investment (FDI). To the advantage of private investors, this expansion has been achieved at the price of the common good. The problem is that it hasn't been very efficient in reducing poverty or laying a stable foundation for economic or social development. It is suggested that the three interrelated processes that dominate Mozambique's political economy are (1) the maximizing of inflows of foreign capital (either FDI or commercial loans) free of political conditionality; (2) the development of links between these capital inflows and the domestic process of accumulation and the emergence of national capitalist classes; and (3) the optimization of domestic resource

usage. Reference: (Carlos Nuno Castel-Branco, 2015) and the perpetuation of a system of labor in which employees are paid less than their Expenditure on basic necessities as a social issue, and whose families must support (particularly feed) income earners per supplementing their pay or trying to have a huge idle reserve of labor available to keep the system running. (Carlos Nuno Castel-Branco, 2015).

Researched in this article is the importance of economic porousness in facilitating state-nurtured, state-supported, and state-mediated links between domestic and international capital. Overall, Mozambique's economy has expanded significantly. Because of this of improvements in the economy, finance, economics, and international enterprise, a measure of the effectiveness of certain segments of the middle class has increased. This includes skilled workers connected to the center executives, proprietors, and those on the outskirts of the destructive sector, and local elites. However, the economy's inherent flaws have been brought to light, issues, such as financial weakness, lack of effectiveness in fighting inequality, and the existence of loopholes.

Rapid economic growth is more of a byproduct of investment than a goal in and of itself, particularly when it is built on an extractive and wide mindset. Investments may be a source of initial funding for new national capitalist organizations in Mozambique. Thus, from the standpoint of private capital accumulation, the insatiable desire fresh money, foreign direct investment, or business borrowing at whatever cost is, to some degree, sensible, regardless relative to the future repercussions for the economy as a whole. The layout and structure of Mozambique's economy are the result of a model reliant on multinational, financial capital that sets a premium on the country's resources (including its agricultural products, hydroelectric power, oil reserves, and property investment) as well as its consumer durables and luxury goods.

The Progress of the Nigerian Economy by Analyzing Capital Accumulation and Endogenous Growth Strategies There are two persons accountable for this crime, and their names are Dennis Brown Ewubare<sup>1</sup> and Anuli Regina Ogbuagu (2015) (2015) This analysis uses a simple supply-leading model to look at how various variables have affected Nigeria's economy over the short and long term. Gross fixed capital formation (GFCF), human capital formation (HCF), savings, and population growth rate are all relevant variables (PGR). The Autoregressive Distributed Lag model forecasts that these variables will have a negligible effect on GDP growth in the long and short term in the long and short terms. Gross Fixed Capital Creation, Human

Capital Formation, National Saving, and the Population Growth Rate were all shown to have a negligible effect on long-term growth using the Pesaran Bound Test and the Wald Coefficient Diagnostic Test.

Finally, the rate of convergence to equilibrium is relatively slow, at 23.99%, and the error component is properly signed but rather small. These two factors are detractive. Since the impulses they released at both time frames shifted throughout the time periods under consideration with minor percentage influences, plainly the fluctuations in the economic growth rate were not significantly affected by any of the independent factors. This is the case due to studies covering both time periods. For example, over the decade, an increase in gross fixed capital led to a positive shock of 6.12%, whereas an increase in human capital led to a negative shock of -12.48%. When compared to their positive impacts (5.89 and 6.52) on growth, the negative effects of national savings (-6.55) and population (-7.52) were more pronounced. Investing in the growth of human capital via classroom instruction and on-the-job experience is one of the recommendations I make to the government in order to encourage domestic and international investment.

There is widespread agreement that emerging nations may boost their long-term development rates through accumulating capital. Raising the savings rate, keeping the credit system in order, reducing the prevalence of corruption, and providing a solid foundation for economic growth are all important steps toward amassing greater wealth. However, Marx argued that riches and poverty are inevitable results of capitalist accumulation.

Capitalist accumulation, in other words, is inherently hostile since it creates and contains a unity of opposites. One extreme effect of capital accumulation is the increase of riches, whereas the other extreme is the "accumulation of poverty and suffering." Essentially, this is Marx's main point on the capitalist accumulation process. Also, Solow's model suggests that there is a point of diminishing returns when it comes to investing more money into a company. Capital accumulation, according to endogenous growth models, has the potential to boost prospective economic conditions growing rate of development. Exogenous growth theories, on the other hand, hold that demographic shifts and technological advances are the key factors in economic progress. Nonetheless, in order to permit capital formation, savings ratios must be increased. As a result of what has been said, it is essential to have a firm grasp on the

macrodynamic interconnections between Gross Fixed Investment (GFI) and the "sources of growth" approach, popularized by the neoclassical growth model, is a well-known empirical method for investigating the factors that contribute to economic expansion.

A production function at the aggregate level is used to dissect growth into its constituent pieces. A residual, sometimes called "technical advancement," is best understood as the difference between the increase of manufacturing output and the growth of the total number of inputs, with the inputs being weighted according to the number of competitive factors that they "provide" (growth in total factor productivity). Contemporary economists often use Solow's sources-of-growth accounting to untangle the contributions of capital, labor, and technological advancement to economic expansion. Neo-Classical growth theories provide three unique drivers for expansion while holding the quantity of accessible land constant. Increases in all three areas—(1) the number of potential employees, (2) the amount and caliber of investment capital, and (3) the pace of technological development and productivity—would boost productivity.

Real GDP (GDP) per person and asset value (stock of goods and structures owned by a person) per person for a number of developed and developing countries. focuses on the same set of nations from 1965 to 1990 and compares their GDP growth to their capital stock growth. Growth in GDP tends to follow increases in capital stock in developing nations. For example, Botswana's GDP per capita has increased by almost 400% due in major part to a 200% rise in the country's capital stock over this time. To put it another way, this is the highest percentage rise in terms of both assets and the greatest increase in GDP for each person by percentage among these countries. Japan's GDP and capital stock both grew by the second-highest percentages in the world. It is clear that the accumulation of capital is crucial for a nation's prosperity and progress. Capital lasts for a long time, typically decades, and it delivers a steady stream of services during that time. When a company increases its capital expenditures, it does so with an eye on the future rather than the present. But when a company makes an investment in a person or employs a component of a raw material, the results of such actions are seen immediately.

The durability of machinery and structures in five developed countries is compared in Table 5.1. In the United States, for instance, a new piece of machinery will increase output for 15 years, but a structure will do the same for 40 years. Capital relies heavily on things like this durability. Whereas at low for example, at limited funds (point A) values, the addition of a

physical console leads to a large increase in output; yet, at excessive liquidity (point B), the productivity flattens out (such as point B), where output varies little even for huge increases in the capital stock. This chapter's discussion of a nation's potential for growth as a result of increased investment in productive assets will revolve mostly on Figure 4.

How much capital a company or nation should have been directly related to its marginal product of capital. 3 The marginal product of capital (MPC) multiplied by the selling price of output ( $p$ ) is the additional income a new machine generates (MPK). When this figure is larger than the price of the new equipment (which we'll call  $r$ ), the investment is worthwhile for the business. Different Theories of Financial Development and Industrial Expansion the Late Great Miljan Knezevi'c In this research, the study examines a few data points concerning several theories of economic expansion. The golden rule of capital accumulation and dynamic inefficiency is offered here as a generalization. the study examine the shift in production and physical capital development to propose an alternative strategy. In Solow and Swan's neoclassical model, physical capital  $K$  and labor  $L$  are two examples of endogenous variables. Three crucial assumptions about the production function are at the foundation of this model:

For any  $K, L > 0$ , the production function exhibits growing marginal returns and decreasing returns at higher levels of input (i.e.,  $F_K(K, L) > 0$ ,  $F_L(K, L) > 0$ ,  $2F_{K^2}(K, L) < 0$ , and  $2F_{L^2}(K, L) < 0$ ).  $F(0, L) = F(K, 0) = 0$  is assumed as well, for  $K, L > 0$ . (2) The production function has constant returns to scale with regard to physical capital and labor, i.e.  $F(\lambda K, \lambda L) = \lambda F(K, L)$ , for all  $\lambda > 0$ ,  $K, L > 0$ . Roughly speaking, this implies it should be feasible to generate twice as much from a doubling of inputs. This is because (3) the manufacturing function meets the requirements  $\lim_{K \rightarrow 0} F_K(K, L) = \lim_{L \rightarrow 0} F_L(K, L) = 0$ . This paper's study reveals a generalization of a well-known golden rule: The pace of economic expansion must be equal to the rate of return on investment. Loosen the assumptions underlying the traditional golden rule theorem. To begin, let's assume that  $f$ , the per capita production function, is the only continuous and concave function defined on  $[0, +\infty]$ , and that for any  $m > 0$ , there exists a single positive solution to the equation  $f = 1/m$ . A variation on the neoclassical model is also offered, with the underlying assumption being a shift on the anticipated dynamics of financial assets. Predicting Monetary Growth in Mexico: Why Capital Accumulation Is Crucial.

With this work, I want to establish a happy medium between these two schools of thought by arguing that the rise in demand for imports could be affected by the rate of rise in demand for imports could be affected by the rate of growth in economic capacity brought about through the pace of increase in assets and efficiency. The pace of export growth is only one factor in determining the long-term increase in production rate of long-term increase in production.

Fourth, the study's model predicts that the long-term growth rate of production is determined by capital accumulation and the growth rate of capital productivity and that this is compatible with keeping the Labor share of GDP. Finally, in section five, the researcher applies our models to the real world and shows that the growth model for a small open economy is superior to Thirlwall's. Comparing the subperiods 1951–1981 and 1982–2014, the study finds that the income elasticity of demand for imports is quite similar across the two time periods, coming in at 1.94 and 2.04, respectively. The figures of 2 and 1 are likewise extremely comparable if the study compares the GATT and NAFTA eras. (Clavijo and Ros's, 2015)

Financial and human capital development are often cited as the two most crucial criteria for a nation to break out of its perpetual cycle of poverty. There is widespread agreement that emerging nations may boost their long-term development rates through accumulating capital. Raising the savings rate, keeping the credit system in order, reducing the prevalence of corruption, and providing a solid foundation for economic growth are all important steps toward amassing greater wealth.

Many researchers have looked into the effects of capital investment, human capital formations, and savings rate on economic growth in an effort to corroborate the famous Karl Marx theories and the exogenous and endogenous growth models' assertions that these factors are crucial to economic expansion in the long run. Capital has been proven to positively affect Nigeria's economic development by Ugwumba, Bakare, Orji, and Mba (2010-2013). By monitoring shifts in a number of variables from 1980 to 2020, the study investigates the connection between capital accumulation and economic growth. This inquiry is focusing only on the country of Somalia.

In conclusion, the research from the past that was looked at demonstrates that there is a connection between the accumulation of capital and the expansion of the economy. The majority

of the study consisted of using the co-integration, unit root, error correction model, and Granger Causality tests, all of which are used to investigate the nature and direction of the relationship between economic development and the accumulation of capital. There are a variety of schools of thought held by economists about the connection between the development of economies and the accumulation of capital. While some reasons suggest that the link between the accumulation of capital and economic development is unidirectional, A counterargument suggests that capital may stimulate development in either way.

Many studies also investigate the function of capital accumulation in economic expansion, with a particular focus on emerging nations. The majority of these researchers come to the conclusion that there is a positive association between increasing levels of capital and increasing levels of economic growth. The vast majority of this body of research places the blame for the consequences of capital accumulation on economic development on several different causes. In addition, Short-term and long-term variables including capital accumulation, human capital development, net national savings, and population expansion all contributed to the negligible growth rate of the economy. Furthermore, the study found that neither the short-run nor the long-run impact of economic growth was caused by capital accumulation and human capital development.

### **2.6.1 Economic porosity as a strategy for primitive capital accumulation**

Microstructure in indirect financing occurs when there is a waste of resources due to the inability to hold on to excess funds that might be used for the maintenance of the sector (Castel-Branco 2010). There are two ways of looking at vulnerability. The depletion would favor overseas investment over residential interactions of formation, and will indeed probably be caught, all else being equal, by the GDP being higher than the gross regional earning. To the contrary side, it may be viewed as withdrawals of deficit that might alternatively be interpersonally utilized for the growth of the residential market in general (GNI). However, in the early stages of capitalism (primitive capitalist growth) and especially times of disaster. permeability may also be used as a vehicle to transmit taxpayer funds and revenue to support regional and international corporate economic growth. (Fine 2009, 2012; Marx 1976),

Surface might thus be seen as a means of privatizing the government and the common participation for one's own benefit, a process that necessitates putting business priorities ahead of national ones. It's possible that the gap among GDP and GNI understates the extent to which porous infrastructure benefits regional entrepreneurs, who may use the money to invest in their own country. In this situation, the effects of permeability on financial and macroeconomic circumstances, the government's unwillingness to promote larger political and financial objectives with a generally and significantly increased advantage (Fine 2009, 2012), and restricted forms of governmental and commercial connections and engagement may all be on display (Castel-Branco 2010,).

Permeability in the economy has a clear effect on the prevalent "dilemma" of unequal growth of socialism across and within regimes (Lenin, 2010). This paradox is exacerbated by the difficulties of mobilizing funds for wide ranging socioeconomic and commercial progress. In addition to the aforementioned effects of permeability, the emergence of national economic autocracies not reliant on, or even actively seeking out, outside money, together with the ever-widening spheres in which personal gain may be made, is also a possibility (Luxemburg 2003). As a consequence, it is crucial to comprehend the group interactions of permeability, as the causes could not be merely specialized faults in the accounting framework or several good form of transnational separation of income at the expense of the regional market due to tax rewards, unlawful currency devaluation, poor incomes of funding of financial interests, and so on.

When it comes to the rise of the country's capitalist elites, Mozambican has lagged behind. Compact, dispersed, monetarily vulnerable regional business groupings were shaped by active imperialism, which attracted many Portuguese immigrants and merchants across South and East Asia, along with enormous asset confiscation and limitations on use to money. Throughout the majority of the imperial era, migrant labor, frontier business conditions, and connections to the imperial state apparatus were the primary drivers of class distinction (O'Laughlin 1981, 1996; Wuyts 1981). Theoretical formation, especially in agricultural commerce monopolized by Citizens of Asian origin, was motivated by the anti-capitalist stance of the first Mozambican authorities since autonomy, along with the embargo by the oppressive rule, which impacted recruiting process of migrant laborers and the rate of hiring at the Maputo Port (CEA 1979; Mackintosh 1987, pp 19).

With over a thousand government organizations and country invests in numerous other industries were deregulated following the implementation of the financial recovery process (PRE)2 in 1987, marking the first methodical and huge chance to improve federal capitalist categories across humongous marketization of public funds. In order to relaunch output and generate new employment, tax income, and external money, bigger and better competitive businesses were leased to outside owners. About 80% of all businesses were leased at modest prices to new Mozambican business owners who had emerged from the ranks of state-owned-company directors, liberation-movement combatants, and merchants. Despite the fact that all Mozambican purchasers paid less than 20% of the negotiated cost for the enterprises obtained via privatization, no strategies or assistance were installed to aid in the recovery and growth of certain businesses.

In the end, the public did not get the increased money it had hoped to receive through the huge sale of its assets (Castel-Branco 1996-2003, 1999; World Bank 1996). Furthermore, over 40% of the companies were declared defunct during the five years following privatization. In Mozambique, the privatization of state funds to ambitious and rising companies was, in great part, a tactic to meet growing societal demands from administrative and financial authorities by facilitating the emergence of strong local sectors of commercial investors of financial benefits (Hanlon, 2001). Since the earliest major plundering of the government by the government for personal profit, this privatization of government facilities and resources yielded minimal environmental benefits.

As worldwide restrictions upon South African assets were lifted in the early 1990s, the country's economy was free to join the world economy for the first time since the segregation government's fall and the freedom campaign's political success. Over time, Mozambique's role in the South African market shifted from mostly providing transportation facilities and migrant workers to primarily receiving FDI via the South African economic system, and South Africa eventually emerged Mozambique's most important trading ally. The new challenges faced by young Mozambican business owners were compounded by the rapid rate of commercial consolidation inside the so-called South African financial zone. South African products and activities were becoming more of a threat since they was affordable, higher value, more well regarded, consistently supplied, and provided superior consumer care. However, South African

assets, primarily across foreign direct investment (FDI), has permeated all major areas of the workforce, including the metals and electricity intricate (beginning with the massive Works correctly aluminum alloy factory and the Pande and Temane gas reserves), monopolistic production plants with considerable markets of level (fructose, solidify, liquors, etc.), the defense industry, the commercial business, the visitor numbers industry, and the banking markets. Additionally, the achievement of South African FDI in Mozambique inspired additional FDI from other roots, originally correlated with the South African economic structure, which began to keep expanding in connection with an increasing standpoint of a commodity rise in Mozambique affiliated with the competition for huge tracts of property and steam for the growth of sweetener and biofuel manufacturing and, subsequently, with the metals and electricity (ores, organic petrol, and petroleum) interplay. This meant that FDI laid the groundwork for the extraction sector as a means of financial development in Mozambique.

The authorities started the 2nd phase of privatization of the public to maximize the attractiveness of FDI for commercial benefit and turn these risks and obstacles into advantages for striving and developing regional capitalist organizations. huge Large companies were given access to assets and electricity deposits more quickly; the administration privatized the monitoring of crucial facilities to entice huge FDI and expose the area for more personal company advantages; financial and other welfare benefits were presented and preserved for huge companies in buying and selling for stocks, directorships, and the customer support delivery for residential businessmen; unused budget deficit was utilized to its fullest extent; and the authority offered a safe haven for residential businessmen (Castel-Branco Machel , Nhachote 2010-2013).

In essence, two distinct methods of expropriating the government for personal benefit have yielded Mozambique's aspirant and rising capitalist elites. There was initially the vast, heavily subsidized distribution of country firms and assets to residential ideological and commercial leaders, which mainly resulted in the creation of an inefficient elite of financial institutions with limited access to finance and a lack of manufacturing and management skills. As a result, the growth of trade liberalization and market linkages with the globe, especially with South Africa, posed a danger to and attacked the goals of these organizations. In attempt to maximize FDI inputs and the extraction of a portion of gains from those imports by local capitalist elites, the government reacted to these risks and difficulties by enacting a further, more

complicated phase of confiscation of the sovereign. As a consequence, we have an authoritarian, oligopolistic, and vulnerable economic system.

## **2.6.2 Capital accumulation, financialization and the financial system**

Here, we examine how the parasitic and permeable environment of the industry affects the monetary structure and vice versa. The federal bank's efforts to encourage a stronger imperialism economic strategy are highlighted, as is the contradictory reaction of the private financial services field, which has been steadfast in its opposition to these efforts. This discussion encompasses three facets of the issues surrounding Mozambique's economic advancement: the ways in which the interplay of asset accretion influences these issues are influenced by the interplay of asset accretion, the ways in which these advancement structures them are structured by this advancement, and the ways in which they are managed in the head of discrepancies across the various steps of economic strategy and among economic and taxation strategy.

Mozambique's economic management has recently placed a priority on the plan to consciously develop banking activities. This includes expanding bank penetration throughout the region 's territory and elevating the banking platform's role in economic and industrial operations. During the past 8 seasons, the banking sector has grown at an approximate annualized rate of 10%, slightly over 2 % levels beyond the estimated yearly increase in GDP. This development may be attributed in large part to the banks' policy of extending banking activities in response to rising competition. Considering these efforts, Maputo, which makes up below 5% of the country's land but is home to about 15% of the people, is home to 47% of bank registers; while 40% of regions still lack any kind of banking operation (Amarcy and Massingue 2011; BdM 1995–2012; Massarongo 2013).

By making it easier to get low-cost financing for businesses and other commercial endeavors, a larger banking sector is aiming to boost the monetary sector's impact on the growth of the industrial sector. The Bank of Mozambique has been cutting its interests rates since 2011 to push for lower borrowing terms at financial institutions to accomplish this goal. However, the reaction of financial institutions to the reduced policy percentages was far delayed than envisaged by the financial officials. There was a gap of nearly a year among the decline in source

rates and the decline in industrial lending rates (which continued at approximately 14%). (Massarongo 2013). Who is to say, enterprises that rely on acquiring credit regionally are not benefiting from the improved circumstances for access to financing despite the banking platform's increased geographical presence. The authors of these two works (Amarcy and Massingue, Castel-Branco, 2012)

There is firstly a lack of coherence in economic strategy and in economic and administrative strategy. In 2010 and 2011, the central bank used stringent economic strategy tools to mitigate the effects of induced volatility, particularly in agricultural prices, brought on by a confluence of rising reliance on importation and the global supply situation. It resulted in a mispricing of the interchange rate, a massive decrease in the value, in pound sterling, of customs duties, and a corresponding decrease in commodity prices, and it infused different deposits into the financial system to the tune at about US\$1.4 billion from over 2 years. An "anti- riot strategy on foreign rates" was implemented. Because of the rise in comparison rates and the decline in the liquidity stock, good business lending rates rose. Considering the underlying circumstances that prompted the national currency to establish restricting financial policies had not altered, financial institutions did not give the 2011 deployment of inflationary economic strategy procedures, notably the fall in estimate, any credence and proceeded with caution. There was also concern about the possible hyperinflation, turmoil, and disruptions in local banking system that come with such big influx of money. That is to say, the market's underlying structure, together with hazard, assumptions, and routine, acted as a drag on the efficacy of stimulative economic policies.

Fiscal deficit grew rapidly during this time, fueled in part by the greatest ever issuance of treasury notes. Between 2010 and 2012, the quantity of treasuries and other financial instruments grew by 48% and 36%, accordingly. Cash accessible for capital assets was decreased as a result of the issuance of public assets, which were pushed with enticing rates of interest and lower incidence. As a result, the inconsistency between budgetary and economic strategy undermined the stimulative effects of the latter. In summary, the introduction of contractionary economic policies occurred during a large decline in accessible capacity, which likely diminished their efficacy and raised their price.

Furthermore, the effects of financialization on a monetary sector that is still undeveloped and lacks competition. Corporate banks handle ninety percent of the savings and loans in the official economic sector percent of the savings and loans in the official economic sector are handled by corporate banks. Only 6% of all economic resources are exchanged on the capital market, and of them, 80% are public instruments. By 2013, the public exchange only listed two firms other than banks: Mozambique Diamonds and the State Petroleum products Agency. Therefore, the behavior of the economic field is determined by the characteristics of the corporate banking system.

There is a lack of competition in the banking industry, with only 17% of banks controlling 80% of the branches and making up the vast majority of the assets and loans. Sixty-two percent of assets, seventy-two percent of account reconciliation, and fifty-three percent of venues are controlled by the two largest banks with that the country conducts its economic activities. The commercial strength of these banks allows them to sustain an ineffective pricing framework for society, and the centralization of the banking sector results in a nearly fixed request for loans at each institution, lessening the motivation to provide more competitive mortgage levels.

Approximately 70% of the capital in the four major banks are owned by multinational banks, mostly from Portugal and South Africa. Since these investors are more likely to feel the impacts of the worldwide conflict and the complexities of securitization, it stands to reason that they would be more concerned with replying to their worldwide investment and modification methods than to the allusion rates of the banking system in Mozambique.

Foreign monetary accounts make up 40% of bank reserves treasury bills and 20% of liquid funds. Regulation confines borrowing in exchange rate, which implies that the banks preserve unresponsive earnings from something they can they can generate revenues but which suffer. Because of this potential revenue shortfall from international monetary records, banks may be maintaining exceptionally large profit rates on current processes. The percentage of international funds that are requirement settlements has stayed secure over the past five years, although the the percentage that are rectified settlements has decreased by half. To make the most of the international monetary funds, the banks should be conducting processes in international monetary system at tax haven locations.

Last but not least, the major banks are progressively specializing in borrowing to other banks and investing on loan securities, both national and commercial, which are insured by the sovereign and generate greater profits. The four largest banks all reported record profits in 2011, making them the most lucrative industries in the nation. There was a yearly increase of 57% in the profitability for these four banks from 2004 to 2011.

Third, the nation's economic parasitic organization. Commercial prospects in the exploitative center and the surrounding commercial and equipment chain are constrained by the rentier paradigm of the industry. Due to the systemic impediments to integrate multiple establishments, the banking sector can only support development in four areas: the environmentally destructive sector, the house price inflation sector, the client items sector, and the government fiscal securities sector. While the first and fourth sectors are huge and energetic, the second and third sectors are interactive but small due to the nation's economic relatively low acquiring strength.

With more and more states turning to borrowing securities as a source of funding, the extraction service's inherent porousness provides openings for speculative gambling. That is to say, on the one side, the issuance of borrowing securities generates possibilities for commercial businesses to make earnings off of the government's subsidized activities in the natural resource framework of the market, and on the other hand, the issuance of borrowing securities generates possibilities for loanable funds to do enterprise. Credit to the economic, which accounts for almost half of banks' resources, has been declining at a somewhat slower rate (by 2% per year) during the last three years, but liquid instruments (incentive to invest in banking securities and other private lenders) have virtually quadrupled in same time. Due to the discrepancies in economic authorities and the discord between economic and budgetary strategy, which favor speculative trading over actual development, banks have shown a predilection for borrowing securities due to their appealing terms and minimal danger.

Over the past 12 years, the share of borrowing allocated to the commercial, industrial, and agricultural areas has decreased. However, the share allocated to building projects, transportation, and connectivity, as well as other segments (such as nutrient and power supplies, reforestation, power generation, and others), has increased. As development and development

have tended to concentrate on the parasitic mechanism of gathering, so has the composition of loans shifted in that direction.

The central bank's feeble efforts to promote aggressive economic strategies are 'sterilized' by the economic growth reliance on international financial markets (international assistance, FDI, and borrowing), which in turn leads to prohibitive economic procedures that influence the amount of credit in existence.

Contradictions in the goals and sequential of economic regulation and between economic and budgetary strategy; the framework of the economic institutions; more particular methods of formation and development in the economic activity; and the global interactions of dramatization all contribute to the failure of economic strategy to increase the accessibility of equity for beneficial funding and to reduce its expense. The actual economy is being reorganized by banks in line with their priorities, and the banks' freedom to define and pursue these aspirations is constrained by financial strategies in special.

## **2.7 ECONOMIC GROWTH IN A MONETARY ECONOMY**

### **2.7.1 The Demand for Capital**

In this context, a revised version of Witte's current explication of the cumulative capital indicator might be used. A company needs funding to ensure its future profitability. The corporation's true need is for the use of physical equipment. Companies often require to purchase the use of financial assets to gain these operations. For each specific set of conditions, there will be an optimum amount of financial assets for any business, since the need for the supply of material activities contributes to the requirement for a supply of strategic products, as proposed by Witte. Furthermore, the cumulative consumption for financial products is calculated by adding together the supply demands of all businesses (where the desire is genuinely for the activities of material, which is operationally tied to the position of equity). (Keynes. Pp. 211)

Naturally, the business value might be anything is required to distribute the inventory without residual between bidders if there were no manufacturing or degradation of fixed assets (as would be the case in a perfect economic area). Therefore, in a manufacturing sector, the market assessment of resources has to be supplemented by flow calculations. The rate of market

deterioration over duration is the primary driver of the constant need for new investments. For the sake of argument, let's say that deterioration is a negligible percentage,  $n$ , of the total equity portfolio per year. Capital is needed in a steady stream, therefore calculating the past valuation of the projected profits of the forthcoming stream of production factors of the level of assets and contrasting it to the existing trade cost of industrial production, owners select the portfolio amount of material products they seek. Therefore, the location of the company aggregate supply, and, considering the amount of deterioration, the significant business profile, is determined by owners' assumptions about potential gains compared to the present rate of devaluation and their capacity to get financing to implement this requirement. (Keynes. Pp. 211)

In general, the inventory requirement for material calendar shifts to the left when debt rates are higher because a greater reduction rate is implied for a similar set of estimates about the future monetary return of property. Therefore, for each certain rate of debt, there is a varied requirement for material structure based on businessman assumptions and devaluation (cf. 16, pp. 202-3). A current value for assets will be established in light of the aspirations of enterprising shareholders, the rate of revenue, the current inventory of assets, and the rate of deterioration. Further surplus investments will be conducted if this cost is higher than the  $pm$ , the lowest fluid delivery value of fixed assets. Asset degradation and the flexibility of availability in the wealth management industry will determine the ensuing rate of capitalist production. To this end, Keynes said that "a decline in the rate of debt promotes the development of fixed assets not through a fall in the budget of manufacturing but because a rise in the quantity demanded. (Keynes. Pp. 211)

Consequently, opposed to Tobin's view, the rate of wealth creation in a financial system is ascertained not only by the retirement funds and client base choices of residents, but also by innovative business preconceptions of earnings from the prospective groove of relationship between financial development, the cost of borrowing and the availability of funding, the rate of financial devaluation, and the stockpile suppleness of the private equity businesses. Pursuant to Lerner, the scheduling of the optimal effectiveness of property is determined by the desire from users of investments in conjunction with the revenue actions of providers of material products. Tobin is able to disregard these later characteristics because of his underlying premise that, at rising wages, the number of former investments must match the level of former deposits. When

we recognize that Say's Law doesn't apply in an economic system, we may turn our attention to the factors of commercial aspirations, financing, use and wear, and demand price elasticity, all of which are crucial to comprehending formation and development. (Keynes. Pp. 334)

Assuming job growth hides the difficulties of adjusting to long-term balance. When it comes to economic systems in reality, economic growth is not a given, and fluctuations in consumption expenditure and the pace of capitalist production do not occur in a vacuum. One cannot possibly argue that the "Economic Crash" did not slow the pace of asset formation in the U.s. When we assume that relatively brief modifications that result in rising wages take place quickly beyond the doors, we take away the issue of credit's involvement in the development phase from the issues of the reality. (Keynes. Pp. 334)

## **2.7.2 The Influence of Portfolio Balance**

Then, where do choices about not spending money (efficiency) and investing come into this framework? Keynes argued that the choices to consume (and by extension, save) and develop are entirely dependent on the state of the economy at the time. Consumers' equity choices, by contrast, are related to "... to their entire bank of already amassed money. In fact, the present increase is a very inconsequential part of the economic stock already in existence "If you're trying to decide how to allocate your assets, the amount you're now investing should take a back seat to other factors as a corollary, saving and entrepreneurs have different goals. (Keynes. pp. 141).

Depositors care primarily about preserving and, ideally, growing the significance of their savings in the long run. As Keynes argues, "depositors should keep their worth in one of these mechanisms, either permanent goods or pecuniary entitlements (i.e., marketable securities comprising currency)" (Keynes. pp. 145-212). When compared to entrepreneurs, who are engaged in fixed assets for the stream of benefits that will be generated by them in the coming, depositors are mainly engaged in fixed assets for the claim to them as a repository of wealth. Shareholders, by contrast, care more about the effective supplied cost per unit of labor of the component of property than they do about the ownership to property itself. (Accordingly,

business owners don't give a hoot regardless of whether they have ownership to their workforce (slaves) or not; the maximum availability cost of supporting industries is what matters.) (Keynes. pp. 145-212).

A financial value's market price is often insignificant since its positive charge value surpasses its overhead price during its service period. Therefore, the saver will need to look for a client of his reserve currency at a certain moment in later if he plans to transform his shop of worth into expected growth products in a varying time sequence than the flow of potential gains during the life of the financial property. The seller understands that he may pay shipping fees and lose potential manufacturing time if he has to disassemble and carry the machinery to the client. Actual securities are often huge, inseparable tangible parts, so if a saver wants to boost his expenditure in a point of time by a quantity less than the estimated price of the entire tangible commodity, he may need to find a buyer for the entire component. Consequently, the shorter the property item, the higher the likelihood of its economic viability. (Keynes. pp. 145-212).

For this reason, as demonstrated by Makower and Marschak, "high sales volume not just to enhance the distribution of prospective returns, but also diminish their probabilistic prices" [keynes. pp. 279]. Since the saver wants to maximize his wealth, it follows that he'll be more off if he is able transfer the ownership to the property, in whole or in part, with little effort spent on finding a client and no loss of production or shipping expenses incurred. Therefore, the evolution of installations, i.e. equities and credit bonds, has enabled long-term consumers to keep their money in tiny, easily liquidated property entities, incurring little if any distribution expenses and suffering no loss in output. However, this change has once again disrupted the link among the requirement for cash choice (which involves controlling the factor's activities) and the equity asset pricing model choice (which involves management of the component) (cf. pp. 150).

There is always a fixed quantity of assets available; as a result, the change in delivery of market offerings is fully illiquid (cf. pp. 15, 19-20). The requirement for fixed assets by startups, and the consequent need to enhance the availability of equities or credit bonds, will be the primary determinants of this trend. Generally, amortization provisions are sufficient to fully fund substitute expenditures for most businesses. This means that as investment converges, just the net difference in the share price of fixed assets requires supplemental funds, and seeing as some of this net effect may be largely funded domestically by the organization, the increase in

stockpile of postings will transition only to the large extent that the organization has been using the outside references of financial services. Accordingly, unlike the inventory distribution timetable for material products, the inventory distribution program for bonds is expected to change less often throughout the course of each quarter.

Earnings per time during which possession of a location gives rise to a surety of payment serves as our standard for measuring insertion volume (cf. 30, p. 21). In this case, we may disregard the distinctions among placing kinds since we are using a confidence revenue statement as primary measurement unit. The value of a bonds, equity investments, or ordinary shares may be determined, for instance, by its right to receive return or rewards each term totaling \$1. Applying this probabilistic assumption as a loading mechanism, our approach might consider two units to be equivalent to one insertion item if possession of a single ordinary stock (as traditionally assessed) included the possibility of just 0.5 of a \$1 revenue declaration every session. As a result, installation volume in terms of monetary amounts attested to with reasonable assurance. " As a result, "the cost of borrowing" is correlated negatively with installation costs. (cf. 30, p. 21).

In order to meet the market for postings, savings must weigh the pros and cons of keeping all or part of their income in the pattern of resolute commitments or awards to equity versus keeping it in the type of bank investments (cash) (cf. pp. 233). The time has arrived to make a judgment on the optimal investment mix. For if we make the assumption that savings anticipate the potential value of basic commodities to be identical to the current expense (or at most no greater than their structure. based, so that savings do not shop their capital in inventory levels of consumables), then depositors will only wish to purchase their capital in profit and employment agencies. Investors' preferences for long-term wealth storage among cash and bonds will be influenced by the rates of interest on both. At any given time, the rate of interest on bonds is approximately equal to the market value at which they were placed. On the other hand, the prospective value range of bonds is a key factor in determining the projected earnings on investments. (cf. pp. 233).

### 2.7.3 Finance and Capital Accumulation

This theory allows us to make inferences about the process connecting the rate of wealth concentration to the volume of currency in circulation. Companies can no again afford to overlook the significance of flow provision factors when arranging locations.

First, let's pretend the industry is at rest, as a government does. What is  $p$ , the current market value of fixed assets? Simply said, in each time span, new tangible assets (funded domestically via the corporate company's overall amortization savings) are being used to replace older, worn-out equipment. The postings'  $D_p$  and  $S_p$  consumption and lending remain unchanged in the absence of any change in  $A$ . Because the installation trade has cleared, the value of installations has not altered from its previous level. Now let's suppose that speculators' investment requirement rises at the start of the term owing to an endogenous enhancement in financing. Assuming the extra consumption can be funded, this will raise the need for fixed assets (cf. pp, 149)

Despite this, regardless of the starting wage degree, there will be a need for more funds to support the increased requirement for assets, since the original level of expenditure profitability expectations must have been adequate. Therefore, certain businesses will, all else being equal, need larger cash reserves in order to make net purchases of development products. To meet the rising market for development products, they may hire a hedge fund manager (or salesman), who, having satisfied himself that the shareholders' projections are accurate, may get a relatively brief credit from a corporate lender. (Of course, companies may also borrow money straight from banks, which is often the best option for funding increases in retained earnings). The companies will utilize the newly formed cash to pay out dividends to the private physical corporation's source stockholders. Thus, the income creation of the society (save for the portion actually held by the domestic segment) and savers' capital surpluses both rise concurrently with the development in financing. Several families are finding that their actual revenue and cash reserves have grown since they were last in accumulation. As a result, they will boost their anticipated purchases and save part of the extra cash for future purchases. The leftover amount becomes families' savings, and it's up to those families to figure out how to best save their money. (The amplification effect and the acceleration of income then go on to other families).

If the capital stock remains the same, then as expenditure rises, so too will the number of installations, which in turn will lower the amount of cash obtainable as a reserve of value, and the cost of each installation as a result. The drop in balances is proportional to the square root of the rate of rise in the number of active credits needed per period of time. Thus, given constant conflict for net market gains, higher rates of fall in installation prices result from lower demand and much more supply (the more rapid the rise in interest rates). As a result, the pace of capitalist production will be capped, creating yet another "cash crunch" that impedes growth. because "When there is an excessive need for investment, the market might dry up and progress can be slowed due to the unavailability of appropriate financing. Additional revenue is slowed or sped up by the availability of credit, therefore if the banking sector is unable to raise the amount of money in circulation, there may be a backlog of unfinished asset allocation ".

To maintain development, it stands to reason that the monetary base must expand in tandem with rising production. However, the link among the necessary expansion in the currency quantity and the rise in actual resources is considerably too complicated to be managed by any simple formula in a universe where assumptions are dynamic and unknown (instead the provided statistic represented in our theory). In a capitalistic society, financial development is undoubtedly tied to the availability of currency, but a single rule cannot replace careful oversight of the currency supply if development is to be sustained (cf. pp. 15).

#### **2.7.4 Finance, Capital Accumulation, and Public Policy**

For improvements in includes significant to have any impact, our methodology has underlined, businesses must have access to more funding. Therefore, the finance sector and the Commercial Bank play a crucial role by supplying the first money on conditions which purchasers feel acceptable, allowing for a constant pace of wealth creation and expansion. In a monetarized mixed environment, the monetary injectors primary function in driving economic development is not at the base of asset allocation imbalances but rather at the base of funding initiatives. The pace at which global wealth has risen has been significantly more flexible than thrifty practices, Keynes noted decades ago. (cf. pp. 149).

The phrase "or habits of portfolio balance" might be added to this adage. To elaborate on Keynes' analogy, we could say that the Seven Wonders of the World were not constructed as a

result of frugality or a well-balanced investment portfolio, but rather as a result of the desire of kings and other powerful people to leave lasting monuments to themselves made possible by their access to the financing necessary to command the real resources required to create them. Of course, a well-liked or -hated government can always find a way to pay for anything it wants ancient families had little choice but to alter their savings and investments in light of the available options when the deliberate decision to expand the actual wealth of the world in this way was adopted. (cf. pp. 276).

The majority of Keynesian estimation methods have mistakenly disregarded the fiscal conditions for development. certainly, Professor Tobin has made an effort to demonstrate that the fundamental determinants of development are financial considerations. Nevertheless, he does not fully attach the need for a sustainable capital production to the needs of banking, where they should be. there is typically a persistent minority of dissatisfied lenders in fiat currency systems with an advanced banking sector. In the manner that "the quantity loaned to any independent controlled not exclusively by the protection and the ratios of intrigue provided, but also by allusion to the depositors' reasons of course and his getting up with the bank as a precious or impactful consumer" (Keynes, pp. 365), banks frequently place restrictions on borrowing. This borrowing limitation (which restricts E in calculation 1) does the same thing as competitive return rates in reducing the amount of formation. (Keynes, pp. 365).

As a result of this interpretation, it follows that the financial sector must be managed in such a way as to consider funding as straightforward as potential till economic growth at every stage of period is reaped. This is because financing concentration is principally dependent on (1) shareholders' opinions of the long term (q), (2) the potential of companies to additional cost (E) as well as the percentage of return I and (3) resource circumstances in the industrial production enterprises. (Keynes, pp. 365). When the economy is operating at full capacity, the pace of asset formation will be determined only by the businesses' capability to generate profits and the degree to which the demand for capital products can be met. Subsequently, in a capitalist model, if this leads to a percentage of formation that surpasses the instinctual percentage of economic expansion in the workforce, funds and rising income and costs will rise,, pressuring financial institutions (especially bond holding landowners) to decrease importance to take (compelled earnings) and enabling a few additional advancements in portfolio product companies and a

rising amount of job development with a stronger workforce participatory charge (that also presumes that there is nothing "organic" concerning full job opportunities) (Keynes, pp. 365).

The progressive taxation and hyperinflation that come along with it will be bad for society. Those that invest in bonds will see a decline in their real earnings growth, which will affect how they perceive the revenue and financial issues associated with their ownership and ultimately affect the commodity market prices. In addition, business owners may factor in hyperinflation assumptions when projecting future revenue streams, increasing the need for investment (Keynes. pp. 203). Last but not least, the Central Banking system is not likely to maintain lenient lending terms within these conditions. Consequently, development products production should eventually slow significantly due to the lack of funding in the presence of a coordinated currency, budgetary, and economic strategy for full potential. (Keynes. pp. 203).

There is no built-in machinery in a command society that automatically balances the growth of assets with that of the working population. The best that can be claimed is that, depending on factors like technologies, wealth inequality, entrepreneurship ambitions, and democratic mandate for flexibility, a percentage of return may be reachable that will ensure that the expansion of assets keeps pace with the increase of the working population (cf. pp. 129-169). If there is a spontaneous or optimal cost of borrowing money, the Central Bank should aim for it in formulating fiscal system. Because of this, a growing financial system requires a constant infusion of fresh cash into circulation. However, as I have argued elsewhere, if this new wealth is not provided in anticipation of the development itself, the financial system may be stifled by a second "credit crunch," this time caused by a lack of equity due to a lack of funding. (cf. pp. 129-169).

## **2.8 Productivity Growth versus Capital Accumulation**

Development in total production is clearly diverse among African nations, but the reasons for this are much more contentious. There has been a lot of study done to try to pin down what exactly led to their meteoric rise, but it hasn't put an end to the debate just yet. This ongoing discussion may be traced back to the challenges of employing cross-national studies to isolate the most important causal factors influencing the expansion of collective production. Particularly

frustrating has been the volatility of findings in the predictor variables in response to apparently modest modifications in specifications. As a further complication, proliferation and its immediate drivers are all physiological factors.

The breakdown of labor productivity growth we provide, into asset formation and TFP increase, may also be called into doubt. Because of these two factors, it may be challenging to tell them apart. As a first step, technological progress may find expression in the form of monetary expansion. Second, higher interest rates on investment might encourage further investment if TFP growth is high enough. As a starting point, it's important to consider whether or not the development accountancy activity truly produces a significant segmentation and whether or not it permits one to state anything more definitive about the manner in which the East African nations vary from neighbors.

We take a statistical perspective to these problems by using econometric modeling to determine the impact of a few key variables on financial activity, such as the state of the economy at the outset and the nature of the surrounding atmosphere. We next try to assess how much the East African growth experience varies from that of other increased investments, given these commonalities and differences. The identical procedure is then applied to the two parts, which are element accumulating and TFP expansion. We have relied largely on Barro and Lee's earlier work in generating the measures of beginning and ambient circumstances. Despite using a different set of nations and a somewhat unique metric for production per employee, we are able to reproduce the fundamental characteristics of their analytical findings. Life expectancies and years spent in school are provided as indices of wellness and knowledge, while the beginning amount of earnings per capital in global values is added to highlight the phenomena of tape delay. The average and standards deviations of the yearly shift in a government's profits of commerce are statistical representations of uncontrollable outside fluctuations. shows the findings of our multivariate investigation. Column 1 shows that this set of conditioned factors explains roughly half of the 1960–1994 international variance in per capital GDP growth. that the averages of the predicators for East Africa do not vary substantially from those of the overall sample, with the exception of the reschedule measurement (starting revenue), which may better understand why East African economies have developed faster than median. Some key distinctions among East Asia and other areas are, nevertheless, brought into focus. When looking

at East Africa and Latin America together, the difference in economic performance is shown to be attributable to the different amounts of terminology shocks. By contrary, the quick development of East Asia compared to South Asia cannot be largely attributed to foreign factors. Nevertheless, East Africa's educational attainment and mortality rates are worth around 0.75 basis points each year in greater growth.



### **3. THEORETICAL FRAMEWORK AND METHODOLOGY**

This is the third chapter of the research project on Capital Accumulation and Economic Growth in Somalia. This chapter provides the theoretical framework for the study, which begins with a definition of the study constructs and continues to discuss the theory utilized, the data collected, and the model used for the research.

#### **3.1 Theoretical Framework**

##### **3.1.1 Definition**

The term "capital accumulation" or "capital formation" describes the action of accumulating or stockpiling valuable assets, growing one's fortune, or producing new riches. A key distinction between saves and capital creation is that the latter refers to the process of acquiring the resources necessary to make actual future investments. In contrast, the former refers just to the savings themselves. (Adekunle and Aderemi , 2012)

The primary goal of capital accumulation is to increase already existing wealth by investing hard-earned income and savings. This spending goes toward a wide range of economic priorities. Investing in production-driven physical assets may help your business expand financially. Machines and other tangible assets are one example. Human capital, including research and development expenditures, may also stimulate productivity. If the value of the investment is maintained or rises, capital may be accumulated by purchasing financial assets like stocks and bonds. Appreciation is a critical part of building wealth over time. In this case, the money is put into something concrete, like a piece of property, with the expectation that its value will rise over time. (Alicia Tuovila, 2021).

It is essential to keep in mind that adding new capital does not necessitate incurring additional costs in the form of cash payments. It is possible to achieve this goal using simple measures, such as improved organization. For instance, a business can increase its output simply by reorganizing its factory in order to make it more efficient. This allows the business to accomplish this goal without investing in any new machinery or recruiting additional personnel. Following this logic, greater production would lead to more profits. (Alicia Tuovila, 2021).

Alternative meanings One of the pillars of a capitalist economy is the accumulation of capital or the growth of assets resulting from investments or earnings. The purpose is to earn more money from an investment over time. This may happen via various means, including but not limited to appreciation, rent, capital gains, and interest. (Alicia Tuovila, 2021).

The point at which economic expansion is Measured in nominal or real (after adjusting for inflation) terms, GDP growth indicates an expansion of an economy's ability to generate products and services. While GDP has been the standard method of measuring economic expansion, other indicators have also been utilized. (Ali, Mohamed & Ali, 2017)

The key to my working definition is That economic growth is more limited compared to economic development. It's the rise in the market value of all final goods and services produced in a country. It can be the result of several factors, including improvements in education and training, a rise in the overall quantity of resources, and technological advancements. (Bruce G. Carruthers, Sarah L. Babb, 2000)

### 3.1.2 Theoretical Aspects

Capital Formation is the process by which a nation accumulates more physical capital assets by allocating a portion of its current income to purchase assets specifically for use in future productive endeavors in the real sector. The accumulation of savings is the source of capital creation. Put another way, a rise in capital creation is good for private savings since it encourages people to put away more money. Gross domestic investment (GDI) rises in response to a rise in savings, while GDP rises due to the revenue created by investment projects. (Uremadu, 2006)

#### 3.1.2.1 Harrod Domer Model

The Harrod–Domar model is the one that best illustrates the primary purpose of this investigation (see equations 1-8 below). Based on the Harrod-Domar model, a rise in investing contributes increased economic expansion. In order for a nation to advance economically and experience expansion, some of its resources must be redirected away from their immediate consumption (or saved), and instead invested in the production of new capital. Saving may be defined as the diversion of resources away from their present use.

The Harrod-Domar model argues that saving is an essential component for development. This is despite the fact that saving is not the sole factor determining growth. It contends that every nation's economy must set aside a certain percentage of its gross domestic product (GDP), even if the savings are used just to finance the replacement of depreciated capital assets. The model provides a mathematical demonstration of the connection between growth and saving and an indirect connection between saving and the capital production ratio. If assume that national income is  $Y$ , growth is  $G$ , capital production ratio is  $K$ , saving is  $S$ , and investment is  $I$ . If Ialso assume that the average saving ratio is  $s$  and the incremental capital-output ratio is  $k$ , then Ican create the following straightforward model of economic expansion.

$$S = sY \dots\dots\dots \text{Eq1.}$$

saving (S) is some proportion of (s) of national income (Y)

$$I = \Delta k \dots\dots\dots \text{Eq2..}$$

net investment (I) is defined as the change in capital stock K

$$G = \Delta Y \dots\dots\dots \text{Eq 3}$$

$\Delta Y$  i.e. growth is defined as change in National income  $\Delta Y$  divided by the value of the National income.

But since the total stock,  $K$ , bears a direct relationship to total national income, or output  $Y$ , as expressed by the capital/output ratio  $k$ , then it follows that:

$$k = \frac{K}{Y} \dots \dots \dots \text{Eq4}$$

$$\text{Or } K = \frac{\Delta K}{\Delta Y}$$

$$\text{Or, finally, } \Delta K = K \Delta Y$$

Finally, since total national saving,  $S$ , must equal total investment,  $I$ , I can write this Equality as

$$S = I \dots \dots \dots \text{Eq 5}$$

But from Equation (1) above I know that  $S = sY$  and from Equations (2) and (3) I know that:

$$I = \Delta K = K \Delta Y$$

It therefore follows that I can write the identity of saving equaling Investment shown by Equation (6) as

$$S = sY = K \Delta Y = \Delta K = I \dots \dots \dots \text{Eq 6}$$

or simply as

$$sY = K \Delta Y \dots \dots \dots \text{Eq 7}$$

$$\Delta Y = G = sYK \dots \dots \dots \text{Eq 8}$$

The rate of change of national income or rate of GDP is represented by the growth Model  $Y/Y$ , which is obtained by dividing both sides of Equation (8) by  $Y$  and then by  $K$ . Simplified from the renowned Harrod-Domar equation in the theory of economic development, Equation (8) suggests that the national saving ratio,  $s$ , and the national capital/output ratio,  $k$ , jointly determine the rate of increase of GDP ( $Y/Y$ ). In particular, it states that the capital/output ratio of an economy has a negative relationship with the growth rate of national income and a positive relationship with the saving ratio (i.e. the more an economy is able to save-and-invest-out of a

given GDP, the greater will be the growth of that GDP) (i.e., the higher the  $k$  is, the lower will be the rate of GDP growth).

Equation (8) has a straightforward economic rationale. Economies need to save and invest a particular percentage of their GDP in order to expand. The pace of growth of every economy is proportional to its capacity for saving and investment; this is true regardless of the degree of growth achieved.

### **3.1.2.2     *The Slow Growth Model***

The Solow Development Model is an endogenous model of economic growth that examines how the amount of production in an economy change over time in response to shifts in population growth rates of population growth, savings, and technological advancement.

Economics Nobel Laureate Robert Solow developed the first neoclassical growth model with his Solow Growth Model. The model was based on the work of Keynesian economists Harrod and Domar. To this day, Robert Solow's growth model remains the cornerstone of modern theories of economic development.

The assumptions of solow growth model are listed below

1. The pace of population increase has been stable for some time. The equation for population growth says that the future population, given by  $N'$ , is equal to the current population,  $N$ , times the growth rate,  $g$ , hence  $N' = N(1+g)$ . If the current population is 100 and future growth is predicted to be 2% per year, then the population will be 102.
2. Each user in the market saves some proportion of their income (represented by  $s$ ) and spends the rest on final consumption items (represented by  $t$ ). Therefore, production (measured by  $Y$ ) and consumption (defined by  $C$ ) are linked by the consumption equation  $C = (1-s)Y$ . (represented by  $C$ ). A client with a 40% savings rate produces 100 units of output in revenue, of which 60% is spent, and 40% is set aside in savings.
3. All businesses in the economy follow a standard manufacturing process that requires the utilization of both labor and capital to complete. Therefore, the production function  $Y = K + L +$

Y connects the output (represented by Y), capital (represented by K), and labor (represented by L) (K,L).

Assuming that the production function has constant returns to scale is essential to the Solow Growth Model's functioning (CRS). If I assume this scenario, I know that I will need to increase both my capital stock and my workforce by a factor of two in order to achieve a 100% increase in output. As a result, the Solow model's mathematical analysis pays more attention to productivity per worker and capital employed by each worker than it does to output as a whole and total capital stock.

4. The equation for capital accumulation states that the current capital stock, denoted by K, the future capital stock, denoted by K', the rate of capital depreciation, denoted by d, and the amount of capital investment, denoted by I are all connected in some way.

### **3.1.3 Implications of the Solow Growth Model**

No development occurs on a longer time scale. The Solow Growth Model predicts convergence across countries with similar rates of population growth (g), saving (s), and capital depreciation (d). A poorer country grows economically faster along this convergence path.

Because the Solow Growth Model does not predict absolute convergence, it follows that nations with varying rates of economization will never arrive at a single stable equilibrium. Due different nations have varying rates of savings, it is not necessarily the case that a country with a lower initial capital stock would have quicker growth. This is because of the disparities in saving rates.

## **3.2 Data description**

This study gathered information from the World Bank and the World Development Indicators. Picked in the Somalia region. The link between capital accumulation and the economy's expansion is measured using data that is not balanced. The sample includes observations made between the years 1980 and 2010. The rate of economic growth is the study's dependent variable, whereas the amount of capital accumulated is an explanatory variable. The GDP's value is measured annually, and its value depends on a variable. Foreign direct

investment (FDI) is a measurement of capital intake, while national income is a measurement of savings. growth capital creation is another term for this

### 3.3 Model specification

This makes it possible to determine the influence of capital creation on the expansion of the Somali economy from 1980 to 2010, using the Harrod-Domer model as a guide. And Iutilize OLS model the following components make up the model:

$$RGDP = f(GCF, TS, FDI, ) \dots \dots \dots Eq$$

$$lnRGDP = \beta_1 + \beta_2GCF + \beta_3TS + \beta_4FDI + \varepsilon \dots \dots \dots Eq10$$

Where:

GDP = Gross domestic product as a proxy for economic growth;

GCF = Gross Capital Formation which is a proxy for capital formation;

S = SAVING

FDI = Foreign Direct Investment

$\varepsilon$  = stochastic term

## 4 RESULTS AND DISCUSSION

Economic findings, including a test of the robustness of the model and estimates of its parameters, are presented and discussed in this, the fourth chapter of the research on the correlation between the Somalian shilling and the Consumer Price Index.

### 4.1 Descriptive Statistics

Table 4.1.: Summary Statistics of the Variables

Variable	Mean	Std. Deviation	Maximum	Minimum
<b>GDP</b>	2.22E+09	3.33E+08	2.67E+09	1.67E+09
<b>SAVING</b>	3.31E+10	9.19E+10	4.10E+11	37993058
<b>FDI</b>	-97142.9	20368629	64340000	-43390000

<b>GCF</b>	24.18346	7.702953	42.39582	11.73501
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**Source:** Author`s calculations using data from the world bank and SESRIC

As shown in table 1, the findings show that the mean value of the dependent variable GDP is 2.22E+09 with a standard deviation of (3.33E+08). The maximum value that the GDP reaches all the time is 2.67E+09, and the minimum value of GDP is 1.67E+09. The explanatory variables include FDI, GCF, and Saving. The mean value of FDI is -97142.86, with a standard deviation of 20368629. The highest FDI is 64340000 all the time, and the lowest FDI is -43390000. Furthermore, the average value of GCF is 24.18346 with a standard deviation of (7.702953), the highest and the lowest GCF during the observation is 42.39582 and 11.73501 respectively. Lastly, the mean value of Saving is 3.31E+10 with a standard deviation of 9.19E+10. The maximum value of Saving is 4.10E+11, and the lowest Saving is 37993058.

*Figure 4.1: GROWTH DOMESTIC PRODUCTION*

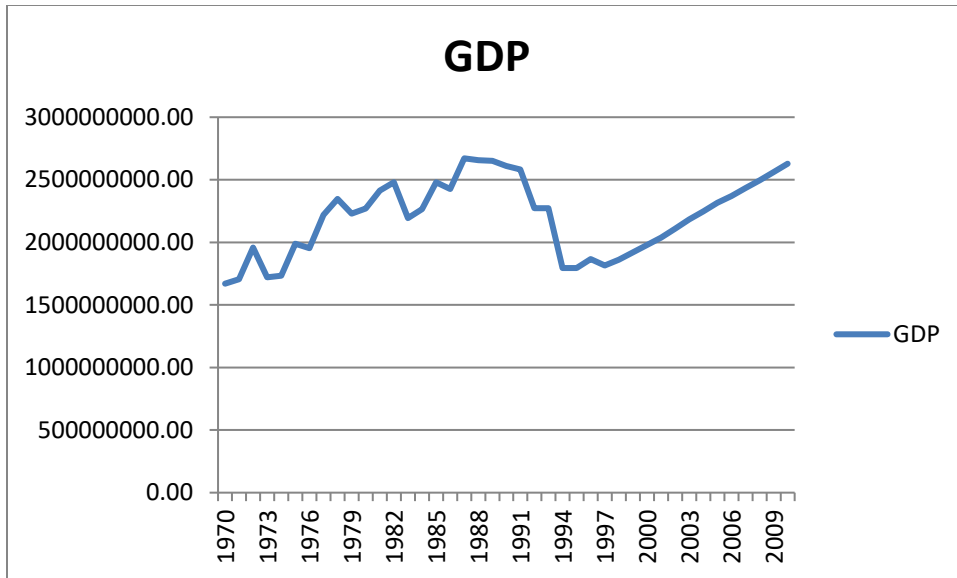


Figure 3 Started from 1970 up to 1991. The GDP was between 50 million and 270 million. This situation tells us that the country with economic stability was the best because, at that time, the country had existed good Government. Still, after 1992 the country explored a civil war that caused to decrease in economic growth. Somalia faced economic instability at that time because of the central government's collapse.

Figure 4.2: Foreign direct investment

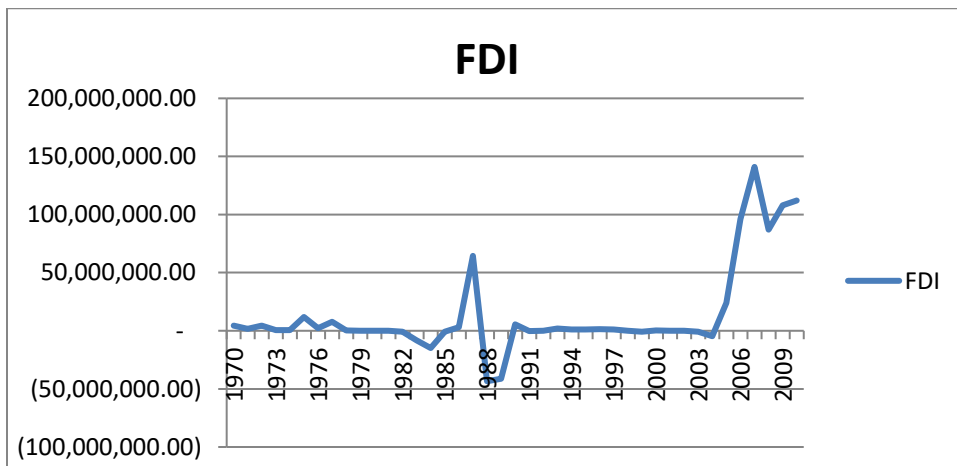


Figure 4 shows the flow of FDI into Somalia from 1970 to 2010. I can see that the flow has been very low and steady for the first decade. Interestingly, it went into a further low negative in the early 1980s to strikingly rise to over 50 million US dollars in the mid-80s. By 1988, the trend has quickly reversed. From 1990 to 2004 has experienced a steady flow of small amounts of FDI,

just over one million US dollars. It then reached its highest peak from 2004 till 2006. However, that quick increase in FDI inflows was disrupted after the intervention of Ethiopian forces into Southern and Central Somalia.

Figure 4.3: Saving

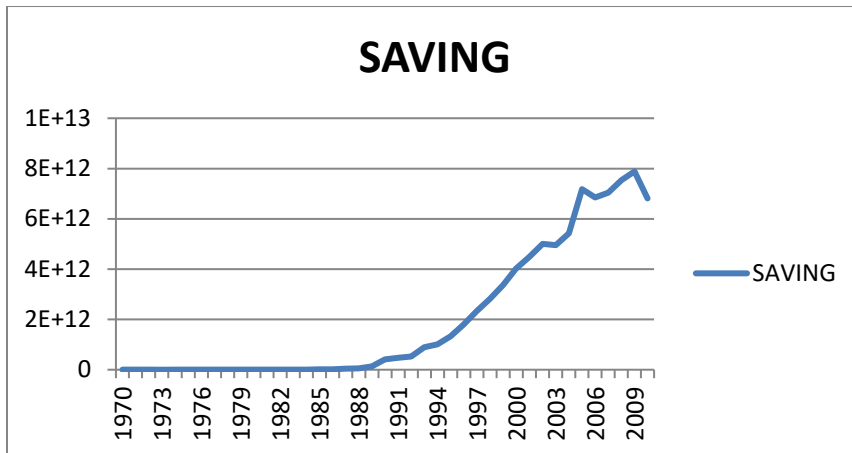


Figure 4.3 shows the amount of saving in Somalia from 1970 to 2010. I can see that the amount of savings has been very low and steady for the first decade. Interestingly, it went into a further low negative in the early 1980s, and the trend quickly reversed. From 1990 to 2004 has experienced a steady flow of a large amount of savings. It then reached its highest peak from 2004 till 2006.

Figure 4.4: Gross Capital Formation

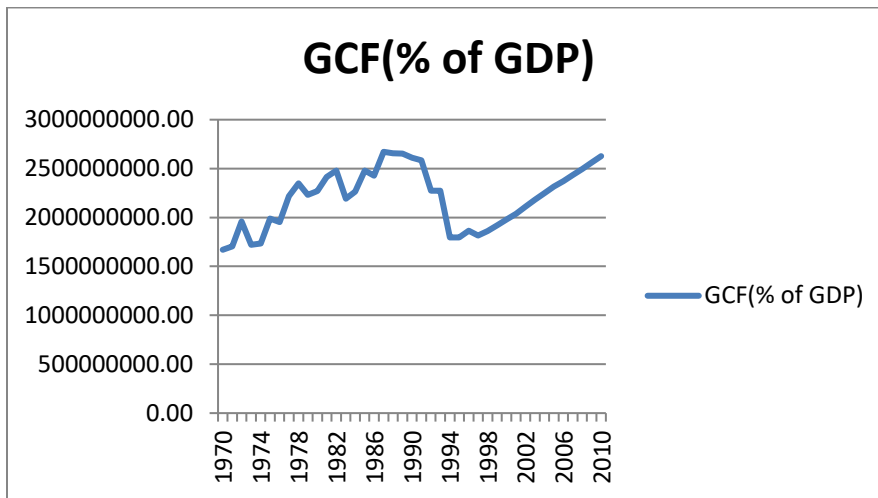


Figure 4.4 shows us that there was high gross capital formation b/w 1970 to 1990.

By the way, the trend quickly went down in the mid-90s because of the collapse of the government, and finally, it peaked in 2010.

## 4.2 Estimation of the Model Parameters

After making descriptive statistics, the next useful step is to estimate the parameters of the model as well as their statistical significance. Since we want to know how much foreign direct investment, savings, and government stimulus spending all contribute to GDP growth, we may say that this is the focus of our research.

Table 4.2: Estimation of the Model Coefficients

**Dependent Variable: LGDP**

**Method: Least Squares**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Log GDP	22E+09	3.33E+08	2.67E+09	0.012
LOG GCF	26482024	7048451.	3.757141	0.0016
LOG FDI	1.393635	2.640848	-0.527722	0.6045
LOG S	0.001913	0.000593	3.227716	0.0049
C	1.52E+09	1.82E+08	8.321715	0.000
R-squared	0.559774	Mean dependent var	2.22E+09	
Adjusted R-squared	0.482087	S.D. dependent var	3.33E+08	
S.E. of regression	2.39E+08	Akaike info criterion	41.59484	
Sum squared resid	9.74E+17	Schwarz criterion	41.79380	
Log likelihood	-432.7459	Hannan-Quinn criter.	41.63802	
F-statistic	7.205500	Durbin-Watson stat	1.372684	
Prob(F-statistic)	0.002500			

The results of the model show that the coefficient of GCF is significant to the GDP and also statistically significant through a 5 percent significance level, meaning the two things are positively correlated GCF and GDP. If there is a unit increase in GDP, the GCF increases by 26482024. Furthermore, the coefficient of FDI also consistently remains positive and also statistically significant through a 5 percent significance level, meaning that there is a positive relationship between FDI and GDP.

This means that if FDI increases by one unit, GDP will decrease by (-1.393635) Lastly, the coefficient of Total Saving is consistently positive and statistically significant at the 5 percent significance level, meaning that there is a positive association between Total Saving and GDP position. This means that if GDP increases by one unit, TS will increase by (0.001913) Existence of unit root has been tested to check the stationarity of the variables; I have used three explanatory variables to make estimation results.

Both tests found that most of the variables are non-stationary and thus cannot be regressed without making them stationary. However, all the concerned variables are stationary in the first and second differences. The OLS method has been conducted to check the validity of the model and the significance of the variables under investigation. In the literature, I have seen that there's a camp of economists who agree with my thesis about capital accumulation on economic growth. Therefore, they focus on increasing savings to make investments, which is how capital stocks increase. There is a negative relationship between FDI and GDP and the positive effect of GCF, and SAVING on capital accumulation, respectively, supports the results of this study

### **4.3 Test of the Model Strength**

#### **4.3.1 The goodness of fit**

It is used to test the goodness of fit from the regression results. It measures how explanatory variables explain the variation of the dependent variable. It uses to compute the number that measures of OLS regression fit to the data line. However, in this study, the R square is 0.559774, meaning 56% percent of the variation of the GDP is explained by FDI, GCF, and TS.

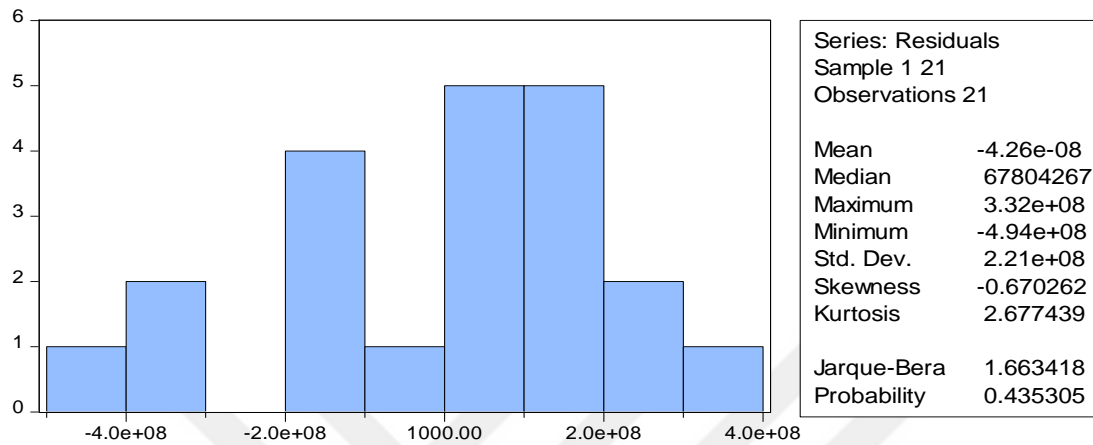
While other determinant variables explain the remaining variation outside of the model counted in residual terms, The validity of the model is tested while comparing R2 with the Durbin-Watson test. If DW is greater than R2, the model is said to be valid in otherwise not, since DW (1.372684) is greater than R2 (0.559774), the model is not spurious. Lastly, the F statistics of the model indicate that model is globally statistically significant.

#### **4.3.2 Test of the Model Strength**

##### ***4.3.2.1 Asymptotic Normality test***

The normality test is used to determine if a data set is well-modeled by a normal distribution and to fulfill the classical linear regression model's assumption about the normality of the data.

Table 4.3.2.1: Asymptotic Normality test



The above table shows that the data is normally distributed. This could be seen from Jarque-Bera's insignificant probability values. That means the null hypothesis, which states that data is normally distributed, could not be rejected.

#### 4.3.2.2 Multicollinearity Test

The multicollinearity test is a state of very high intercorrelations or inter-associations among the independent variables. It is, therefore a type of disturbance in the data, and if present in the data the statistical inferences made about the data may not be reliable. I can use either VIF or a correlation matrix to detect multicollinearity. In this study, the latter is used and the percentage at which I will determine the presence of multicollinearity will be any value higher than 75%.

Table 4.3.2.2: Multicollinearity Test

Variable	Coefficient		VIF	
	Uncentered	Centered	Uncentered	Centered
GDP	2.04E-06	44.52136	2.498219	
GCF	9.61E-12	13.75858	1.527218	
FDI	4.46E-10	2.895206	1.969506	
S	6.46E-11	28895206	2.969506	
C	43265636	23.55708	NA	

As shown in the above table, there is no Multicollinearity among the explanatory variables; since the variance inflation factor is less than 10 and is between 1 and 10.

#### 4.3.2.3 Heteroskedasticity Test

Heteroskedasticity refers to a situation in which the variance of the error term is not constant. The Breusch-Pagan method is used to test the presence of heteroskedasticity. Furthermore, after making use of Breusch-Pagan. There is no Heteroskedasticity because the probability of chi-square is insignificant.

*Table 4.3.2.3.: Heteroskedasticity Test: Breusch-Pagan Godfrey*

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F-statistic	1.348610	Prob. F (3,17)	0.2919
Obs*R-squared	4.037020	Prob. Chi-Square (3)	0.2575
Scaled explained SS	2.218896	Prob. Chi-Square (3)	0.5282

---

Result of table (4.4) shows that there is no Heteroscedasticity Problem in the model. Since the p. value of  $X^2$  is greater than 5%. So, the study accepted the null hypothesis of Homoscedasticity at 5 % level

#### 4.3.3 Autocorrelation

Autocorrelation, also known as serial correlation, may exist in a regression model when the order of the observations in the data are relevant or important. In other words, autocorrelation is a concern with time-series (and sometimes panel or longitudinal) data.

*Table4.3.3 : serial correlation*

Breusch-Godfrey Serial Correlation LM Test:

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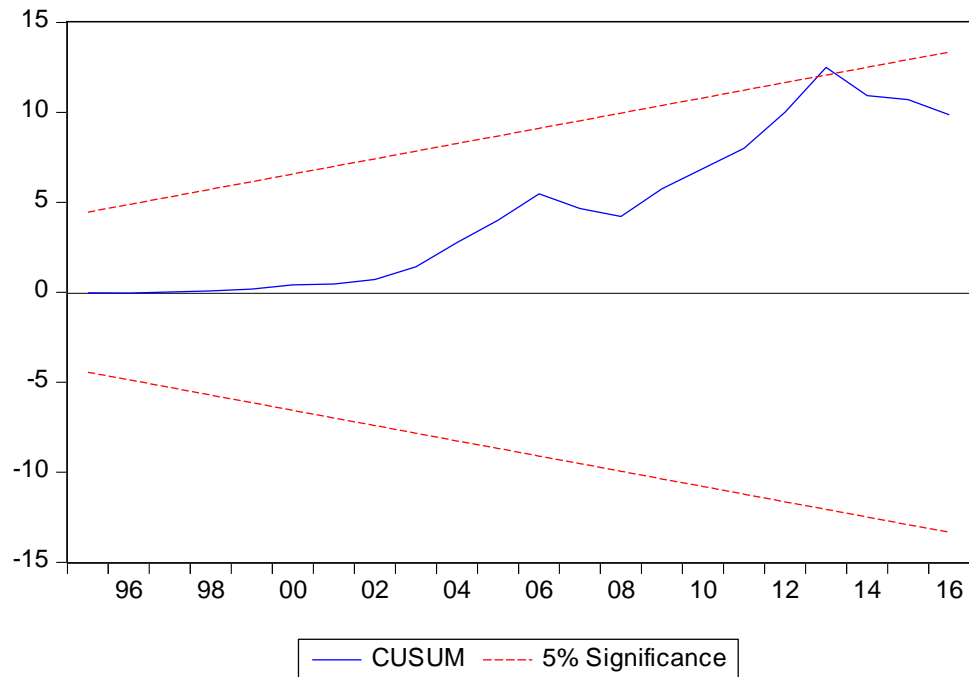
F-statistic	1.221079	Prob. F (2,15)	0.3226
Obs*R-squared	2.940307	Prob. Chi-Square (2)	0.2299

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#### 4.3.4 Stability test

Figure 4.6 shows the stability of the model. After using the CUSUM test, the estimated parameters model is stable and free from stability problems because the mean value of the dependent variable (unemployment) is within the two lines. If it is not within the lines, the model faces a stability problem. This implies that there is stability in the Model.

Figure 4.3.4: CUSUM test



## **5 CONCLUSIONS AND POLICY IMPLICATIONS**

The chapter is the last chapter of the study of about capital accumulation and economic growth and gives conclusion and policy implications.

### **5.1 Summary and Conclusion**

The common wisdom is that a nation may break out of its poverty cycle of poverty via a combination of domestic savings and foreign direct investment. Long-term growth rates in emerging nations are commonly advocated to be increased via capital accumulation. Raising the savings rate, keeping the banking and credit systems in excellent shape, reducing the prevalence of corrupt practices, and providing an attractive investment environment are all crucial to fostering a culture of saving and investing.

### **5.2 Policy Implications**

First, Capital stock investment is necessary for a nation to expand its capital accumulation. Second, having seen firsthand the benefits of both foreign direct investment and savings, I believe it is imperative that the Somali government facilitate both means of wealth accumulation. Foreign and domestic physical capital accumulation requires an enabling environment, security, legal frameworks, and supporting infrastructure. Last but not least, I propose that the government provide a favorable setting for both local and international investment. Human capital development via formal education and on-the-job training also merits boldness.

As a result of the shift to a network economy, there will be significant alterations to underlying structures and a rise in the demand for competent individuals with the right mix of academic credentials, professional experience, and technical know-how. Investing more time and money into educating and training a skilled labor force is the key to solving this issue.

Following is a brief summary of the findings and recommendations:

The expansion of one's productive capacities and general maturation depend on one's ability to make good use of one's free time. Understanding the content and method of operation of the economic law of accumulation is crucial to the advancement of contemporary civilisation.

The technological foundation for contemporary society is the global process of digitization. The category of "information" best illustrates the connection between technological progress and societal advancement, namely the information economy and the proliferation of digital technology.

The digital economy is the foundation for the new social order that has emerged as a consequence of the information society. This is due to the fact that in an information society, it is the knowledge that ultimately determines the outcome of reproduction. In the end, the implementation of network management's strategy of unifying the reproduction stages led to better judgments being made by management. Companies that have established their own ecologies may take full use of its primary features, which include network planning, network organization of the reproduction process, network incentive, and network accounting and control.

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