ALFRED NOBEL UNIVERSITY

DEPARTMENT OF THE GLOBAL ECONOMICS

Master's Thesis

Effect of financial deepening on economic growth in Kenya

Student: Oriyomi Ibrahim Muibi

Group: МЕВангл-19м

Specialty: 292 International economic relations

Supervisor: Kliuchnyk R.M.,

Candidate of Political Sciences

Dnipro, 2021

ALFRED NOBEL UNIVERSITY
DEPARTMENT OF THE GLOBAL ECONOMICS

First (master) level
Specialty 292 International economic relations

Approved by:
Head of the Department
Doctor of Ecomomics,
Professor A.O. Zadoia

“____” __________________20__ p.

The Master’s Thesis
Assignment
Oriyomi Ibrahim Muibi
Student’s full name

1. Title «Effect of financial deepening on economic growth in Kenya»
2.Supervisor Kliuchnyk R.M., candidate of political sciences
Approved with the Order of «___" _____________ 20___, No. _______________
3. Deadline for submission
____
4. Aim of the paper is to analyze the financial sector and its impact on the economic growth in Kenya in the context of the concept of the financial deepening and to develop the recommendations for the development of the financial deepening in Kenya.

5. Thesis outline (list of issues to be developed):
CHAPTER 1 THEORETICAL ASPECTS OF THE INFLUENCE OF FINANCIAL DEEPENING ON ECONOMIC GROWTH
1.1. Theoretical approaches to assessing the impact of the financial sector on economic growth
1.2. The concept of financial deepening in the system of financial market indicators
1.3. Effect of financial deepening on economic growth
CHAPTER 2 THE ANALYSIS OF ECONOMIC GROWTH OF KENYA AND THE EFFECT OF FINANCIAL DEEPENING
2.1. The main indicators of economic growth of Kenya
2.2. The characteristics of the financial sector development in Kenya
2.3. The assessment of the financial deepening in Kenya
CHAPTER 3 ASSESSMENT OF THE EFFECT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN KENYA AND ITS FUTURE PROSPECTS
3.1. Analyzing the effect of financial deepening on economic growth in Kenya
3.2. Directions for the development of the financial sector in Kenya in the context of stimulating of financial deepening and economic growth
6. Date of issue of the assignment 01.09.2020
7. Thesis schedule

no	Stages	The deadline for submission	
		Schedule date	Actual date
1	Chapter 1 THEORETICAL ASPECTS OF THE INFLUENCE OF FINANCIAL DEEPENING ON ECONOMIC GROWTH	02.11.2020	02.11.2020
2	Chapter 2 THE ANALYSIS OF ECONOMIC GROWTH OF KENYA AND THE EFFECT OF FINANCIAL	23.11.2020	01.12.2020

	DEEPENING		
3	Chapter 3 ASSESSMENT OF THE EFFECT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN KENYA AND ITS FUTURE PROSPECTS	03.12.2020	05.01.2021
4	The whole paper	04.01.2021	18.01.2021

Student __________ Oriyomi I.M.

Supervisor __________ Kliuchnyk R.M.

SUMMARY

Oriyomi Ibrahim Muibi "Effect of financial deepening on economic growth in Kenya"

The master's thesis is devoted to the consideration of the relation between the financial deepening and economic growth. The theoretical approaches to assessing the impact of the financial sector on economic growth are presented. The concept of financial deepening in the system of financial market indicators is considered. The effect of financial deepening on economic growth is studied. The research deal with the main indicators of economic growth and the characteristics of the financial sector development in Kenya. It is completed the assessment of the financial deepening in Kenya. It is proved that the financial deepening has an impact on the economy. The analyzing the effect of financial deepening on economic growth in Kenya allowed us to consider that the financial services industry is being restructured by the ever-changing consumer needs, innovative financial products, technological advancement and the use of multiple delivery channels. The main directions for the development of the financial sector in Kenya in the context of stimulating of financial deepening and economic growth are focused on the main growth channels: rural households transition away from farming; a modern technology-led services sector grows.

Key words: financial deepening, economic growth, financial sector, financial innovations, financial services, financial inclusion, bank system

АНОТАЦІЯ

Орійомі Ібрагім Муїбі «Вплив фінансової глибини на економічне зростання в Кенії»

Магістерська робота присвячена розгляду зв'язку між фінансовою глибиною та економічним зростанням. Представлені теоретичні підходи до оцінки впливу фінансового сектору на економічне зростання. Розглянуто концепцію фінансової глибини в системі показників фінансового ринку. Досліджено вплив фінансової глибини на економічне зростання. Дослідження стосується основних показників економічного зростання та особливостей розвитку фінансового сектору в Кенії. Завершено оцінку фінансової глибини в Кенії. Доведено, що фінансова глибина впливає на економіку. Аналіз впливу фінансової глибини на економічне зростання в Кенії дозволив нам вважати, що галузь фінансових послуг перебудовується внаслідок постійно мінливих потреб споживачів, інноваційних фінансових продуктів, технологічного прогресу та використання безлічі каналів доставки. Основні напрямки розвитку фінансового сектору в Кенії в контексті стимулювання фінансової глибини та економічного зростання зосереджені на наступних основних каналах: сільські домогосподарства переходять від фермерського господарства; зростає сучасний сектор послуг, керований технологіями.

Ключові слова: фінансова глибина, економічне зростання, фінансовий сектор, фінансові інновації, фінансові послуги, фінансова інклюзія, банківська система

CONTENTS

INTRODUCTION

The problem of the role of the financial sector in the public economy has always occupied one of the central places in economic research. In recent decades, interest in studying the impact of the level of financial development on the real economy has increased significantly, due to large-scale financial and economic shocks, which have aggravated the need to rethink the place and significance of finance in the modern world.

In Kenya, the urgency of this problem is associated, in addition, with the specifics of the formation of the financial sector in the context of the development of market relations, expressed in its relative isolation from the real sector, and in the new situation - also taking into account the activation of such factors as increased geopolitical tensions and reduced availability long-term financial resources in Western markets.

The aim of the thesis is to analyze the financial sector and its impact on the economic growth in Kenya in the context of the concept of the financial deepening and to develop the recommendations for the development of the financial deepening in Kenya.

The objectives of the thesis are:

- to research the theoretical approaches to assessing the impact of the financial sector on economic growth;
- to determine the concept of financial deepening in the system of financial market indicators;
- to identify the effect of financial deepening on economic growth;
- to evaluate the main indicators of economic growth of Kenya;
- to consider the characteristics of the financial sector development in Kenya
- to assess the financial deepening in Kenya and its main trends;
- to analyze the effect of financial deepening on economic growth in Kenya;
- to develop the directions for the development of the financial sector in Kenya in the context of stimulating of financial deepening and economic growth.

The object of research are the relations in the financial system and economic growth in Kenya.

The subject of the research is the financial deepening and its impact on economic growth in Kenya.

Methodology. During the study, general scientific methods of cognition, analysis and synthesis, a process approach, methods of systemic, strategic, economic and statistical analysis were used.

The practical significance of the work means the possibility of development directions for the development of the bank sector for the decision the goals of financial deepening and economic growth in Kenya.

CHAPTER 1
THEORETICAL ASPECTS OF THE INFLUENCE OF FINANCIAL DEEPENING ON ECONOMIC GROWTH

1.1. Theoretical approaches to assessing the impact of the financial sector on economic growth

The idea of the stimulating effect of the development of the financial sector on economic growth was firstly expressed and described in detail in the work of Schumpeter [1], where the author showed that banks as financial intermediaries perform a number of functions necessary for the development of the economy. This idea was later tested empirically in the works of Goldsmith [2] and McKinnon [3], the results of which confirmed a positive correlation between indicators of the indicators of the financial system and long-term economic growth rates in data from several countries around the world.

The beginning of the 1990s was marked by the emergence of a large number of empirical works on the topic of causal relationships between the development of financial institutions and economic growth. In the empirical literature, a new direction of research is being formed - "finance-growth nexus". In [4], it was firstly demonstrated that the depth of financial markets is a stable predictor of economic growth in the next decade on a large cross-country sample covering 119 countries for 1960-1989. In a complementary work [5], the authors show that the stable relationship they discovered in their previous work between the current depth of the financial sector and future economic growth is explained through the channel of banks filtering the flow of loan applications coming to them for potentially successful and unsuccessful business projects. Banks finance the former and do not finance the latter, which contributes to economic growth in the future. In works [6; 7; 8], it was shown that the liquidity of the stock market has a positive effect on economic growth, since in more liquid stock markets, potential investors have more incentives to get involved in business projects, since it is easier for them to sell their shares in the future. On the contrary, these theoretical concepts and empirical findings [6] contradict the conclusions of [9]. With the growth of stock market liquidity and the ability to sell shares quickly - the incentives for potential investors to speculate in securities grow. In addition, it is also necessary to mention the works [10] and [11], where, based on a comparison of the results of various econometric methods based on the use of instrumental variables, it was found that the development of financial institutions generates the development of the economy as a whole, and not vice versa.

The influence of financial development on economic growth was revealed in empirical literature. Nevertheless, the authors of a number of works came to the opposite conclusions that the primary cause of financial development is economic growth. Their main thesis was that financial development is a side effect of economic growth [12]. In other words, they noted that there was no stimulating effect of finance on growth. The revealed presence of a statistical relationship between the dynamics of the development of the financial system and economic growth can be explained by the influence of macroeconomic conditions [13], institutional factors [14; 15], the achieved level of well-being of the population [16].

However, a significant drawback of all the considered works is an attempt to identify only the linear character of the relationship between finance and economic growth. The results of later studies showed that the growth of the deepening of the financial sector is not always able to lead to an acceleration of economic growth. On the one hand, the development of financial markets contributes to economic growth, creating ample opportunities for investment in the economy, reducing the problem of information asymmetry and allowing economic agents to diversify funding sources [17; 18]. On the other hand, upon reaching a certain threshold, the level of development of the financial sector turns out to be excessive in terms of the accumulation of various risks in the system. The latter, in turn, lead to a decrease in stability and a reduction in the rate of economic growth [19; 20; 21; 22] and to an increase in the volatility of economic growth rates [23; 22]. This circumstance is a particularly urgent problem for countries with underdeveloped regulation and supervision of financial markets [22]. Consequently, the relationship between financial and economic development is not linear. It is assumed that there is a certain saturation point in the development of financial markets in terms of opportunities to stimulate balanced economic growth (the “too much finance” effect). Overheated financial markets are becoming a catalyst for slowing economic growth as a result of the accumulation of a significant amount of risks, the emergence of a high probability of financial crises and increased volatility of the issue [24; 25].

In [26], the direction of causality was tested in a panel of 24 OECD countries and it was found that for most countries, an increase in the depth of the credit market is the cause of economic growth, while the reverse causal relationship is weakly confirmed. At the same time, for 12 of 24 countries, the relationship between finance and growth was not found. This may be evidence of the existence of a certain maximum level of development of the financial system, contributing to economic growth.

In studies of the relationship between the development of the financial system and the economy, the dependent variable is the rate of economic growth and the analysis of its factors. In this case, for an objective assessment of the impact of financial development on economic growth, one should take into account both the rates of economic growth and the volatility [22; 27; 28]. The main goal of economic policy is not only to achieve high rates of economic development, but also to maintain the stability of development. A developed financial sector can help reduce the volatility of GDP dynamics, but only up to a certain limit. Despite the fact that developed financial systems create conditions for stabilizing economic growth by smoothing the processes of production and consumption of goods, they can also lead to an increase in excess debt by firms. This can lead to a massive loss of stability by corporate and private borrowers [23], which will affect the dynamics of GDP.

In the study [22], the analysis was based on data from the World Bank Global Financial Development Database, World Bank FinStats, IMF Financial Access Survey, Dealogic corporate debt database, and Bank for International Settlement debt securities database. The relationship between the level of development of the financial market and economic growth, the volatility of economic growth and financial stability (measured by the z-score) is considered [22].

The level of financial market development is proposed to be measured by the financial development index, which takes into account the deepening of financial institutions (the ratio of the volume of loans issued to private companies and households to GDP; the ratio of pension funds' assets to GDP, etc.), the availability of financial institutions (the number of divisions of operating commercial banks by 100 thousand people of the adult population, the number of ATMs of commercial banks per 100 thousand people of the adult population), the efficiency of financial institutions (the difference between the volume of loans issued and the volume of attracted deposits / deposits of commercial banks; return on assets, etc.), the deepening of financial markets (the ratio capitalization of the securities market to GDP, etc.), the availability of the financial market (the total number of legal entities that issue debt obligations, etc.), the efficiency of the financial market (the ratio of the capitalization of securities traded on the securities market to the total capitalization of the securities market). The weights of the components of the index were determined using the principal component analysis. The index takes values from 0 to 1 [22].

There is a statistically significant relationship between the financial development index and economic growth. The value of the financial development index, at which the positive effect of the impact on economic growth begins to decline with a 95% probability, is 0.7. This weakening relationship between the growth of the financial development index and economic growth is due to the growth of indicators of financial deepening. At the same time, there is a positive linear relationship between the availability of financial institutions and markets and economic growth and the absence of a significant positive relationship between the efficiency of financial institutions and markets and economic growth [22].

The authors found a non-linear relationship between the financial development index and the volatility of economic growth rates. Initially, the growth of the financial development index reduces the volatility of economic growth, but after a certain stage associated with the growth of the financial development index, an increase in the volatility of economic growth is observed. At the same time, the risks of financial instability arise due to the growth of indicators of the deepening of financial institutions [22].

According to a number of studies [18; 29; 17; 31], not only an increase in deepening, but also a change in the structure of the financial sector (the ratio between its various segments) can have an impact on economic growth. For example, in [30], an indicator of the ratio between the capitalization of the stock market and loans to the private sector was introduced into the cross-country growth regressions, and its stable statistical significance was shown. In [29], it was revealed that not only the total volume of financial services is important for economic development, but also their distribution between different segments of the financial sector. From works [18; 17; 31] it follows that with the transition of the country to a higher level of development, entrepreneurs begin to need a wide range of financial instruments that are convenient for flexible risk management and raising capital, primarily securities. In these conditions, the predominance of bank lending in the financial sector may become an obstacle to further economic growth.

In the economic literature, there are significant discrepancies in assessing the impact of finance on economic growth. R. Levine [17] notes that finance is not a factor in economic development; R. Lucas excludes finance from the key determinants of economic growth [33]. From this perspective, finance does not cause economic growth, but simply responds to changes in the requirements of the real sector.

A polar point of view is presented in the study by M. Miller that financial markets contribute to economic growth [34]. W. Bagehot, J. Schumpeter, J. Gurley and E. Shaw, R. Goldsmith and R. McKinnon make more restrained conclusions. Their idea is that ignoring the relationship between finance and economic growth significantly limits understanding of the latter. This specificity of views is due to the difference in the initial conceptual structures, as well as the evolution of finance in the course of social development associated with the process of transition from simple to more complex forms, the specific historical and country specifics of the latter and the reflection of the historical stages in the evolution of the financial sector.

The position prevailing in the early stages of the formation of financial institutions, according to which their activities were reduced exclusively to the function of ensuring the economic turnover of money, was rethought as it developed further. Within the framework of the neoclassical concept of economic science, the role of the financial sector in the public economy began to be associated with the efficient allocation of resources based on overcoming the uncertainty of the investment result and reducing the investment risk. The founder of the evolutionary theory, Schumpeter, viewed this role through the prism of the development concept, distinguishing the participation of financial institutions in economic circulation. It involves monetary mediation of routine economic processes, and the development process, which requires the activation of market financing of investments [1].

The logic of substantiating the role of finance in the economic system of J. M. Keynes was based on an appeal to the triad of fundamental psychological factors (psychological propensity to consume, psychological assumptions about future income from capital assets, and psychological perception of liquidity [36]. The first proved the key role of investments in the economic development. The last two proved the dependence of the investment dynamics on the functioning of the financial market. His followers (H. Minsky, L. Ray, C. Wahlen, etc.) focused the attention on the study of the financial aspects of the accumulation of productive capital in a market economy.

The new institutional theory linked the role of the financial sector in economic development with the ability of financial institutions to concentrate and broadcast information, reduce information asymmetry, ensure the execution of contracts and, as a result, minimize transaction costs. Financial systems that arise to level market friction naturally affect the distribution of resources in time and space, which affects economic growth [37].

Since the 90s. XX century, empirical studies of the impact of the financial sector on economic growth, including developments at the microeconomic, sectoral, macroeconomic, intercountry and intertemporal levels were published. The mechanisms of the impact of financial development on economic growth were investigated by highlighting factors such as investment, human capital accumulation, and overall productivity. The results of the estimates obtained turned out to be very ambiguous and had a significant scatter. However, research has shown a significant positive relationship between financial sector performance and long-term economic growth. They also made it possible to identify the factors of financial development and the channels through which the financial sector affects economic growth. Overall, the data showed that:

- the level of financial development is determined by the action of various determinants. Some researchers consider in their capacity the legal systems and macroeconomic policies affecting the formation of financial sector operations, others focus on the political, cultural and geographic context;
- finance has a more important influence on economic growth through promoting productivity and resource allocation than through capital accumulation. However, initial capital formation is predominantly present in the developing world, while productivity is most important for industrialized countries;
- development of the financial sector helps to reduce liquidity constraints and increase long-term investments of companies. This reduces investment volatility and stabilizes economic growth processes, stimulates innovation activities of firms, the formation of a more efficient structure of the asset portfolio and the choice of rational organizational forms with potential consequences for aggregate economic growth;
- financial development has a disproportionately positive impact on sectors with over and under financial resources, strong and weak future opportunities, dominance of small or large enterprises;
- countries with a more developed financial sector are characterized by faster rates of economic growth, while the type of financial system (with the predominant development of banks or capital markets) is not so important.

Many studies have demonstrated that the financial sector, by mediating the accumulation of public savings and allocating them for the best use, is critical to economic growth.

Analyzing the factors of economic growth, it is necessary to consider the concept of financial development as one of such factors. In particular, the qualitative and quantitative characteristics of financial development. The analysis of qualitative characteristics presupposes, first of all, an appeal to the functions of the financial system, as well as the ability of the financial system to implement these functions. Financial development takes place when financial instruments, markets and intermediaries reduce or eliminate asymmetries of information, operational and transaction costs and provide an improvement in the implementation of functions of the financial system [17].

In the economic literature, there are different ideas about the functions of the financial system. R. Levine identifies five key functions of the financial system: providing economic agents with information on possible investments, monitoring investments and implementing corporate governance, risk management, mobilizing and accumulating savings, reducing circulation costs (facilitating the exchange of goods and services). Each of these functions, in his opinion, can influence savings and investment decisions and, therefore, economic growth [17].

R. Merton and Z. Bodie believe that the financial system has such functions as payment and settlement, pooling of resources and allocation of shares in a company, temporary, cross-sectoral and cross-country reallocation of economic resources, risk management, provision of information on prices, overcoming or mitigating problems associated with information asymmetry. At the same time, the financial system does not perform these functions if it does not redistribute economic resources and does not use them optimally [37]. Financial development involves improving the implementation of key functions of the financial system.

In a quantitative aspect, financial development is characterized by various indicators. In particular, to assess financial development, one can use a set of parameters proposed by the World Bank experts, which includes groups of indicators: financial deepening (size of financial institutions and markets); financial inclusion (the accessibility of financial services for economic agents); the stability of financial institutions and markets; efficiency of financial institutions, financial markets and operations. The methodology for calculating these indicators differs depending on the objectives of the study and the data set used, which ensures sufficient adaptability of the methodological tools with a common conceptual framework.

The financial deepening of the economy is understood as its penetration with financial relations, saturation with money, financial instruments and institutions. The indicators of financial deepening are indicators that reflect the level of monetization of the economy, the share of a segment or institution of the financial market relative to GDP or other financial indicator. The level of monetization of the economy is defined as the ratio of the monetary aggregate M2 to GDP. The deepening of development of financial markets is characterized by indicators: the ratio of financial assets (bank assets, stock capitalization, debt securities in circulation) to GDP, or as the sum of domestic credit and the volume of the securities market as a percentage of GDP.

1.2. The concept of financial deepening in the system of financial market indicators

The development of the country's financial market is determined by a number of factors, among which one of the key factors is the “financial deepening”. At the macroeconomic level, the deepening of a country's financial market is defined as the aggregate of financial claims and obligations in relation to GDP. It shows the extent to which corporations, households and government institutions can finance their activities through financial markets and financial intermediaries. This indicator is close to the indicators of the saturation of the country's turnover with monetary and financial instruments and also implies the development of the financial architecture. This provides an assessment of the possibilities to accumulate and distribute monetary resources to meet the needs of economic growth. According to scientists N. Loayza, R. Rancière, the deepening of financial markets in the long term makes the financial system more stable, since the ability to service capital flows without sharp fluctuations in asset prices and exchange rates increases [38].

The indicator "financial market deepening" was introduced by the IBRD experts, who used it mainly in studies examining the level of financial resources of a country or a group of countries, primarily developing countries, to meet the needs of economic development. Later, it acquired a more comprehensive character, allowing a broader assessment of both the level of financial intermediation in general and its individual segments [39]. To a greater extent, the depth of financial markets began to be based on monetary indicators of a broad monetary base and liquid liabilities of commercial banks and non-financial institutions [40].

When determining the financial deepening coefficient of the markets of countries or their group as part of the world financial market, two groups of basic indicators are often used:

- the level of development of the banking system (loans issued by commercial banks or deposits to GDP);
- indicators of the development of the securities market (maturing government, municipal and corporate bonds and capitalization of equity markets), the insurance market to GDP.

The advantage of the financial depth indicator is its versatility and the ability to carry out fairly correct international comparisons both in terms of market segments and analysis of the financial positions of individual countries or clusters of countries in general and for the main groups of financial products.

At the same time, for a more objective assessment of the role and place of the financial market in the economy, it is necessary to take into account that this group of indicators, reflecting through the financial deepening coefficient the role of the financial market and its segments in the economy, should be supplemented by an assessment of the degree of accessibility of companies and individuals to financial services in the financial market. Thus, the process of deepening the financial market is largely determined by the degree of maturity of financial intermediation institutions. Financial systems develop through the creation of institutions, instruments and mechanisms to ensure the transfer of savings and the efficient use of the general savings fund for investment purposes.

The idea of the role of the financial market in the economy can be formed on the basis of indicators of financial deepening. They are relative indicators showing the share of a particular market segment relative to GDP or another financial indicator.

The collection and construction of relevant indicators is based on world statistics. The data is reflected in the exchange and banking statistics of states, published by international economic organizations. In particular, the World Bank experts maintain a publicly available Financial Structure Database (FSD), which includes 22 indicators of financial deepening. These indicators assess the level of development of both the financial market of a particular country as a whole (for example, using the dynamics of the ratio of liquid liabilities of financial institutions to GDP), and of its individual segments.

Three blocks of relevant indicators can be distinguished:

1) indicators of the banking system development (the ratio of the volume of loans issued by commercial banks to GDP, the volume of bank deposits to GDP, net interest margin to the total value of interest-bearing assets of the banking system, etc.);

2) indicators of the development of the securities market (the ratio of capitalization of stock markets, corporate and government bonds to GDP, etc.);

3) indicators of the development of the insurance sector (the proportion of collected premiums for life insurance and other types of insurance in GDP) [35].

In addition, on the basis of the indicators presented in this database, additional analytical indicators can be constructed. These are indicators that allow us to compare the importance of individual segments of the financial market, to conduct cluster analysis of states depending on the specific weights of these segments. Such indicators can be obtained:

- by direct transformations of the available indicators (the ratio of loans issued by commercial banks to the capitalization of the securities market, indicates a more important role of the banking sector or the securities market in the economy);

- based on the use of statistical tools (for example, factor analysis methods).

A high degree of completeness of the base of financial structure indicators (especially in developed countries), time series covering more than 40 years, the possibility of constructing additional analytical indicators are factors that predetermined the wide popularity of the FSD base among researchers dealing with financial development. The vast majority of empirical research conducted since 2000 is based on processing the financial deepening indicators that make up this database.

The higher value of the indicator of financial deepening indicates a higher institutional level of development of the segment of the financial market that it characterizes. If in country A the share of commercial bank loans in GDP exceeds the value of a similar indicator in country B, say, by more than 10 percentage points, we can speak of a higher level of credit orientation of the banking system in country A. However, there are countries that are quite close or completely identical on some parameters of financial deepening. Are there any additional criteria to expand the scope of this analysis?

Let's consider a concrete example. Countries such as Colombia and Lithuania are comparable in terms of the “ratio of commercial bank loans to GDP” (in both countries it is about 20%). At the same time, about 70% of households in Lithuania have loan accounts in banks, while in Colombia such accounts are kept only for 40% of the population. The availability of such information allows us to conclude that the coverage of the population of Lithuania with credit services is wider than that of Colombia. Accordingly, credit banking services in Lithuania are also distinguished by a higher institutional level of development, despite the formal equality of financial deepening indicators with Colombia.

Thus, for a more objective analysis of the role of the financial market in the country's economy, it is desirable not only to have information about the financial deepening ratios, but also to know how secured the access of economic agents to financial services is. In other words, an efficient financial market should be characterized by both a high level of indicators of financial deepening and a relatively even participation of economic agents in the formation of these indicators. The need to ensure the broadest possible coverage of the population with financial services has come to be known as “financial inclusion” [41].

Financial services coverage requires a separate comment. Even in countries with a high level of financial market development, not all households or firms use and would like to use the financial services available to them. In particular, people of the older generation, as a rule, do not resort to bank loans, relying on savings made during their working life. Financial refusals can also be based on ethical or religious reasons.

The concept of access to financial services is broader than use, as it also includes the part of the population that has the opportunity, but does not use these services. The main goal of public policy for the development of the financial market is to increase access to financial services, reducing the number of those who are forced to abandon them because of unreasonably high costs, any discriminatory restrictions or inadequacy to the requirements of potential clients.

In contrast to indicators of financial deepening, measuring access to financial services is more difficult because it is based on survey data. The number of surveys conducted, which are aimed at identifying the features of the financial behavior of the population, is currently small (they cover no more than 40 countries).

The most important initiatives to determine the population's access to financial services include, for example, surveys of living standards sponsored by the World Bank, or Eurobarometer - surveys conducted by the European Commission [42]. However, due to differences in the methodology for conducting these surveys, the results obtained are often not completely comparable. Nevertheless, the results of such surveys are very informative. In particular, survey data for the United States and Mexico show that cost barriers significantly limit the Mexican population's access to financial services compared to the United States. 70% of respondents in Mexico noted that they are not able to open a bank account due to high service fees [43].

At the same time, the presence of a bank account (loan and / or savings) is the main indicator that measures the population's access to financial services. Since the range of countries for which the percentage of the population with bank accounts is reliably known, attempts have been made to estimate this indicator for other countries indirectly.

It was found that there is a positive relationship between the percentage of the population with bank accounts and the number of open bank accounts per capita (an indicator that is available from the banking statistics of most countries) [44]. Accordingly, knowing the number of open bank accounts per capita, it is possible to obtain rough estimates of the percentage of the population with bank accounts for those countries for which survey data are not available.

In addition to the share of the population with bank accounts, the indicators are offered as indicators of access to financial services. For example, the number of bank branches or ATMs per 1000 residents (or per 1000 sq. Km), the number of documents for applying for a loan, the time for consideration for a loan, etc. For developing countries, where funds transferred by labor migrants from abroad play an important role, a significant criterion for the population's access to financial services is the cost of transfer (as a rule, based on the average amount of transfer, equivalent to $ 250).

This quantitative information significantly expands the understanding of the level of development of the financial market in comparison with the analysis of indicators of financial deepening. However, even the group of indicators of “financial inclusion” does not fully assess the scale of the financial market and access to financial services. The high value of the indicator of bank branches or ATMs per 1000 people or 1000 sq. km can be provided exclusively at the expense of large cities, while rural areas may not be provided at all. It is possible to assess the real “remoteness” of banking service points only on the basis of survey data, and so far the amount of such information is insignificant.

In addition, financial services can be distributed by non-financial organizations (postal banking services), as well as through various communication channels (telephone, Internet). It can have a positive effect on the population's access to them, especially in geographically remote regions. Objective evidence on the role of such channels for the distribution of financial services is also available for a limited number of countries.

Thus, the problem of measuring the scale and role of the financial market in the modern economy is only partially solved. Despite the positive relationship between the level of financial deepening and the population's access to financial services, it is necessary to accumulate more information on the "inclusiveness" of the financial markets of the countries of the world. This would allow a much more objective analysis of the impact of the financial market on economic growth, poverty and inequality, and more accurately measure the welfare effects induced by government policy measures to develop the financial market.

Analysis of financial deepening indicators allows us to identify general and specific trends in the development of the financial market in individual countries. Based on this approach, it is possible to identify the classification features of these states. The experience of comparative analysis of the financial market has shown two polar types of its structure:

- a financial system with the dominant role of financial intermediaries (banks, insurance companies, etc.);
- a financial system with a predominance of the securities market (stocks, bonds, financial derivatives).

Traditionally, Germany was recognized as the standard of the first type of structure, the central place in the financial system of which belongs to the banking sector, while the US financial system is identified with the dominance of markets. Other countries, according to this typology of financial market structures, occupy an intermediate position from a bank-oriented financial market to a system dominated by the securities market.

At the same time, such a one-dimensional classification of financial market structures is not exhaustive. In the United States, the capitalization of the stock market (135% of GDP) is more than twice the value of the assets of the banking system (62.7% of GDP). Nevertheless, the assets of the US banking sector are comparable to 13% of world GDP in absolute terms, and significantly exceed the banking systems of the same Germany or France. US commercial banks such as Citigroup and Bank of America have consistently held leading positions in various ratings of the world's leading multinational banks. Accordingly, the dominance of the securities market can be combined with a highly developed banking system, and vice versa.

The development of the financial market in any country is associated with many political, legal and historical patterns. The financial market depends on the trajectory of its previous development. Therefore, changes in the financial market are closest to the "path dependence" mode. There is a strong dependence of new forms of financial intermediation on old ones.

It is interesting that this thesis is not purely speculative, but is also confirmed at the level of model formulations. In particular, researchers from the European Central Bank proposed an economic and mathematical model of general equilibrium, which makes it possible to explain why the financial systems of two countries can radically differ from each other, even if the macroeconomic parameters of the development of these countries are practically identical for a long time [45]. Thus, the existence of a financial system with a dominant role of the securities market in this model is due to the fact that in the past significant fixed costs were incurred to create such a financial structure, and its further operation and maintenance of efficiency no longer require such serious costs. Due to this, using this type of financial market structure to transform savings into investments can be cheaper than in the case of a bank-oriented financial market.

Accordingly, the deliberate suppression of the development of banks (or the securities market) in the past probably leads to the formation of a financial system based on the dominance of the securities market (the banking sector).

A striking example of this is the limitation of the territorial expansion of commercial banks in the United States from the middle of the 19th century, the absence of the Central Bank until 1913, as a result, a series of banking crises (1857, 1873, 1884, 1893, 1907), which forced entrepreneurs to use methods of financing their business, alternative to a bank loan (issue of commercial paper, shares).

In addition, certain mechanisms that restrain the development of a particular segment of the financial market may be due to the very specifics of the functioning of this segment. Thus, researchers note that British banks have historically focused on maintaining liquidity, often to the detriment of lending to the real sector, showed less interest in detailed monitoring of the economic activities of their potential borrowers [46].

1.3. Effect of financial deepening on economic growth

The concept of expanding access to financial services is measured by various indicators. However, the most important is access to and efficient use of financial services such as banking and insurance services at affordable prices (especially for the poorest people). The coverage of financial services and their impact on people, companies and the economy should be assessed.

Financial access by the IMF has been estimated since 2004 based on annual data collected by central banks from financial service providers in 189 countries. The results of the study indicate a significant increase in access to financial services over the past 10 years. Globally, the number of bank accounts per 1,000 adults increased from 180 to 654 between 2004 and 2018. Bank branches per 100,000 adults increased from 11 to 16.

There are large differences between countries and regions. For example, in 2018, there were 1,081 accounts per 1000 adults in high-income countries and 88 in low-income countries. Bank branches per 100,000 adults in developing and emerging markets ranged from 978 in Europe and Central Asia to 158 in sub-Saharan Africa.

The World Bank's Global Findex, released every three years, brings together data from a global survey of individuals' access to and use of financial services. This work began in 2011 and uses 100 indicators included in the survey (taking into account age, gender and income differentials). According to Global Findex estimates, in 2017, 2 billion adults (almost 40% of the world's adult population) did not use banking services, meaning they did not have bank accounts with formal financial institutions. This figure ranges from less than 10% in high-income countries to 86% in low-income countries. The study also points to the potential for increased use of financial services by people who use banks. Only 3/4 of account holders use them to keep their savings, withdraw cash or send and receive electronic payments at least three times a month. The survey also shows that, despite an increase in the number of women with access to and use of formal financial services, approximately 7 % fewer women than men have access to financial services.

The World Bank has been conducting a business survey since 2002 on the use of financial services by businesses. In 2018, 36% of companies worldwide reported that lack of access to finance was a major obstacle to their development (3% in high-income countries, 42% in low-income countries). In developing and emerging economies, 21% of East Asia and Pacific companies said they experienced access restrictions, while in sub-Saharan Africa, 37% said so.

The effects of expanding access to financial services are positive for both the population and the companies.

The poor benefit from basic payment services such as deposit and savings accounts, and insurance services. Providing individuals with access to savings accounts increases savings, income, consumption, productivity, empowers women, and increases business investment and investment in health prevention.

Improving access to credit and other types of finance is helping small firms, which often find it difficult to obtain bank loans because they do not have an established reputation, credit history or collateral. Their access to credit is directly linked to future innovation, job creation and economic growth.

However, estimates of microcredit have been mixed. Data sources demonstrate that access to financial services has an impact on the economy as a whole at the macro level. Expanding access to financial services was not in the focus of most economists until the early 2000s, when problems primarily originated in the United States due to the rise in low-quality mortgages (primarily to poor people or those with poor credit ratings), which until then mostly had no access to credit), escalated into the global financial market crash of 2008.

In [22], the authors, based on data on access to and use of financial services in more than 100 countries, proved the global economic consequences of expanding access to financial services.

Expanding access to financial services for businesses and individuals has significant benefits for economic growth. A country with a medium level of financial market depth (the total amount of funds raised by financial institutions) can increase its annual GDP growth rate in the long term by 3-5 percentage points by expanding the population's access to ATMs and enterprises' access to credit. In addition, sectors that depend on external sources to finance investment are growing at a faster pace in countries where financial services are more readily available. However, the effect on economic growth is limited and is gradually decreasing as access to services expands and the financial market deepens. At very high levels, easy access to financial services can cause destroyable effect on growth by encouraging irresponsible lending by financial institutions that lend without adequate risk management.

However, risks to financial stability, the manifestation of which could reduce a country's economic growth, increase when access to credit expands without adequate supervision. Countries with weaker supervision face tough choices between increased financial inclusion and stability. The reserves (capital) that banks must have to protect themselves from adverse shocks can be eroded, mainly due to the inability to properly track the over-growth of loans that are not paid on time. But in countries with strong oversight, expanding access to financial services goes hand in hand with financial stability. Expanding access to credit has been accompanied by an increase in banks' reserves to cover losses. Moreover, efforts to improve loan repayment rates can also conflict with increased access to financial services. For example, imposing restrictions on how much of their income borrowers can pay for loans to reduce the risk to financial and economic stability from booms and bust in the housing market (as Australia, Hong Kong and the United Kingdom have done) will also restrict access to loan.

Expanding access to non-credit financial services such as deposit and savings accounts, for example, through ATMs, bank branches, and smartphones, does not harm financial stability. As well as expanding access to insurance services.

In general, the availability of financial services is increasing along with the deepening of the financial market. For example, there is a positive relationship between indicators of financial market development (volume of loans) and the availability of financial services (percentage of enterprises with loans). Of course, unlimited access to credit is not desirable, but the share of enterprises with loans illustrates the overall positive relationship between the availability of services and the deepening of development of the financial market.

The relationship with the deepening of the financial market, however, is superficial. Countries with the same financial market deepening may have different levels of financial inclusion. For example, in Mongolia, Nepal, Slovenia and Ukraine, lending to the private sector is approximately 60 percent of GDP. However, the share of companies with loans differs. Approximately 65 percent in Slovenia, 50 percent in Mongolia, 35 percent in Nepal and 18 percent in Ukraine.

This means the simultaneous influence of other factors. For example, in [32] it is shown that higher competition in the banking sector ensures greater availability of credit. This explains why Slovenia has higher access to credit than Mongolia, where competition between banks is more than half that of Slovenia. But competition alone cannot explain the big difference between Slovenia and Nepal or Ukraine. In [32], the authors also pointed out that the quality of financial information and availability to potential borrowers are important factors. Among these four countries, Slovenia has the highest level of credit reporting. The country has a credit history bureau with data on the entire adult population of the country. Other studies show that the creation of registries of collateral in the form of movable property such as vehicles, which are often the only assets owned by many potential borrowers in developing countries, helps increase companies' access to finance.

The diffusion of modern technology can also increase access to financial services. One of the areas is mobile banking, when mobile phones are the only communication channel between a client and a financial institution. Only 2 % of adults worldwide use mobile banking, but this technology is rapidly gaining traction in sub-Saharan Africa. Approximately 20 % of adults in Kenya, Tanzania and Uganda receive financial services through mobile phones. Policymakers in Peru are considering expanding access to financial services through mobile payment systems. Mobile accounts are still used primarily for payment transactions. It is not yet clear if they will be able to promote savings, credit and insurance.

Expanding access to financial services requires removing the barriers that keep people away from the financial system. For example, when excessive bureaucracy makes it too expensive to open an account, policymakers can take steps to simplify the procedure for opening an account. Since financial stability as a whole could be undermined by overall bank credit growth or the imposition of a target to boost credit growth, policymakers should consider other measures to help the poor, such as direct and targeted transfers. Policies that make expanding access to financial services economically viable for banks and other institutions are likely to boost economic growth rather than various sector-specific directed lending schemes.

In recent decades, there has been a tendency for the growth rates of the value volumes of financial markets to exceed the growth rates of the world economy, and, accordingly, an increase in their share in relation to world GDP. Until the early 1980s, the rate of growth of financial assets roughly matched the rate of economic growth. The exceptions were periods of aggravation of crises and hostilities, when public debt obligations increased. Subsequently, there is a noticeable acceleration in the growth of financial assets as compared to GDP. In the United States, for example, the total value of financial assets in relation to GDP more than doubled before the 2008 financial crisis. The bulk of the increase was in private debt, as corporations and financial institutions began to turn more to capital markets for financing.

The growth of financial assets was halted by the 2007–2008 global financial crisis. The fall in financial assets affected almost all groups of countries, except for Western Europe. Government-run programs to recapitalize troubled banks have spurred the expansion of private debt issuance. In particular, the level of support increased after the decision of the European Central Bank and the Bank of England on the possibility of using securitized assets as collateral for repo loans. The resumed post-crisis growth of the world financial market again restored the indicators of financial depth in the main market segments, except for non-securitized loans.

The deepening of financial markets was determined both by general trends in the development and improvement of financial mechanisms, and by the peculiarities of the development of regional markets, by the acceleration of growth of certain groups of financial products:

- firstly, the capital market in Western and Eastern Europe, a number of Asian countries has undergone a serious transformation, in particular as a result of the use of schemes for the full or partial privatization of state and parastatal enterprises through public corporatization or sale to private companies, as well as the revaluation of shares upward after growth their dividend yield;
- secondly, the stock market is expanding through the issuance of corporate bonds, asset-backed securities;
- thirdly, there is an increase in deposits as a result of growth in household income, the release of new savings products (certificates of deposit and money market instruments).

Developed countries now have significantly deeper financial markets than developing countries. The financial deepening ratio of the markets of the United States, Japan, Western Europe and other developed countries is at 4.0 or above GDP, compared with 2.8 in China, and about 2.0 or less in other emerging markets [47]. However, with relatively small deviations from the average indicator within the group of developed countries, in the structure of the indicator of financial deepening, they have significant differences depending on the existing financing models.

The largest markets for stocks, corporate bonds and the market for securitized instruments are in the United States. Western Europe follows a largely traditional bank lending scheme and uses banking institutions for other forms of financing. In Japan, almost half of the financial depth indicator is determined by the huge size of the government bond market, and together with bank loans - more than two-thirds. The lag of developing countries in the financial sphere is caused, first of all, by the virtual absence of markets for corporate debt securities and securitized assets. Bank loans and equity capital markets prevail in sources of financing. Thus, when assessing financial deepening, it is necessary to take into account that in developed markets, both investors and issuers of securities have a significantly larger choice of financial institutions and instruments. This allows for better capital and risk allocation.

In the long term, however, the gap between developed and developing countries should be expected to narrow in this indicator. In the latter, the fundamental factors of the deepening of the financial market are strengthened, determined by the growth in volumes and diversification of money demand to finance economic growth. Many of these countries have high savings rates, providing the necessary sources of capital to expand investment in the face of increasing demand for financial resources for infrastructure, housing, commercial real estate and manufacturing facilities.

The further development of financial markets directly benefits the country's economy. This provides the corporate and individual sectors with great opportunities to invest their savings, raise capital and create a more favorable environment for portfolio diversification and risk leveling. As financial markets evolve, their deepening will continue both for the main groups of countries and for groups of financial instruments, which should also be reflected in the indicators characterizing this process.

At the same time, there are significant differences in approaches to assessing the contribution of financial markets to the reproduction of the social product. They are caused by the fact that the deepening of financial markets is a fairly general indicator and should be supplemented by data on their qualitative characteristics, indicators of the efficiency of capital flow management and their structure. On the one hand, the development of the financial system, the expansion of the institution of financial intermediation provides the needs of the investment process directly related to the growth of the real economy. At the same time, the link between the financial sector and economic growth is becoming less pronounced today. This applies to the equity securities market (public issues, additional issues, privatization), and to the debt instruments market (mortgage-backed securities, government bonds).

The limiting factors include financialization. This is the process of forming the GDP of countries mainly at the expense of the financial sector, which provides investment and profit-making without direct involvement in the reproduction of production assets. Securitization in various forms is operating in the same direction, creating conditions for the transformation and increasing the liquidity of intangible assets and significantly expanding their ability to circulate in the money and capital markets. Along with this, the growth of financial deepening can be temporary in the event that it is caused by the swelling of “asset bubbles”, and when the situation in financial markets deteriorates, when there is a significant downward correction in their value.

The development of a system of transnational relations and an increase in the volume of international transactions in the capital market requires expanding the concept of financial deepening and making changes to the indicators characterizing its level, thereby adjusting the assessment of the financial positions of individual countries and regions in the global financial market. Accounting for external assets and liabilities allows us to give a more complete picture of the degree of integration of a country's economy into the international financial system. In this regard, the composite (global) index of financial deepening (IFD) of the economy began to be used. It is determined not only on the basis of indicators of the national market, but also takes into account the country's position in world finance. As shown by IMF calculations, the increase in the degree of global financial deepening in the last two decades was largely due to the growth of external assets and liabilities, which accounted for about a third of the increase in this indicator [48].

Deepening financial markets in the broadest sense contributes to an increase in the level of economic stability, making it possible to serve the growing flows of cross-border capital. Deeper markets can provide alternative sources of funding during international liquidity crises, limiting sharp fluctuations in asset prices and exchange rates. All of these factors could mitigate the problems of global imbalances, thereby contributing to the development of the global financial market. At the same time, this indicator by itself cannot give a sufficiently complete assessment of financial stability without taking into account the structure of cross-border flows and the market participants involved in serving them. In particular, the high volatility of capital flows in the case of an underdeveloped infrastructure of the securities market can significantly complicate the problem of stability of the country's balance of payments even with a high level of IFD.

CHAPTER 2
THE ANALYSIS OF ECONOMIC GROWTH OF KENYA AND THE EFFECT OF FINANCIAL DEEPENING

2.1. The main indicators of economic growth of Kenya

Firstly, the main indicators of economic growth are considered in real sector.

The Kenya economy remained resilient in 2019 and grew by 5.4 percent compared to 6.3 percent in 2018. The slowdown of growth was mainly attributed to reduced agricultural activity following delayed and inadequate rainfall in the first half of 2019. Service-oriented sectors remained resilient and supported economic activity (Table 2.1, Fig. 2.1). Agriculture sector growth slowed to 3.6 percent compared to 6.0 percent in 2018, as the delayed and below average rainfall adversely affected activity within the sector. As a result, its contribution to real GDP growth declined to 0.7 percentage points from 1.3 percentage points in 2018 (table 2.1).

Table 2.1

Real GDP growth of Kenya

Main sectors	Growth Rates (Percent)					
	2016	2017+	2018+	2019*	Q1 2019	Q1 2020
1. Agriculture	4.7	1.6	6.0	3.6	4.7	4.9
2. Non-Agriculture (o/w)	6.2	5.7	6.4	5.9	5.8	4.9
2.1 Industry	5.9	3.9	5.5	4.7	4.7	4.4
Manufacturing	3.1	0.7	4.3	3.3	3.5	2.9
Electricity & water supply	8.4	7.0	8.0	7.0	7.8	6.3
Construction	9.9	8.4	6.9	6.4	6.1	5.3
2.2 Services	6.8	6.5	7.0	6.7	6.5	5.5
2.3Taxes on products	4.4	5.7	5.6	4.4	4.7	3.4
Real GDP Growth	5.9	4.8	6.3	5.4	5.5	4.9

Note:

+ Revised
*Provisional
Source: KNBS

The Services sector remained resilient and was the main driver of economic growth in 2019. It grew by 6.7 percent compared to 7.0 percent in 2018, supported by strong performance of Wholesale and Retail Trade, Accommodation and Restaurants, Transport and Storage, Information and Communication, Financial and Insurance, and Real Estate sectors.

Industrial activity slowed to 4.7 percent from 5.5 percent in 2018. The Manufacturing sector grew by 3.3 percent, slower than 4.3 percent in 2018. Growth in Electricity and Water Supply was 7.0 percent in 2019 compared to 8.0 percent in 2018, reflecting decreased hydroelectricity generation due to the unfavourable weather conditions in the first half of the year. However, Construction sector growth remained strong at 6.4 percent compared to 6.9 percent in 2018. In the first quarter of 2020, growth stood at 4.9 percent on account of the impact of COVID-19 which affected the services sectors, mainly the accommodation and restaurants sector following the international travel restrictions and containment measures. The services sector growth declined to 5.5 percent.

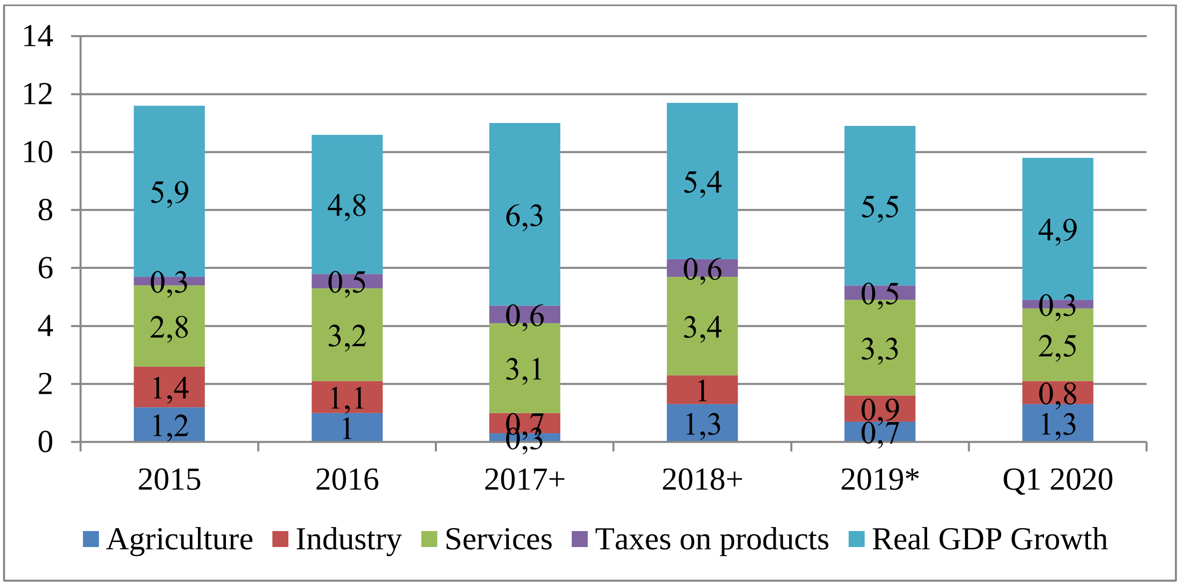

Fig. 2.1. Contributions to real GDP growth in Kenya

Source: KNBS and CBK

Overall inflation remained anchored within the target range in the FY 2019/20. It declined to 4.6 percent in June 2020 compared to 5.7 percent in June 2019, driven mainly by food prices (Table 2.2 and Fig. 2.2). Food inflation was elevated during the period. It was 8.1 percent in June 2020 compared to 6.6 percent in June 2019. The high food inflation was as a result of elevated prices of a few key food items such as tomatoes, onions, potatoes, maize products and kales, following crop destruction due to excess rainfall in the first half of 2020 and supply disruptions occasioned by the COVID-19 pandemic.

Table 2.2

Recent developments in inflation in Kenya (%)

	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20
Overall 12-month inflation	5.7	3.8	5.8	5.8	4.6
Food Inflation	6.6	5.9	9.3	12.3	8.1
Fuel Inflation	6.3	1.3	2.5	4.5	5.4
Non-(Food & Fuel) Inflation	3.4	2.4	2.7	1.9	1.6
Average annual	5.2	5.2	5.2	5.6	5.9
Three months annualised	11.4	-5.3	6.5	6.0	3.0

Note: Inflation rates from February 2020 are based on the new Consumer Price Index (CPI) whose base period is February 2019

Source: KNBS and CBK

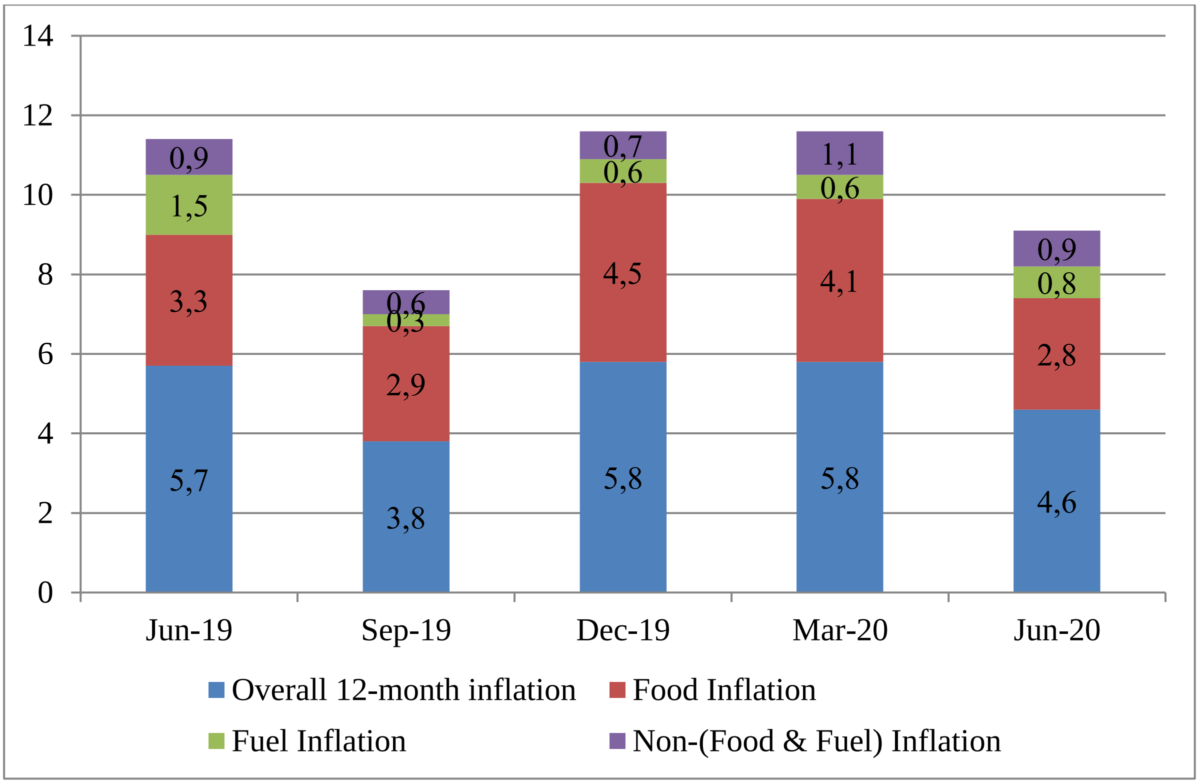

Fig. 2.2. Contribution to overall inflation in Kenya

Source: KNBS and CBK

Non-Food-Non-Fuel (NFNF) inflation remained low and stable in FY 2019/20, reflecting muted demand pressures in the economy. It declined to 1.6 percent in June 2020 from 3.4 percent in June 2019, despite implementation of excise tax measures on airtime, narcotics and some alcoholic beverages. Fuel inflation remained relatively low, supported by low international oil prices.

Analyzing the Balance of Payments and the Current Account, it is considered that during the FY 2019/20, the current account deficit remained stable at USD 4,786 million compared to USD 4,727 million in the FY 2018/19 mainly reflecting reduced imports despite lower receipts from services and secondary income transfers (Table 2.3).

Table 2.3

Balance on current account in Kenya (USD Million)

Item	FY 2018/19 *	FY 2019/20				FY 2019/20 **	FY 2019/20-2018/19	
		Jul-Sep Q1	Oct-Dec Q2	Jan-Mar Q3	Apr-Jun Q4		Change	% Change
Current Account	-4,727	-1,527	-1,675	-1,085	-499	-4,786	-59	1.2
Goods	-10,165	-2,642	-2,907	-2,152	-1,750	-9,450	715	-7.0
Exports (fob)	5,931	1,424	1,429	1,764	1,310	5,927	-4	-0.1
o.w Coffee	222	43	33	52	74	203	-20	-8.8
Tea	1,198	249	305	335	327	1,216	18	1.5
Horticulture	1,056	221	228	273	210	931	-125	-11.8
Oil products	36	26	15	14	8	63	27	73.8
Manufactured Goods	384	109	98	94	69	369	-15	-4.0
Raw Materials	344	79	78	101	89	347	3	0.8
Chemicals and Related Products	460	116	106	122	100	445	-15	-3.3
Miscelleneous Man.Articles	589	145	137	145	103	531	-58	-9.8
Re-exports	693	204	173	331	108	816	123	17.8
Other	912	224	247	285	212	968	55	6.1
Imports (fob)	16,096	4,066	4,336	3,916	3,060	15,377	-719	-4.5
o.w Oil	3,459	772	781	778	362	2,693	-765	-22.1
Chemicals	2,532	576	618	653	606	2,453	-79	-3.1
Manufactured Goods	2,875	802	721	649	607	2,779	-96	-3.4
Machinery	2,868	791	944	746	535	3,016	148	5.2
Transport Equipment	1,627	360	525	315	245	1,445	-182	-11.2
Food	1,620	457	433	437	398	1,725	106	6.5
Other	3,433	924	910	955	807	3,596	164	4.8
Services	1,886	398	375	200	320	1,293	-593	-31.5
Transport Services (Net)	706	185	190	163	119	656	-51	-7.2
Travel Services (Net)	818	194	227	179	149	749	-69	-8.5
Other Services (Net)	362	20	-41	-142	52	-111	-473	-130.8
Primary Income (Net)	-1,678	-527	-446	-359	-300	-1,633	45	-2.7
Secondary Income (Net)	5,230	1,244	1,303	1,225	1,231	5,003	-227	-4.3

Note:
* Revised

**Provisional
fob - free on board
Source: CBK

The balance in the goods account improved by USD 715 million to a trade deficit of USD 9,450 million in the FY 2019/20, due to lower merchandise imports. The decline in merchandise imports largely reflected savings in the oil import bill due to low oil prices that prevailed in the first half of 2020. Merchandise exports remained resilient reflecting improvements in tea and re-exports.

Imports from China accounted for 22.3 percent of total imports to Kenya during the year to June 2020 making it the largest source of imports. During the period, imports from the European Union accounted for 13.4 percent of total imports and decreased to USD 2,066 million while the share of imports from Africa decreased to 12.5 percent, equivalent to USD 1,929 million.

The resilience in merchandise exports was mainly attributed to re-exports of goods and oil products. Furthermore, despite a drop in April 2020 due to COVID-19, horticultural exports normalized in May as the sector benefited from the cessation of restrictions in key destination markets and increased cargo capacity.

Kenya's exports to Africa improved by USD 98 million to USD 2,213 million reflecting increases in exports to EAC and COMESA regions. The share of exports to EAC increased to 23.5 percent in FY 2019/20 from 21.7 percent in FY 2018/19. However, there was a reduction in exports to the rest of the world, majorly to the U.S.A, Netherlands and India (Table 2.4).

Analyzing the Services Account, we revealed that receipts from transport and travel services remained subdued in the first half of 2020 due to the cessation of international travel on account of COVID-19. As a result, the balance in the services account worsened by USD 593 million to a surplus of USD 1,293 million in FY 2019/20 from USD 1,886 million in 2018/19. The reduction was due to lower receipts from transport, travel and other services mainly insurance and finance, financial services and telecommunication.

Table 2.4

Kenya's direction of trade

IMPORTS	(in millions of US dollars)		Share of Imports (%)		EXPORTS	(in millions of US dollars)		Share of Exports (%)	
	Year to June		Year to June			Year to June		Year to June	
Region/Country	2019	2020	2019	2020	Region/Country	2019	2020	2019	2020
Africa	2,046	1,929	12.7	12.5	Africa	2,116	2,213	35.7	37.3
Of which					Of which				
South Africa	679	547	4.2	3.6	Uganda	608.88	623.11	10.3	10.5
Egypt	369	419	2.3	2.7	Tanzania	303.78	309.84	5.1	5.2
Others	998	963	6.2	6.3	Egypt	192.17	182.04	3.2	3.1
					Sudan	61.68	71.64	1.0	1.2
EAC	564	568	3.5	3.7	South Sudan	114.41	176.13	1.9	3.0
COMESA	1,080	1,092	6.7	7.1	Somalia	132.72	100.39	2.2	1.7
Rest of the World	14,050	13,461	87.3	87.5	DRC	140.58	128.76	2.4	2.2
Of which					Rwanda	184.78	231.25	3.1	3.9
India	1,782	1,766	11.1	11.5	Others	376.74	390.32	6.4	6.6
United Arab Emirates	1,528	1,169	9.5	7.6					
China	3,373	3,430	21.0	22.3	EAC	1,286	1,395	21.7	23.5
Japan	1,017	893	6.3	5.8	COMESA	1,455	1,481	24.5	25.0
USA	526	555	3.3	3.6	Rest of the World	3,816	3,714	64.3	62.7
United Kingdom	330	293	2.1	1.9	Of which				
Singapore	56	70	0.3	0.5	United Kingdom	388.95	433.84	6.6	7.3
Germany	449	407	2.8	2.6	Netherlands	467.42	419.37	7.9	7.1
Saudi Arabia	1,587	915	9.9	5.9	USA	511.36	473.48	8.6	8.0
Indonesia	508	580	3.2	3.8	Pakistan	489.70	490.67	8.3	8.3
Netherlands	309	211	1.9	1.4	United Arab Emirates	367.16	368.32	6.2	6.2
France	246	229	1.5	1.5	Germany	111.99	116.47	1.9	2.0
Bahrain	51	6	0.3	0.0	India	71.85	43.46	1.2	0.7
Italy	218	203	1.4	1.3	Afghanistan	37.73	37.17	0.6	0.6
Oman	98	65	0.6	0.4	Others	55.27	24.45	0.9	0.4
Others	1,970	2,668	12.2	17.3	Others	1,314	1,307	22.2	22.0
Total	16,096	15,390	100.0	100.0	Total	5,931	5,927	100.0	100.0
EU	2,225	2,066	13.8	13.4	EU	1,299	1,296	21.9	21.9
China	3,373	3,430	21.0	22.3	China	141	151	2.4	2.6

Source: CBK

The balance on the primary income account worsened by USD 45 million to a deficit of USD 1,633 million. The surplus on the secondary income account declined from USD 5,230 million in FY 2018/19 to USD 5,003 million in the FY 2019/20. The reduction was mainly in transfers to non-governmental organizations.

Remittances remained resilient against the backdrop of COVID-19. In the year to June 2020, total remittance inflows stood at USD 2,809 million, 1.5 percent higher than the USD 2,768 million in the year to June 2019, reflecting significant increases in inflows from the US and South Africa. Capital and

Analyzing the financial account, it is studied that the capital account recorded reduced inflows by USD 66 million in the FY 2019/20, due to a decrease in project grants. The financial account recorded lower net inflows by USD 585 million in FY 2019/20 (Table 2.5).

Table 2.5

Balance on the capital and financial account in Kenya (USD Million)

Item	FY 2018/19 *	FY 2019/20				FY 2019/20**	FY 2019/20-2018/19	
		Jul-Sep Q1	Oct-Dec Q2	Jan-Mar Q3	Apr-Jun Q4		Change	% Change
Capital account credit	215	27	52	24	46	150	-66	-30.5
Capital account credit	215	27	52	24	46	150	-66	-30.5
Capital account: debit	0	0	0	0	0	0	0	0
Financial Account	-6,635	-1,167	-1,322	-419	-3,142	-6,050	585	-8.8
Direct investment: assets	208	33	48	71	51	203	-5	-2.4
Direct investment: liabilities	1,611	284	359	104	118	865	-746	-46.3
Portfolio investment: assets	1,004	227	272	309	319	1,127	123	12.3
Portfolio investment: liabilities	2,006	42	89	-101	-91	-61	-2,068	-103.1
Financial derivatives: net	-13	4	1	3	-5	4	17	-130.3
Other investment: assets	427	125	184	-8	122	424	-3	-0.7
Other investment: liabilities	4,642	1,230	1,380	791	3,602	7,003	2,361	50.9

Note:
* Revised
**Provisional
Source: CBK

Government budgetary operations in the Financial Year 2019/20 resulted in a deficit on cash basis including grants of KSh 791.2 billion (7.8 percent of GDP) compared to KSh 721.1 billion (7.8 percent of GDP) in the previous year.

However, it was below the target of 9.0 percent of GDP in the supplementary III budget despite the shortfall in revenue collection amidst increased expenditures to mitigate the effects of COVID-19 (Table 2.6 and Fig. 2.3).

Government revenue (including grants) increased by 1.9 percent to KSh 1,753.5 billion (17.2 percent of GDP) compared to the previous fiscal year. Non-tax revenue increased by 91.2 percent on account of funds mobilised from parastatal deposits. However, Appropriations-inAid and tax revenues declined by 20.7 percent and 1.2 percent, respectively. Tax revenue accounted for 79.8 percent of revenues (Table 2.6).

Table 2.6

Statement of central government operations in KSh Billion

	FY 2017/18	FY 2018/19	FY 2019/20	SUPP III	Over(+) / Below (-)
	Actual	Actual	Provisional		
1. REVENUE & GRANTS	1,550.1	1,721.4	1,753.5	1,899.8	-146.4
Revenue	1,522.5	1,701.7	1,733.6	1,864.8	-131.2
Tax Revenue	1,280.0	1,400.7	1,383.9	1,466.2	-82.3
Non Tax Revenue	105.9	99.1	189.5	149.2	40.3
Appropriations-in-Aid	136.6	201.9	160.2	249.4	-89.2
External Grants	27.6	19.7	19.8	35.0	-15.2
2. EXPENDITURE AND NET LENDING	2,146.7	2,433.7	2,565.4	2,817.8	-252.4
Recurrent Expenditure	1,349.9	1531.1	1,645.2	1,777.0	-131.7
Development Expenditure	469.5	534.9	594.9	678.5	-83.5
County Transfers	327.3	360.7	325.3	362.4	-37.1
Other	0.0	7.0	0.0	0.0	0.0
3. DEFICIT (incl Grants) on a commitment basis (1-2)	-596.6	-712.3	-812.0	-918.0	106.0
Deficit (incl Grants) on a commitment basis (% of GDP)	-7.00	-7.7	-8.0	-9.0	1.0
4. ADJUSTMENT TO CASH BASIS	-34.7	8.7	-20.8	0.0	-20.8
5. DEFICIT ON A CASH BASIS	-631.3	-721.1	-791.2	-918.0	126.8
Deficit on a cash basis (% of GDP)	-7.4	-7.8	-7.8	-9.0	1.2
6. DISCREPANCY: Expenditure (+) / Revenue (-)	0.0	0.0	0.0	0.0	0.0
7. FINANCING	631.3	721.1	791.2	918.0	-126.8
Domestic (Net)	273.7	303.7	448.3	441.9	6.4
External (Net)	355.0	414.5	340.8	324.0	16.8
Capital Receipts (net of restructuring costs)	0.0	0.0	0.0	0.0	0.0
Others	2.6	2.9	2.0	152.1	-150.1

Source: The National Treasury-Provisional Budget Outturn, June 2020

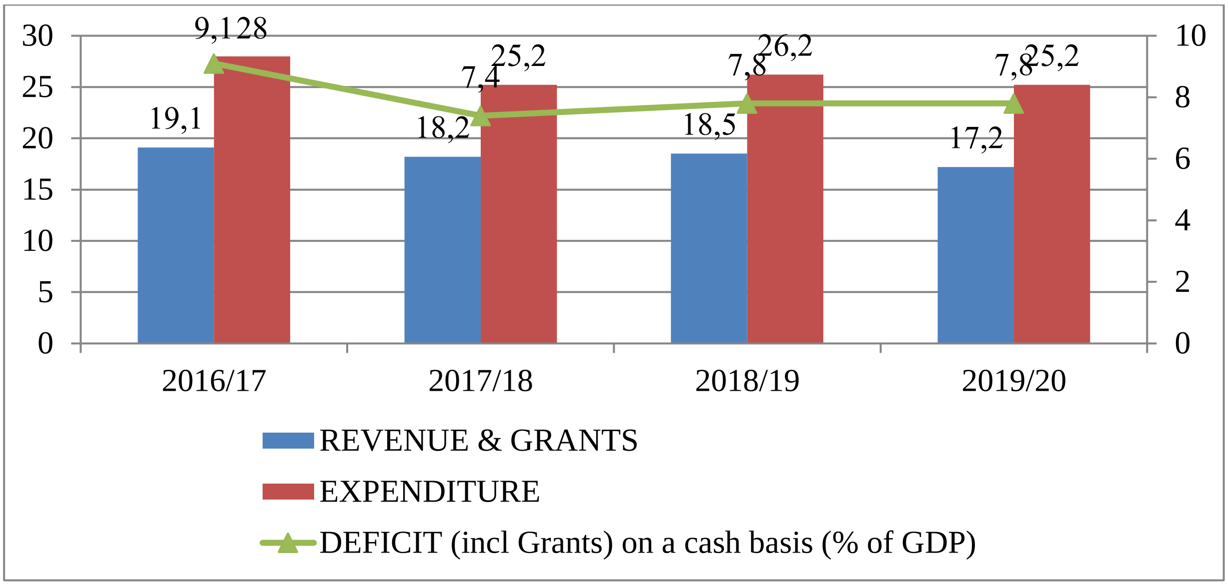

Fig. 2.3. Government budget performance in Kenya

Source: The National Treasury-Provisional Budget Outturn, June 2020

Analyzing the indicators of expenditure and net lending, we see that government expenditure and net lending increased by 5.4 percent to KSh 2,565.4 billion (25.2 percent of GDP), but was below the programmed target (Fig. 2.3).

Development expenditure and recurrent expenditures rose by 11.2 percent, and 7.5 percent, respectively. Recurrent expenditure accounted for 64.1 percent of total government expenditure (Table 2.6).

Analyzing the indicators of financing, we revealed that the net domestic financing during FY 2019/20 amounted to KSh 450.4 billion. The financing comprised KSh 41.9 billion from the CBK, KSh 235.4 billion from Commercial Banks, KSh 165.8 billion from Non-Bank Financial Institutions, KSh 5.2 billion from Non-residents and KSh 2.0 billion net receipts from domestic loan repayments (Table 2.7).

In the budget estimates for the FY 2020/21 total revenue is projected at KSh 1.9 trillion (16.8 percent of GDP) while Government expenditure and net lending is projected at KSh 2.8 trillion (24.7 percent of GDP). The overall budget deficit including grants on commitment basis is, therefore, projected at KSh 841.1 billion (7.5 percent of GDP), to be financed through net external borrowing of KSh 347.0 billion (3.1 percent of GDP) and net domestic borrowing of KSh 494.4 billion (4.4 percent of GDP).

Table 2.7

Domestic financing in Kenya (KSh Billion)

	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
1. From CBK	(22.4)	(26.3)	13.6	41.9
2. From commercial banks	169.5	124.3	126.9	235.4
3. From Non-banks	160.7	172.8	160.3	165.8
4. From Non-Residents	1.9	3.0	2.8	5.2
Domestic Loan Repayments (Net Receipts)	2.3	2.6	2.9	2.0
5. Total Change in Dom. Credit (From 30th June 2019)	312.0	276.3	306.5	450.4

NB. Treasury Bills are reflected at Cost

Source: CBK and National Tresury June 2020 QEBR

Kenya's public and publicly guaranteed debt increased by 15.2 percent during the FY 2019/20, with domestic and external debt increasing by 14.1 percent and 16.3 percent, respectively. Public debt comprised 47.5 percent and 52.5 percent of domestic and external debt, respectively. The ratio of public debt to GDP rose to 65.6 percent in June 2020 from 62.4 percent in June 2019 (Table 2.8).

Considering the domestic debt, we can see that the increase in domestic debt was mainly driven by a 27.0 percent increase in Treasury bonds. This is in line with the Government's objective of achieving 70:30 ratio of Treasury bonds to Treasury bills in order to reduce the refinancing risk. This goal was accomplished through issuance of medium and long-term Treasury bonds as well as 364-day Treasury bill switch to a 6-year Infrastructure bond. Consequently, Treasury bills decreased by 6.9 percent to KSh 907.7 billion in June 2020 from KSh 975.3 billion in June 2019 (Table 2.8). In addition, the domestic debt maturity for all securities improved from 4.94 years in June 2019 to 5.46 years in June 2020, with the average maturity of bonds rising to 7.9 years.

Consideration of the public debt service of Kenya showed that cumulative interest and other charges on domestic and external debt for the FY 2019/20 increased by 15.8 percent and 17.9 percent, respectively (Fig. 2.4). Despite increase in external interest payments, total external debt service decreased during the FY 2019/20 due to a significant reduction in principal repayments as there were no one-off repayments of commercial loans during the FY (Fig. 2.5).

Table 2.8

Public debt in Kenya

	June 2017		June 2018		June 2019		June 2020*	
	KSh bn	%	KSh bn	%	KSh bn	%	KSh bn	%
DOMESTIC DEBT								
Securitised debt	2,100.5	99.4	2,413.8	97.4	2,723.5	97.8	3,127.1	98.4
Treasury Bills	768.5	36.4	901.9	36.4	975.3	35.0	907.7	28.6
Of which Repo Treasury bills	24.4	1.2	23.3	0.9	21.1	0.8	20.5	0.6
Treasury Bonds	1,332.0	63.1	1,511.9	61.0	1,748.1	62.8	2,219.4	69.8
Non Securitised debt	11.1	0.5	65.0	2.6	62.0	2.2	50.4	1.6
Overdraft at CBK	0.0	0.0	56.8	2.3	57.3	2.1	47.1	1.5
others	11.1	0.5	8.1	0.3	4.7	0.2	3.3	0.1
TOTAL DOMESTIC DEBT	2,112.3	100.0	2,478.8	100.0	2,785.5	100.0	3,177.5	100.0
(as a % of GDP)*	27.6		29.1		29.9		31.2	
(as a % of Total Debt)	47.9		49.2		48.0		47.5	
EXTERNAL DEBT**								
Bilateral	724.8	31.6	816.1	35.6	996.1	32.9	1,074.3	30.6
Multilateral	841.9	36.7	821.0	35.8	914.4	30.2	1,321.6	
Comm. Banks	712.1	31.0	906.4	39.5	1,095.8	36.2	1,102.3	31.4
Export Credit	15.9	0.7	16.7	0.7	16.9	0.6	17.6	0.5
TOTAL EXTERNAL DEBT	2,294.7	100.0	2,560.2	100.0	3,023.1	100.0	3,515.8	100.0
(as a % of GDP)*	30.0		30.0		32.5		34.5	
(as a % of Total Debt)	52.1		50.8		52.0		52.5	
TOTAL PUBLIC DEBT	4,407.0		5,039.0		5,808.6		6,693.3	
(as a % of GDP)*	57.5		59.1		62.4		65.6	

* Estimates
** Provisional
Source: The National Treasury and CBK

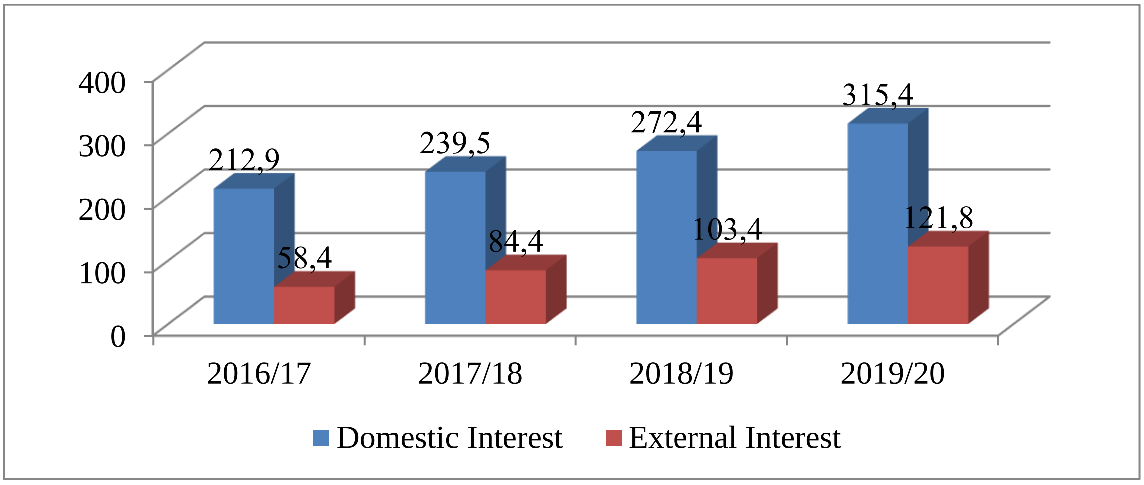

Fig. 2.4. Interest payments (KSh Billion)

Source: The National Treasury

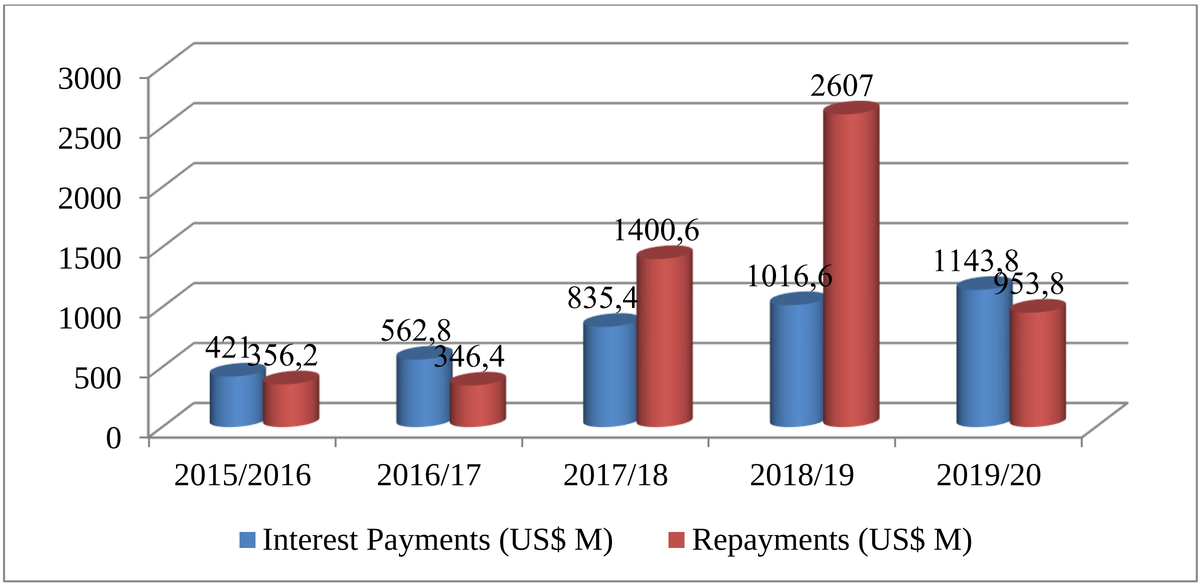

Fig. 2.5. External debt service

Source: The National Treasury and CBK

Considering the external debt, we see that Kenya's public and publicly guaranteed external debt increased to KSh 3,515.8 billion (Table 2.8). This was majorly on account of two Development Policy Operations (DPO) in July 2019 (USD 750 million) and May 2020 (USD 1.0 billion) from World Bank and the IMF Rapid Credit Facility (RCF) in support of COVID-19 interventions. The proportion of debt owed to multilateral lenders increased by 7.3 percentage points while that of commercial creditors and bilateral lenders decreased by 4.9 percentage points and 2.4 percentage points, respectively, as the Government sought to restructure external debt through concessionality and reducing its refinancing risk.

2.2. The characteristics of the financial sector development in Kenya

The financial sector development is characterized by number of indicators, firstly, the indicators of effectiveness of monetary operations.

The first financial indicator is the monetary policy of the Central Bank of Kenya.

In FY 2019/20, monetary policy formulation and implementation was aimed at maintaining overall inflation at the target of 5.0 percent with a flexible margin of 2.5 percent on either side. Overall inflation remained within target range throughout the year, while non-food-non-fuel inflation remained below 5.0 percent, indicating muted demand pressures in the economy.

The Monetary Policy Committee (MPC) held bi-monthly meetings between July 2019 and March 2020. During its meetings in July and September 2019, the MPC retained the Central Bank Rate (CBR) at 9.00 percent as inflation expectations remained anchored and the monetary policy stance was deemed appropriate. The CBR was lowered to 8.50 percent and to 8.25 percent during the November 2019 and January 2020 meetings, respectively, as the MPC noted room for accommodative monetary policy to support economic activity.

As a result of the COVID-19 shock in March, MPC decisions focused on mitigating the adverse effects of the pandemic on the economy. These decisions included lowering the CBR to 7.0 percent from 8.25 percent; reducing the Cash Reserve Ratio (CRR) from 5.25 percent to 4.25 percent which released KSh 35.2 billion in liquidity to banks for supporting customers who were distressed by COVID-19; and extending the maximum tenor of Repurchase Agreements (REPOs) from 28 days to 91 days to enhance access to liquidity by banks.

The MPC also decided to hold monthly meetings since March to facilitate close monitoring and assessment of the impact of the adopted policy measures, and the evolution of the COVID-19 pandemic. In its May and June 2020 meetings, the MPC retained the CBR at 7.00 percent, observing that the package of policy measures adopted since March were having the intended effect on the economy, and that these measures would be augmented by the announced fiscal measures for FY 2020/21.

The next financial indicator is the money supply.

The demonetisation of the old KSh 1,000 notes (equivalent to 80.3 percent of total currency in circulation) from June to September 2019 had a minimal impact on broad money supply, M3. At the end of the exercise KSh 7.4 billion (equivalent to 0.2 percent of M3 and 3.6 percent of total currency in circulation at the end of September 2019) were not exchanged due to the robust AML/CFT checks in place. However, the demonetisation resulted in a portfolio shift in the composition of M3 during the period towards deposits.

The exercise resulted in a contraction in currency outside banks, beyond the normal seasonal fluctuation observed during the end year festivities. Currency outside banks declined from KSh 222 billion at the end of May 2019 to KSh 158 billion at the end of September 2019, mainly due to reduced demand for physical cash by businesses and people as they exchanged the old 1,000 Shilling notes with new ones. The reduced demand for cash was partly mirrored in increased commercial banks deposits, which grew from KSh 3,174 billion to KSh 3,285 billion over the same period. In addition, increased usage of cashless payment platforms, such as mobile payments that remained high during the demonetisation period, partly reduced the demand for cash for transaction. Cash outside banks started to normalise immediately after the conclusion of the demonetisation exercise, rising from KSh 158 billion in September to KSh 199 billion in December. Currency outside banks increased further from April 2020, partly reflecting increased precautionary savings by the public during the COVID-19 pandemic.

The 12-month growth in M3, declined from 9.2 percent in FY 2018/19 to 8.4 percent in FY 2019/20, reflecting slow growth of the net foreign assets (NFA) of the banking system. The decline in NFA was mainly due to relatively lower government external financing inflows.

Growth in the net domestic assets (NDA) of the banking system however increased reflecting increased lending to the private sector and the government (Table 2.9).

On the liabilities side, the decline in growth of money supply was reflected in slower growth in deposits, primarily the other deposits at the Central Bank, partly attributed to the utilization of special projects deposits.

The next considered financial indicator is the domestic credit.

Table 2.9

Monetary aggregates in Kenya

	End Month Level (KSh Billion)			Annual Growth Rate			Annual Absolute Change (KSh Billion)		
	2017/18	2018/19	2019/20	2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Components of M3									
1. Money supply, M1 (1.1+1z.2+1.3)	1,425.6	1,575.5	1,666.6	3.3	10.5	5.8	45.5	149.9	91.1
1.1 Currency outside banks	218.3	196.9	210.9	5.4	-9.8	7.1	11.2	-21.3	13.9
1.2 Demand deposits	1,126.8	1,212.8	1,350.0	3.1	7.6	11.3	34.4	86.0	137.2
1.3 Other deposits at CBK 1/	81.2	165.8	105.8	0.0	104.2	-36.2	0.0	84.6	-60.0
2. Money supply, M2 (1+2.1)	2,681.9	2,943.7	3,201.3	7.5	9.8	8.7	187.7	261.9	257.5
2.1 Time and saving deposits	1,258.3	1,372.7	1,538.7	12.7	9.1	12.1	142.2	114.4	165.9
3. Money supply, M3 (2+3.1)	3,262.6	3,564.2	3,863.6	10.4	9.2	8.4	306.7	301.6	299.4
3.1 Foreign Currency Deposits	580.8	620.5	662.4	25.8	6.8	6.7	119.1	39.7	41.9
Sources of M3									
1. Net foreign assets 2/	756.9	939.9	885.4	17.8	24.2	-5.8	114.3	183.0	-54.5
Central Bank	783.6	941.0	918.1	6.1	20.1	-2.4	45.3	157.4	-22.9
Banking Institutions	-26.7	-1.1	-32.7	-72.1	-95.9	2,906.6	69.1	25.6	-31.6
2. Net domestic assets (2.1+2.2)	2,505.7	2,624.3	2,978.3	8.3	4.7	13.5	192.4	118.6	353.9
2.1 Domestic credit	3,237.3	3,490.0	3,899.5	6.7	7.8	11.7	201.9	252.7	409.5
2.1.1 Government (net)	745.1	890.5	1,117.9	15.3	19.5	25.5	98.8	145.5	227.4
2.1.2 Private sector	2,380.4	2,503.0	2,693.2	4.3	5.2	7.6	98.0	122.6	190.2
2.1.3 Other public sector	111.9	96.4	88.4	4.7	-13.8	-8.3	5.0	-15.4	-8.0
2.2 Other assets net	-731.6	-865.6	-921.2	1.3	18.3	6.4	-9.5	-134.1	-55.6
Memorandum items									
4. Overall liquidity, L (3+4.1)	4,434.2	4,896.0	5,420.4	12.1	10.4	10.7	479.4	461.8	524.5
4.1 Non-bank holdings of government securities	1,171.6	1,331.7	1,556.8	17.3	13.7	16.9	172.7	160.2	225.1

Note:
Absolute and percentage changes may not necessarily add up due to rounding
1/ Includes county deposits and special projects deposit
2/ Net Foreign Assets at current exchange rate to the US dollar
Source: CBK

Annual growth in net domestic credit was 11.7 percent in FY 2019/20 compared with 7.8 percent in FY 2018/19, supported by private sector credit and net lending to the government (Table 2.10).

Credit to the private sector was on a recovery path during the year, but was slowed by the effects of COVID-19 on the economy in the last quarter. Monetary policy actions and other policy measures to improve liquidity conditions in the market, mitigated the adverse impact of the pandemic on lending. Growth in private sector credit therefore increased from 5.2 percent in FY 2018/19 to 7.6 percent in FY 2019/20. Strong lending was recorded to manufacturing, building and construction, real estate, trade and transport and communication (Table 2.10).

Table 2.10

Banking sector net domestic credit in Kenya

	End Month Level (KSh Billion)		Annual Growth Rate		Annual Absolute Change (KSh Billion)	
	2018/19	2019/20	2018/19	2019/20	2018/19	2019/20
1. Credit to Government	890.5	1,117.9	19.5	25.5	145.5	227.4
Central Bank	-189.6	-89.2	-7.2	-53.0	14.8	100.5
Commercial Banks & NBFIs	1,080.2	1,207.1	13.8	11.7	130.7	126.9
2. Credit to other public sector	96.4	88.4	-13.8	-8.3	-15.4	-8.0
Local government	3.8	4.4	-13.7	16.8	-0.6	0.6
Parastatals	92.7	84.0	-13.8	-9.4	-14.8	-8.7
3. Credit to private sector	2,503.0	2,693.2	5.2	7.6	122.6	190.2
Agriculture	86.2	87.3	3.9	1.3	3.2	1.1
Manufacturing	357.6	401.7	11.4	12.3	36.5	44.1
Trade	447.1	497.0	5.5	11.2	23.2	49.9
Building and construction	109.2	114.2	-6.3	4.6	-7.4	5.1
Transport & communications	174.7	200.7	5.8	14.9	9.6	26.0
Finance & insurance	92.8	95.8	4.7	3.2	4.2	3.0
Real estate	377.4	395.8	1.0	4.9	3.8	18.3
Mining and quarrying	13.3	14.6	-4.3	10.0	-0.6	1.3
Private households	429.6	443.3	7.6	3.2	30.2	13.6
Consumer durables	220.1	253.5	21.3	15.2	38.7	33.4
Business services	146.6	142.9	-3.2	-2.6	-4.8	-3.8
Other activities	48.2	46.4	-22.6	-3.7	-14.1	-1.8
4. Total (1+2+3)	3,490.0	3,899.5	7.8	11.7	252.7	409.5

Source: CBK

Net lending to Government grew by 25.5 percent in FY 2019/20 from 19.5 percent in FY 2018/19, mainly reflecting increased drawdown of Government deposits at CBK due to accelerated Government payments towards pending bills and COVID-19 pandemic related expenditures. However, net credit to Other Public Sector declined, due to repayments by parastatals.

The next financial indicator is the reserve money.

Reserve money declined by KSh 12.9 billion in FY 2019/20 compared to an increase of KSh 10.6 billion in the previous financial year, largely reflecting a reduction in bank reserves. The reduction in banks reserves followed the reduction in the CRR from 5.25 percent to 4.25 percent in March 2020, and the enhanced open market operations to withdraw excess liquidity. The excess liquidity resulted from accelerated Government spending towards the end of the FY2019/20, including payments of pending bills and COVID-19 pandemic related expenditures (Table 2.11).

Table 2.11

Reserve money and its components in Kenya

	End Month Level		Annual Growth Rate		Annual Absolute Change (KSh Billion)	
	2018/19	2019/20	2018/19	2019/20	2018/19	2019/20
1. Net Foreign Assets	941.0	918.1	20.1	-2.4	157.4	-22.9
2. Net Domestic Assets	-501.2	-491.2	41.4	-2.0	-146.8	10.1
2.1 Government Borrowing (net)	-189.6	-89.2	-7.2	-53.0	14.8	100.5
2.2 Commercial banks (net)	-21.3	-131.0	-174.3	514.1	-50.1	-109.7
2.3 Other Domestic Assets (net)	-293.7	-274.3	61.3	-6.6	-111.6	19.3
3. Reserve Money	439.8	426.9	2.5	-2.9	10.6	-12.9
3.1 Currency outside banks	196.9	210.9	-9.8	7.1	-21.3	13.9
3.2 Bank reserves	242.8	216.0	15.1	-11.0	31.9	-26.8
3.2.1 Required Reserves	175.0	153.5	11.5	-12.2	18.0	-21.4
3.2.2 Cash in Till	52.6	46.9	18.9	-10.7	8.3	-5.6
3.2.3 Excess Reserves	15.3	15.5	56.7	1.6	5.5	0.2

Source: CBK

Let’s consider the interest rates. First indicator of this group is short term rate.

Short term interest rates declined during FY 2019/20 in line with the accommodative monetary policy stance adopted by the MPC, which resulted in improved market liquidity. The increase in market liquidity towards the end of the financial year was also attributable to Government spending. The average interbank interest rate was relatively stable at 4.64 percent in FY 2019/20 compared with an average of 4.47 percent in FY 2018/19. The average interbank rate remained below the CBR, partly reflecting improvements in the distribution of liquidity across bank tiers. The interest rates on government securities declined reflecting ample liquidity. The average 91-day Treasury bill rate declined from 7.33 percent to 6.94 percent, while the average 182-day Treasury bill rate decreased from 8.48 percent to 7.80 percent.

The average commercial bank lending rate also declined from 12.47 percent in June 2019 to 11.89 percent in June 2020. Average commercial banks' deposit rate declined from 7.19 percent in June 2019 to 6.86 percent in June 2020.

Than we analyzed the exchange rate.

The Kenya foreign exchange market remained stable supported by a narrowing current account deficit and balanced flows. The Kenya shilling strengthened against the US dollar from an average of 103.42 per US dollar in the first quarter of the FY 2019/20 to exchange at an average rate of 101.88 per US dollar in the third quarter (Table 2.12).

Table 2.12

Kenya Shilling exchange rates

	2017/18	2018/19	2019/20				Annual Average
			Q1 Jul-Sep	Q2 Oct-Dec	Q3 Jan-Mar	Q4 Apr-Jun	2019/20
US Dollar	102.37	101.16	103.42	102.52	101.88	106.50	103.58
Pound Sterling	137.86	130.94	127.51	131.83	130.51	132.19	130.51
Euro	122.14	115.44	115.05	113.44	112.30	117.19	114.49
100 Japanese Yen	92.84	91.09	93.05	94.50	93.47	99.08	95.03
South Africa Rand	7.99	7.14	7.06	6.96	6.68	5.94	6.66
Uganda Shilling*	35.74	36.94	35.67	35.99	36.40	35.41	35.87
Tanzania Shilling*	22.01	22.76	22.23	22.44	22.64	21.73	22.26
Rwanda Franc*	8.29	8.82	8.87	9.07	9.32	8.93	9.05
Burundi Franc*	17.15	17.76	17.83	18.12	18.51	17.82	18.07

Note:
* Units of currency per Kenya Shilling
Source: CBK

However, with the onset of COVID-19, the US dollar strengthened leading to a weakening of currencies in emerging markets and developing economies. In tandem with this trend, the Kenya shilling gradually weakened before stabilizing by the end of the financial year.

For research of the financial sector it's important to study the foreign reserves (Table 2.13).

The official foreign exchange reserves remained significantly above the statutory requirement to endeavour to maintain at least 4.0 months of import cover and the EAC convergence criteria of 4.5 months of import cover. As at June 2020, official foreign exchange reserves stood at USD 9,740 million (5.9 months of import cover) compared to USD 9,656 million in June 2019.

Table 2.13

Foreign exchange reserves and residents' foreign currency deposits

USD Million (End of Period)	*Jun-19*	*Jul-19*	*Aug-19*	*Sep-19*	*Oct-19*	*Nov-19*	*Dec-19*
1. Gross Reserves	13,187	13,089	13,170	13,083	13,356	12,825	12,919
of which:							
Official	9,656	9,662	9,596	9,442	9,349	9,153	9,116
import cover*	6.0	6.0	5.9	5.8	5.7	5.6	5.5
Commercial Banks	3,531	3,427	3,574	3,642	4,007	3,672	3,803
2. Residents' foreign currency deposits	6,415	6,290	6,236	6,196	6,341	6,229	6,393
USD Million (End of Period)	*Jan-20*	*Feb-20*	*Mar-20*	*Apr-20*	*May-20*	*Jun-20*	*Jan-20*
1. Gross Reserves	12,766	12,835	12,447	12,286	13,806	13,681	12,766
of which:							
Official	8,880	8,754	8,635	8,357	9,738	9,740	8,880
import cover*	5.3	5.3	5.2	5.0	5.9	5.9	5.3
Commercial Banks	3,886	4,081	3,812	3,929	4,067	3,941	3,886
2. Residents' foreign currency deposits	6,350	6,473	6,445	6,439	6,620	6,557	6,350

Note:
*Based on 36 month average of imports of goods and non-factor services
Source: CBK

Continue to analyze the effectiveness of the currency operations.

Demonetisation influences the financial development and the access to the financial services.

The CBK successfully launched a new series of currency banknotes on May 31, 2019. The change in currency banknotes was done in compliance with Article 231 (4) of the Constitution of Kenya. In addition to the new currency, CBK announced the demonetisation of old generation KSh 1,000 banknotes with effect from the October 1,

2019. This gave a four-month window for exchange of the demonetised banknotes. The objective of the demonetisation was to deal conclusively with the emerging concerns about Illicit Financial Flows and proliferation of counterfeits.

To facilitate a seamless demonetisation process, CBK actively engaged stakeholders and various media to ensure that the correct message reached the public. There were ground campaigns where the Governor personally led the conversations in various parts of the country including Nairobi, Kwale, Garissa, Wajir, Kisumu and Narok. Radio, television and newspapers greatly supplemented the campaign and positive feedback received on the effectiveness of the message of demonetisation. In addition, suitable catch phrases such as uko tayari! went a long way in reinforcing the message of the demonetisation and the associated timelines. CBK ensured that an elaborate exchange mechanism was rolled out to facilitate a smooth transition from the old currency to new and that there was no shortage of cash to complete the exchange process in all corners of the country.

From a total of 217,047,000 pieces of old generation KSh 1,000 banknotes in circulation as at June 1, 2020, 97 percent or 209,661,000 pieces were withdrawn at the end of the exercise on September 30, 2020. The remaining 3 percent (7,387,674 pieces) worth KSh 7.388 billion, were rendered worthless. This balance comprised cash held by individuals who were unable or unwilling to deposit or subject themselves to the robust checks in place

Infrastructure development for improved currency operations is significant for the development of the financial sector.

As part of the improvement of currency services, the CBK advanced towards opening the Kisii Centre. The project, undertaken jointly with the Kenya Bankers Association, was at the final stages of completion and was expected to be formally opened later in 2020. Key staff to run the Centre were appointed to take over operations of the Centre (Table 2.14).

Table 2.14

Currency in circulation

	Jun-19 Ksh Billion	Jun-20 Ksh Billion	Growth (%)
Banknotes	240.3	248.4	3.4
Coins	9.3	9.4	1.9
Total Currency in Circulation	249.5	257.8	3.3

Source: CBK

In addition, CBK improved its currency processing capacity by upgrading the Banknote Processing Systems and Currency Destruction Systems at the head office, Branches and Centres. The upgraded systems played a crucial role in the successful introduction and subsequent processing of both old and new generation currency in 2019. Currency in Circulation Currency in circulation increased by KSh 8.2 billion in the FY 2019/20, an increase of 3.3 percent compared to a decline of 4.9 percent in the previous financial year

2.3. The assessment of the financial deepening in Kenya

Starting with microcredit in the late 1980s, there has been a growing movement of multilateral institutions, private foundations, non-profits, corporations and governments that aims to provide formal financial services to low-income market segments around the world. This movement is largely motivated by the conviction that access to financial services reduces poverty. Libra, Facebook's new digital currency, for example is being launched in the name of connecting people who do not have access to traditional banking platforms, citing in its promotional video that access to digital financial services can reduce poverty by 22 percent.

Over time, the focus of this movement has shifted from microcredit towards encouraging access to a wider, more comprehensive range of financial services, including savings, payments and insurance. There is also a growing emphasis on digital finance – the use of modern information and communication technologies (ICT) to help improve the quality and convenience of financial services, while lowering the cost of acquiring and servicing often isolated customers whose income streams support only relatively small or infrequent transactions.

Kenya has become both a posterchild and focal point of this movement. In 2008, as financial innovation was derided in the US and Europe for its role in the global financial crisis, Kenya's most famous financial innovation, M-Pesa, was celebrated globally and hit a milestone of reaching 5 million subscribers in just 2 years. M-Pesa is now widely recognized as a major success story both because of its explosive adoption by people without a bank account and the evidence it has delivered tangible economic benefits to Kenya's poor, primarily by enhancing the ability of households to cope with adverse shocks through their social networks and to escape poverty [52].

Today, mobile money is a key pillar of Kenya's financial infrastructure and is central to commerce, household finance and innovation: In 2018, 1.6 billion payments (totalling USD 39 billion) were made by the nearly 20 million adults (79 percent of 18+ population) who use a mobile money account. The next most important non-cash payments instrument by volume were debit or credit cards (92 million payments totalling USD 4.2 billion in 2018) [52].

Largely as a result of mobile money and later banking services offered on mobile phones through partnerships with mobile money operators, the share of Kenya's adult (18+) population using either an account from a formal financial institution or a mobile money wallet grew from 27 percent in 2006 to 83 percent in 2018 at an astonishing rate of over 9.4 percent per year [53]. The consumer-base for formal financial services has broadened in parallel with the rapid expansion of the value-added output of the financial and ICT service sectors which, over the same period, grew by 7.4 and 10.9 percent per year respectively. And as a share of GDP, banking system deposits increased from 30 to 44 percent between 2000 and 2016 [54].

While there is a growing body evidence on the individual or household-level impacts of the adoption of specific financial products by low income population segments in Kenya - what is less clear are the wider economywide spill-over effects generated by the activity of a larger financial sector, rapid financial innovation and greater financial inclusion, in particular the effects on labour productivity and sustained long-run growth.

The purpose of a financial system is to create spillover effects and impact evaluations do not necessarily tell you anything about the value of the [financial] system. While poverty reduction is often cited as the key goal of financial inclusion investments, sustained economic growth isn't often explicitly mentioned as a means to that end, although a key finding of development research is that growth is one of the most effective ways to pull people out of poverty [52].

Growth and poverty trends in Kenya are largely positive: Average annual GDP growth accelerated from 4.2 percent in 2000-2009 to 5.4 percent in 2010-2017 and Kenya's national poverty rate declined by about 1 percent per year (from 47 to 36 percent) between 2005 and 2015 resulting almost entirely from rising consumption among the poorest rural households which are diversifying into informal service-sector activities such as wholesale and retail trade and transportation. Meanwhile, modern services in technology, telecoms and finance have been strong performers, driving innovation and attracting high skilled workers and wider investment to Nairobi. In addition to creating good jobs that in turn create the demand for services and jobs in other sectors (such as construction for housing and office space, restaurants, hospitality as well as legal and business services), the growth in the technology and skill intensive ICT and financial sectors are deepening the country's capabilities in software development, data science and related computing technologies which could theoretically position it to take advantage of adjacent fields like artificial intelligence and robotics in the future.

At the same time, the economic circumstances of millions of Kenyans have not fundamentally changed. Modern production technologies in agriculture are not diffusing widely and food prices more than doubled between 2005 and 2015, squeezing the incomes of both urban and rural families alike, perhaps helping to fuel the growing demand for short-term digital loans that are primarily used for "day-to-day consumption" [52]. Lending to the private sector, a measure linked to the financial system's ability to research firms, exert corporate control, provide risk management services, mobilize savings and facilitate transactions increased only modestly from 26 to 33 percent between 2005 and 2016. Caps on commercial lending rates passed into law in 2016 curtailed already relatively low levels of lending to small and medium enterprises (SMEs), dampening the ability of private sector lending to fuel growth. While involving over 60 percent of Kenya's workers and accounting for 25 percent of GDP, the agricultural sector received less than 4 percent of commercial bank lending in 2017. Further, little dynamism among manufacturing and service sector firms contributes to low rates of formal job creation relative to Kenya's burgeoning labour force: an estimated 87 percent of new jobs are informal, offering few protections, limited financial stability and limited growth potential [52]. Finally, Kenya's manufacturing sector has not been a strong source of structural transformation: as a share of GDP, manufacturing output has remained at under 10 percent since independence in 1963 and the share of total wage employment in manufacturing fell from 13 to 11 percent between 2000 and 2017 [53].

How do we understand the role of Kenya's financial system in these macroeconomic dynamics and outcomes? Has a focus on access to accounts and the direct, short-term impact of financial services on households crowded out attention on financial sector development more broadly and its potential to boost productivity, long-run growth and the welfare of future generations? As Kenya's increasingly large, innovative and profitable financial system has included within its reach ever larger segments of the population, has it also supported the ability of individuals to invest in production and human capital? Has it improved its capabilities to identify - and allocate capital topromising small or medium sized firms to support their ability to acquire and scale production technologies and organizational capabilities so that they can compete in the domestic market or seek out export markets and grow and employ more people?

In addition to creating mobile financial services that are suited to an economic context that offers only very narrow pathways to upward mobility, is it doing enough to change that context? Or are the wider benefits of Kenya's digital financial infrastructure yet to truly materialize, with its long-run growth impacts conditional on the specifics of how Kenya builds on- and interconnects - the key components of that foundation:

cellular networks, mobile phones, the internet, agent networks, mobile money and financial intermediaries, to solve concrete problems with tailored products for different people or businesses in different ways?

These questions are particularly important as Kenya's Vision 2030 plan "aims to transform Kenya into a newly industrializing, middle-income country" by 2030. To achieve this vision Kenya will need to raise its GNI per capita from around USD 1,460 today to USD 3,895 in 2030, requiring an average growth rate of 7.8 percent per year, more than triple what it was between 2000 and 2017. In the short-run, the country's policy efforts are focused on achieving the pillars of its "Big Four" economic agenda: universal healthcare, food security, manufacturing and affordable housing. To give an example of the level of ambition embedded in the plan's targets, Kenya aims to increase the share of manufacturing in the economy from 9 percent of GDP in 2017 to 20 percent in 2022.

There seem to be blind spots in the current program of advocacy, research and investment occurring under the financial inclusion umbrella that prevent more concrete guidance to the needs of policymakers that are grappling with achieving and implementing ambitious development programs like Kenya's. Specifically, what policies and investments in the development of Kenya's financial system are likely to raise labour productivity and long-run economic growth while maintaining stability?

Rather than resolve these questions, they are raised here mostly to frame and motivate a discussion that interrogates the links between Kenya's financial sector and the acquisition and diffusion of production capabilities that underpin productive jobs and longrun economic growth, with the ultimate goal to help identify how those links can be strengthened.

Innovations redefining the delivery of financial services, are the most significant factor of the financial deepening in Kenya.

In recent years, the banking industry has adopted fintech to drive financial innovations within the industry. Banks are continuously changing the way they serve customers through improved products and services. Key factors determining the increased focus on innovations by banks include:

- To generate new revenue streams by offering new services;
- To differentiate their services by improving user experience;
- To optimise operational costs; and
- To effectively analyse risks and detect fraud.

Next we consider the banking services and national payments.

The year 2019/2020 witnessed major achievements in CBK's banking and payment services. A number of authorizations for payment service providers were completed, key regulatory guidelines were issued and security enhancements for SWIFT operations among commercial banks were implemented. Most notably, CBK completed a major upgrade of the Kenya Electronic Payment and Settlement System platform to give it unparalleled capabilities. This upgrade greatly improved efficiency and effectiveness of Kenya's payment, clearing and settlement systems.

Migration to new KEPSS platform

The Kenya Electronic Payment and Settlement System (KEPSS) is Kenya's Real Time Gross Settlement System (RTGS). It was set up in 2005 as part of CBK's efforts to modernize payments in Kenya. KEPSS settles Kenya's high-value and time-critical payments. In 2019/20, KEPSS processed 4.97 million transaction messages valued at KSh 33.23 trillion compared to 4.75 million transaction messages worth KSh 30.04 trillion in 2018/19 (Fig. 2.6).

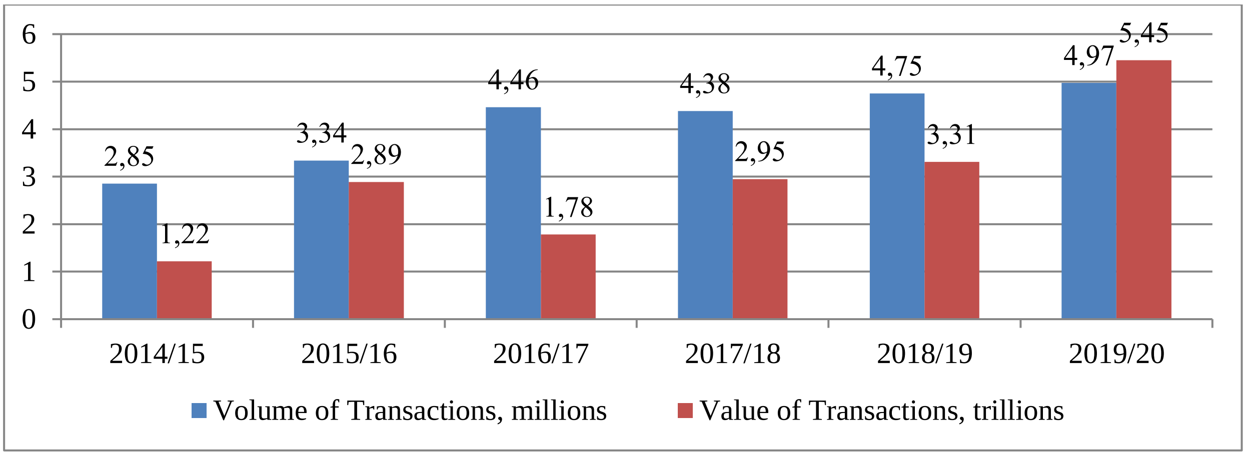

Fig. 2.6. Volume and value of KEPSS transactions

Source: CBK

On June 5, 2020, the CBK went live with a new platform for the Kenya Electronic Payment and Settlement System (KEPSS). The previous KEPSS platform, implemented in 2005 had a number of capacity limitations. It could do up to 50,000 transactions per day compared to the new system's capacity of more than one million transactions per day. The new system has other advantages including elimination of manual paper-based instructions; efficient liquidity optimization; ability to configure customized alerts for exceptional transactions; unique transaction reference numbers for ease of tracking; compliance with ISO20022 SWIFT standards for messaging; Anti Money Laundering/Combating the Financing of Terrorism (AML/CFT) capabilities. The new KEPSS platform is functionally ready for a 24/7 economy.

Authorization of Payment Service Providers (PSPs)

In the year, CBK granted approval to Airtel Network Kenya Limited to carve off the mobile money business from the data and voice business to enhance governance. Further authorizations were also granted to Kenswitch Kenya Limited, Interswitch East Africa Kenya Limited and Integrated Payment Services Limited (IPSL). Other previously authorized PSPs include Safaricom Plc, Airtel Network Kenya Ltd, Telkom Kenya Ltd and Mobile Pay Ltd. This brings the total number of authorized PSPs to seven, deepening growth and payment service delivery in Kenya.

Guidelines and Circulars

To ensure a robust legal and regulatory framework, CBK issued a Cybersecurity Guideline for PSPs to set minimum standards that PSPs should adopt for effective cybersecurity governance. The CBK also issued two circulars in March and June 2020, announcing a range of measures to encourage the use of mobile and digital payments in response to the COVID-19 pandemic. This was part of CBK's wider effort to cushion and support businesses and Kenyans against the impact of COVID-19.

Regional Payment and Settlement Systems

The KEPSS interfaces with two regional payment systems, the East Africa Payment System (EAPS) and the COMESA Regional Electronic Payment and Settlement System. The EAPS is used by traders and banks to make payments in the EAC region. Settlement for EAPS transactions takes place in the EAC Partner States currencies i.e. KSh, UGX, TZS and RWF. In 2019/2020, banks sent 3,020 transactions worth about USD 496.1 million over the EAPS network. The leading currency utilized for EAPS payments in value terms was the Kenya shilling with a total value of USD 342.7 million which represented 69.1 percent of the total payments.

SWIFT Customer Security Program

The CBK coordinated implementation of SWIFT Customer Security Program 2019. This is a global program that involves all commercial banks putting in place security controls against cyber-attacks. The Kenyan financial industry achieved a 91 percent compliance level. In addition, banks that connect to SWIFT received training on ISO 20022 message standards to enable migration to the standard by 2022.

According to the 2018-2019 Innovation Survey conducted by CBK, 94 percent of Kenyan banks introduced a Fintech product between January 1, 2015 and December 31, 2019. Moreover, according to the 2019 Innovation Survey, 80 percent of the banks and 86 percent of Micro-Finance Banks (MFBs) introduced a new Fintech product between January 1, 2019 and December 31, 2019 [54; 55]. New Bank – An institution seeks to become a 'new bank' by creating a 'built for digital' banking platform. The institution shall apply advanced FinTech to provide banking services, minimize operational costs, improve customer experience, and market their products through social media. Distributed Bank – An institution seeks to become a 'distributed bank' through collaboration and partnership with FinTech startups. The institution seeks to compete for the ownership of the customer relationship by providing niche-banking services. Such joint ventures will allow consumers to use multiple financial service providers, through a 'plug and play' digital interface.

Bank for International Settlements. (2018). Basel Committee on Banking Supervision Sound Practices: Implications of fintech developments for banks and bank supervisors. Functionally, the products can be classified into the following 5 clusters:

- Credit, deposit and capital-raising services;
- Clearing and settlement services;
- Investment management and custodial services; • Incidental business activities; and

- Market support services.

Fig.2.7 below highlights the percentage of institutions that have developed products within the five functional areas of innovation.

Payments have been, and continue to be, the activity most affected by technological innovation [52]. Based on the 2018 survey, payments related services had the highest number of products with 77 percent. In the 2019 survey, payments-related services had the highest number of products for banks with 49 percent while credit, deposit and capital raising services had 43 percent.

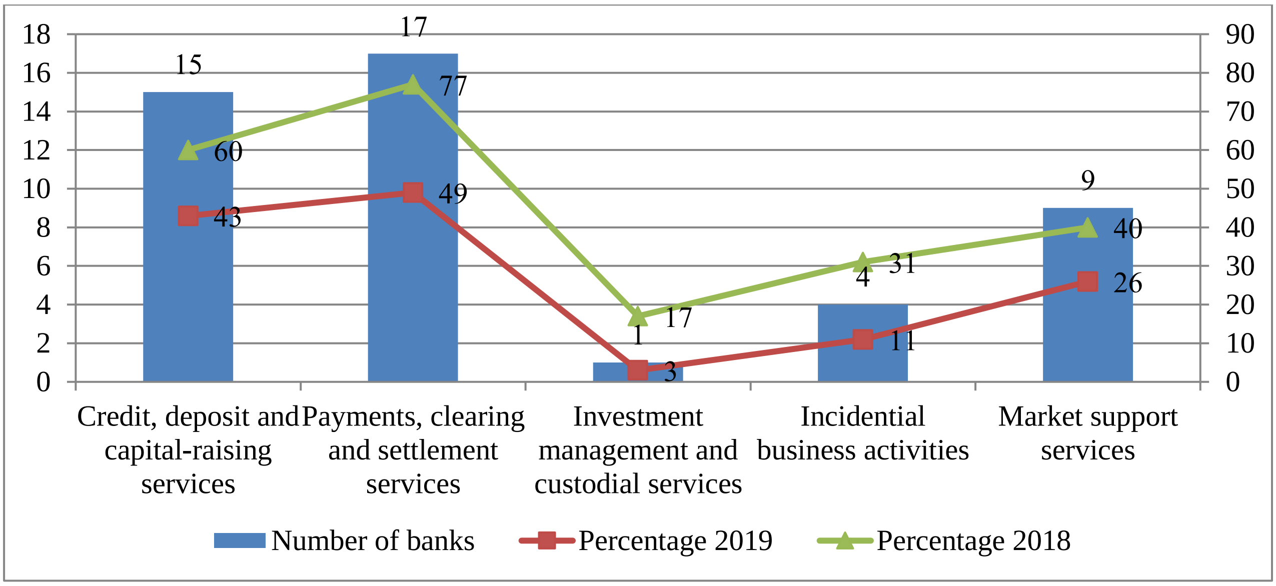

Fig. 2.7. Functional areas of innovation in Kenyan banks

Source: CBK 2019 Innovation Survey [55]

However, For MFBs, credit, deposit and capital raising services had the highest number of products with 57 percent while payments-related services had 29 percent. Essentially, new modes of payment can have a profound impact on the economy, infrastructure and society by facilitating the flows of money. Today, remittances provide a greater source of foreign currency inflows to developing economies such as Kenya than foreign direct investment (Financial Times, 2019).

New technologies influence innovation in the banking sector; 94 percent, 77 percent and 65 percent of the banks consider developments in Application Programming Interfaces (APIs3), Big Data Analytics and Cloud Computing, respectively, as very important innovations. Banks indicated an 86 percent, 83 percent and 71 percent high likelihood of adoption of the three developments, respectively, by 2022. In contrast, 74 percent of the respondents had low interest in developments in Augmented Reality. Banks are cognizant of the risks accompanying innovation. Cyber risk, third-party risk and operational risk were considered the top three risks that should be addressed whilst advancing the innovation agenda.

The *Financial Sector Deepening Kenya* (FSD Kenya) is an independent Trust dedicated to the achievement of an inclusive financial system that supports Kenya's long-term development goals. FSD Kenya works closely with Government, the financial services industry and other partners to develop financial solutions that better address the real word challenges faced by low-income households, enterprises and underserved groups such as women and youth.

FSD Kenya's objective is to facilitate increased incomes, reduced vulnerability to shocks, and better capacities invest in the future. It pursues this objective through partnerships across the public and private sectors, including with the Government, the financial services industry, and other development partners across key economic and social sectors.

These partnerships vary significantly depending on the need at hand. They may involve FSD Kenya offering technical assistance, commissioning relevant research, financing substantial programmes of activity, providing policy advise, or simply collaborating where FSD Kenya finds shared interests in our quest for an inclusive financial market that helps Kenyan achieve better livelihoods, as well as increased value from finance as an enabler of prosperity.

Background

FSD Kenya was established in 2001 to support the development of inclusive finance as a means to stimulate wealth creation and reduce poverty. In 2005, FSD Kenya was constituted as an independent Trust. FSD Kenya operates under the supervision of professional trustees, KPMG Kenya, with policy guidance from a programme investment committee (PIC). FSD Kenya's core development partners are the UK's Foreign, Commonwealth & Development Office (FCDO), the Swedish International Development Agency (Sida), and the Bill & Melinda Gates Foundation.

Mission

To support the development of inclusive financial markets in Kenya as a means to stimulate wealth creation and reduce poverty.

Strategy

The Government of Kenya has established a long-term vision to "create a globally competitive and prosperous nation with a high quality of life by 2030." Vision 2030 emphasises that all Kenyans should enjoy a high quality of life. Improving economic opportunities and delivering vital services to low-income Kenyans is an integral plank towards achieving the country's long-term aspiration for prosperity.

FSD Kenya recognizes that low income lower-income earners already participate in the economy, for instance as wage workers, smallholder farmers, small-scale traders, or consumers. However, they are often constrained by inadequate access to quality, affordable and usable financial services. FSD Kenya continuously seeks to unlock their potential by understanding the constraining issues and partnering with relevant market players to find solutions that best address the needs of such individuals, households, and small-scale enterprises.

Towards this end, FSD Kenya seeks financial solutions that address real world financial problems. FSD Kenya aims to unlock barriers in areas such as agriculture, health, education, and trade, as well as emerging priorities like affordable housing and climate change. The link between financial market development and poverty reduction is the main rationale for the FSD Kenya programme.

FSD Kenya works with a wide range of partners in Kenya, from policymakers and regulators such as the National Treasury and the Central Bank of Kenya through key industry associations such as the Kenya Bankers' Association to innovators in the financial sector. FSD Kenya tries to stimulate change in a variety of ways – though policy advice, technical assistance, applied research, co-funding, risk-sharing, and very occasionally early stage investment. Whatever approach FSD Kenya takes is determined by the outcome required to address a particular market development problem or opportunity.

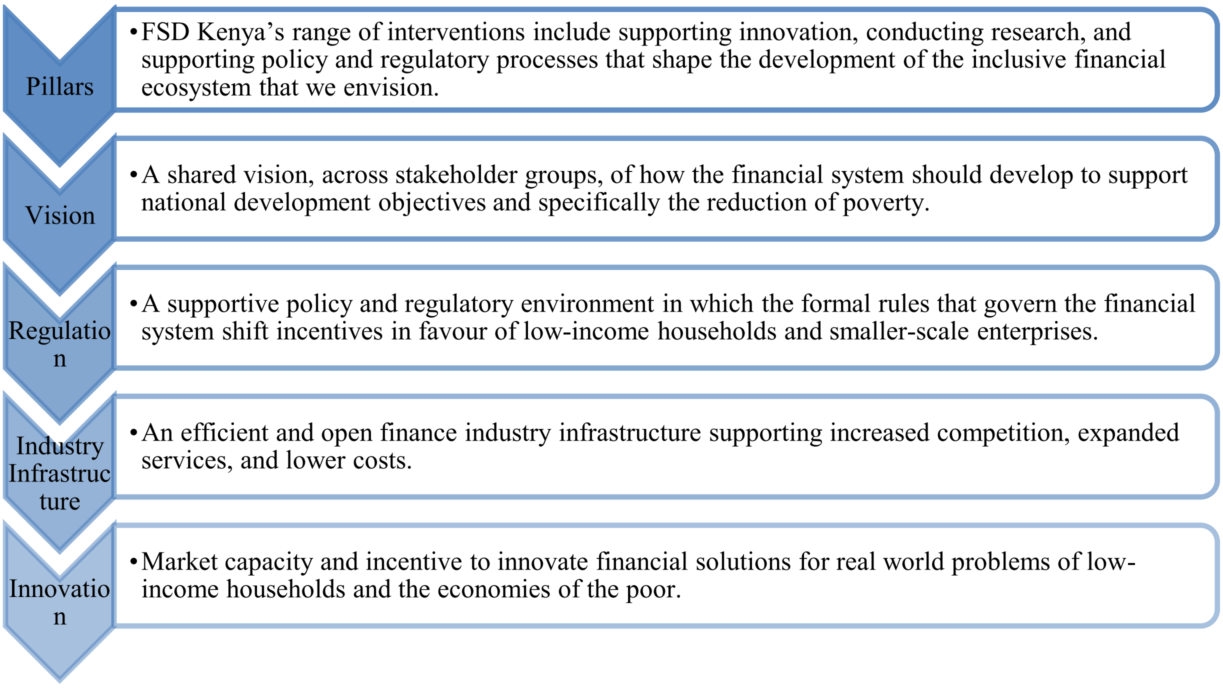

Fig. 2.9. FSD Kenya's activity in development of inclusive financial markets in Kenya

Source: developed by author

In summary, FSD Kenya partners with financial sector stakeholders in the endeavour to develop an inclusive financial sector that supports Kenya's long-term development ambitions.

The focus of the researches of FSD Kenya is narrow: the key outcome against which the role of finance is evaluated is sustained economic growth and the standard of living improvements that ensue when the productivity of an economy and the income of workers grows.

Our research proceeds as follows. It first surveys theories of economic growth and describes different facets of Kenya's own recent growth experience, economic complexity and technology landscape using publicly available data and contrasts Kenya's experience with of a group of comparison countries. Secondly, it examines the theoretical and empirical links between the financial sector, technological change and growth; provides an overview of key development in Kenya's financial system and tries to unpack how those developments connect to the growth.

CHAPTER 3
ASSESSMENT OF THE EFFECT OF FINANCIAL DEEPENING ON ECONOMIC GROWTH IN KENYA AND ITS FUTURE PROSPECTS

3.1. Analyzing the effect of financial deepening on economic growth in Kenya

The FinAccess Household Survey, commonly referred to as FinAccess, is a series of surveys jointly conducted by the Central Bank of Kenya (CBK), the Kenya National Bureau of Statistics (KNBS) and FSD Kenya every two to three years to establish the level of financial inclusion, as well as to measure the drivers and usage of financial services in Kenya.

The five surveys so far-in 2006, 2009, 2013, 2016 and 2019 - help policymakers identify barriers to financial inclusion in Kenya. Private sector actors also find the information useful for identifying new market opportunities.

On Thursday 3rd September 2020, the Central Bank of Kenya (CBK), the Kenya Bureau of Statistics (KNBS) and the Financial Sector Deepening Trust (FSD Kenya) hosted a “FinAccess Datafest” webinar, live-streamed to a global audience on YouTube.

The purpose of the webinar was to demonstrate the power in the FinAccess Household Survey data, commonly referred to as FinAccess. FinAccess is a series of surveys jointly conducted by CBK, KNBS and FSD Kenya every two to three years to establish the level of financial inclusion, as well as to measure the drivers and usage of financial services in Kenya.

Presenters at the online Datafest brought to life clear illustrations of how FinAccess data can be applied in developing solutions to real-life problems using finance. Presentations focussed on practical applications of data gleaned from FinAccess, focussing for instance on data-driven support for the innovation of consumer-centric products and enhancement of services; identification of gaps and opportunities in the usage and quality of different financial products; identification of mismatches between existing financial products and financial needs of consumers, and; demographic and geographical divides in usage.

According to the data of the CBK, KNBS and FSD Kenya, in 2019:

- Urban small business (2.2 million, Ksh34 bn monthly income 96% included): 77% of formally included urban small business owners only operate in cash in their business;

- Local market farmers (4.2 million, Ksh33 bn monthly income 78% included): just 8% of formally included local market farmers turn to formal financial services when they struggle to meet their expenses [53].

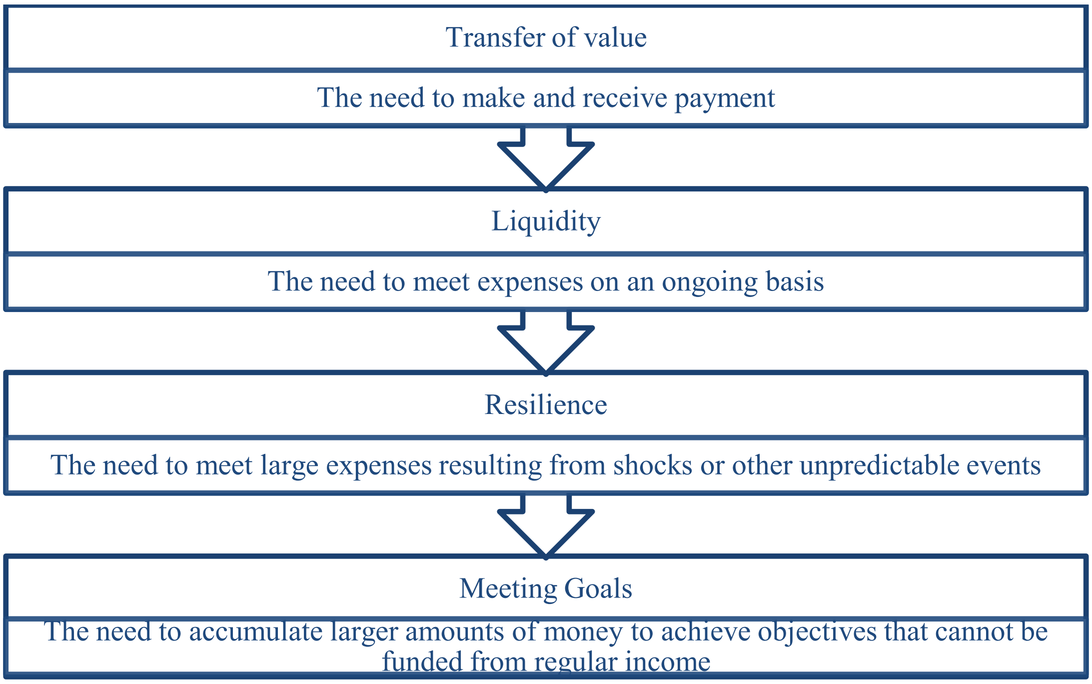

Fig. 3.1. Need: A collection of use cases that can be fulfilled by financial services in Kenya

Source: developed by author

Most Kenyans meet their needs outside the formal sector.

The tripartite partnership between the CBK, KNBS and FSD Kenya has so far seen the release of five consecutive FinAccess surveys since 2006. These surveys have proved immensely useful to financial service providers, development partners and policy makers, providing crucial data in support of the development of an inclusive financial ecosystem through evidence-based policies. For instance, the surveys of 2006, 2009, 2013 and 2016 showed that Kenya has made significant progress in fostering financial inclusion. FinAccess 2019 provided a 13-year perspective on Kenya's financial landscape, uncovering that Kenya's formal financial inclusion had remarkably risen from 26.7 % in 2006 to 83% in 2019. This impressive leap in formal financial inclusion has largely been attributed to the growth of mobile money, government initiatives and support, and developments in information and communications technology (ICT).

Preparations for FinAccess 2021 are on-going, with a focus on ensuring that data collected is relevant in supporting various responses to the COVID-19 pandemic and other shocks facing Kenyans, such as the recent locust invasion and floods. The survey scope will also be broadened to cover all of Kenya's 47 counties, succinctly capturing the uniqueness, opportunities, and challenges in each of the counties to support inclusive finance and pro-growth policy interventions at the county level.

With the continued global technological advancements, the Kenyan Banking Sector has had to continuously adopt and adapt to technologically driven service delivery channels.

Mobile-phone Financial Services (MFS), which spans the full spectrum of financial services, is one such delivery channel. MFS continues to propagate Kenya's digital banking ecosystem to cover not only money transfer but also credit and savings, payments for goods and services as well as e-commerce through linkages with various financial and non – financial institutions. The growth of MFS has been witnessed not only in the urban areas but also the rural areas. This is largely attributed to the convenience and affordability of financial services offered through MFS.

In addition to offering financial services, MFS is now being utilized for customer relations especially in enhancing communication as well as receiving feedback from customers. This has been driven by the continued changes in customers' expectations, which come about with the advancement in technology. The challenge that the banking sector then continues to face is ensuring it remains relevant in the market by continuously developing solutions that address the changing customer needs and preferences.

We studied the summary of MFS transactions data [48]

The number of active mobile subscriptions continues to grow. It stood at 54.5 million as at 31st December 2019, which translates to mobile penetration rate of 114.8 percent 8. One of the reasons why mobile penetration in the country remains high is multiple Subscriber Identity Module (SIM) ownership by consumers. Since inception of MFS, there are now over 224,108 agents, over 58 million customers and 942.7 million transactions valued at over Ksh.2.1 trillion as at December 2019. We continue to witness the growth in value of transactions with an increase of 4 percent from Ksh.367.77 billion in 2018 to Ksh.382.93 billion in 2019. While there was an increase in value of transactions, there was a slight decline in the number of transactions from 155.77 million in 2018 to 154.99 in 2019 million, a decline of 0.5 percent. These figures are captured in Table 3.1.

Table 3.1

Mobile transactions data in Kenya

Digital Financial Inclusion From 2007 To 2019	2007	2008	2012	2017	2018	2019
Mobile Subscribers (million)	11.34	16.23	30.73	42.8	49.5	54.5
Mobile Penetration (percent)	30.5	43.64	78	94.3	106.2	114.8
Mobile Money Subscriptions (million)	1.35	5.08	21.06	30	31.62	58.36
Number of Transactions (million)	1.28	10.2	55.96	139.93	155.77	154.99
Value of Transactions (Ksh.’ billion)	3.8	26.99	150.16	332.622	367.77	382.93
Avg Value of Transactions (Daily) (Ksh.’ million)	126.67	899.66	5,005.33	11,087.40	12,666.70	12,764.30
Active Mobile Money Agents	1,582	6,104	76,912	182,472	223,931	224,108

Source: Central Bank of Kenya

New products make a great impact on the financial deepening.

The Central Bank continued to approve new banking products and related charges as provided for under Section 44 of the Banking Act, which provides that no banking institution can increase its rate of banking or other charges except with the prior approval of the Minister. The Cabinet Secretary, the National Treasury delegated this role to the Governor of the Central Bank of Kenya via Legal Notice 34 of May 2006 on the Banking (increase of Rate of Banking and other Charges) Regulations 2006

While processing such applications, CBK considers:

- whether the proposed increase is in conformity with the Government's policy of establishing a marketoriented economy in Kenya;
- the average underlying inflation rate prevailing over twelve months preceding the application.
- for new charges, whether the proposed charges are justifiable and are comparable to the industrial average.

The financial services industry is being restructured by the ever-changing consumer needs, innovative financial products, technological advancement and the use of multiple delivery channels. To remain competitive in the new landscape, banks have continued to introduce new products, expand the existing ones, and add new delivery channels. Banks strive to enhance access to customers as well as differentiating their products and services by use of alternative delivery channels such as e-banking and m-banking.

During the year 2019, CBK noted the introduction of 31 new products in the market and approved the related charges. Most of the applications sought to introduce digital banking services.

The financial deepening depends on the operations of representative offices of authorized foreign financial institutions.

CBK may under section 43 of the Banking Act (Cap 488) authorize and supervise Representative Offices of foreign banks that wish to establish a presence in Kenya. Representative Offices are only allowed to undertake marketing or liaison roles on behalf of their parent and affiliated entities. Further, they are expressly prohibited from undertaking banking business as defined in the Banking Act.

The rationale underlying the establishment of Representative Offices in foreign jurisdictions lies in the significant growth in cross-border commerce witnessed in recent times. Financial institutions today seek to maintain long-term business relationships with their customers by availing services wherever and whenever these are required.

As at end of 2019, there were 9 Representative Offices in Kenya. These Representative Offices facilitated business worth an estimated Ksh.473.46 billion (USD4.67 billion) in 2019. The value of business activities facilitated in 2019 increased by 31.89 percent when compared to Ksh.359.21 billion (USD3.51 billion) facilitated in 2018. This is indicated in Table 3.2 below. The activities facilitated largely comprised trade finance, term loans, working capital, bilateral receivable discounting and syndicated finance.

Table 3.2

Business activities facilitated by representative offices in Kenya

Year	2019		2018	
	Ksh. Billions	USD Billions	Ksh. Billions	USD Billions
Corporate finance	13.15	0.13	13.67	0.13
Syndicated Finance	86.45	0.85	42.84	0.42
Correspondent banking	36.68	0.36	28.29	0.28
Project financing	14.22	0.14	7.37	0.07
Specialized finance	11.89	0.12	-	-
Property Finance	13.91	0.14	19.99	0.02
Trade finance	155.65	1.54	109.25	1.07
Others (term loans, borrowing base, working capital and bilateral receivable discounting)	141.82	1.40	137.81	1.35
Total value of business facilitated	473.76	4.67	359.21	3.51

Source: Central Bank of Kenya

The number of Automated Teller Machines (ATMs) decreased by 70 (2.77 percent) to 2,459 in December 2019 from 2,529 in December 2018 (Table 3.3).

The general decrease in ATMs in 2019 is as a result of increased rollout and adoption of digital banking. There has also been an increase in adoption of mobile phone banking platforms by banks.

Next turn to the consideration of the financial sector development and its relationship to growth in Kenya.

Major developments in Kenya's financial sector have been concentrated in banking and payments while capital markets (with the exception of private equity), pensions and insurance have been less dynamic (Figure 3.2). By using digital technologies and agent networks to lower the cost of delivering and accessing accounts, payments and loans, the financial sector significantly broadened its reach and size. While Safaricom has become a market leader in digital payments with the introduction of M-Pesa in 2007, banks and a growing number of fintech companies are leveraging mobile money and other technologies (such as smart phones and machine learning) to develop new ways of offering services and compete for depositors, borrowers and payments.

Table 3.3

ATM network in Kenya

Month	No of ATMs	Monthly Increase	Percentage Growth (%)
Dec-18	2,529	-	-
Jan-19	2,519	-10	-0.4
Feb-19	2,515	-4	-0.16
Mar-19	2,510	-5	-0.2
Apr-19	2,510	0	0
May-19	2,523	13	0.52
Jun-19	2,522	-1	-0.04
Jul-19	2,573	51	2.02
Aug-19	2,556	-17	-0.66
Sep-19	2,464	-92	-3.6
Oct-19	2,463	-1	-0.04
Nov-19	2,463	0	0
Dec-19	2,459	-4	-0.16

Source: Central Bank of Kenya

Critical to these developments were engaged regulators, who adopted a “test and learn” approach with respect to new innovations and built their capacity and expertise to understand digital technologies [52; 53]. Despite there not being a regulatory framework applicable to mobile money, after an audit of the legal, operational and money laundering risks of the M-Pesa system, the Central Bank of Kenya (CBK) issued a “letter of no objection” paving the way for Safaricom to launch the product in March of 2007 [52]. In 2009, Kenya’s banking act was amended to allow banks to recruit third parties to offer select banking services, paving the way for banks to develop agent networks to reach into underserved or more remote communities. The fact that financial service providers that do not take deposits are not regulated and do not require a license to operate, left the door open for credit-only providers offering digital loans to consumers over their mobile phones to enter the market. The government itself has launched a number of initiatives that leverage digital technologies and digital finance to improve tax, social protection, pension and NHIF payments, among others [52].

While financial innovation for inclusion is a defining feature of the financial sector in Kenya, domestic lending to the private sector has not grown significantly and credit allocation to potentially strategic sectors remain low as a share of the overall lending portfolio. For example, agriculture and tourism, two important sectors from an output, employment and comparative advantage standpoint (in the latter case) only received 6.2 percent of bank lending though they account for over one third of GDP (Fig. 3.2).

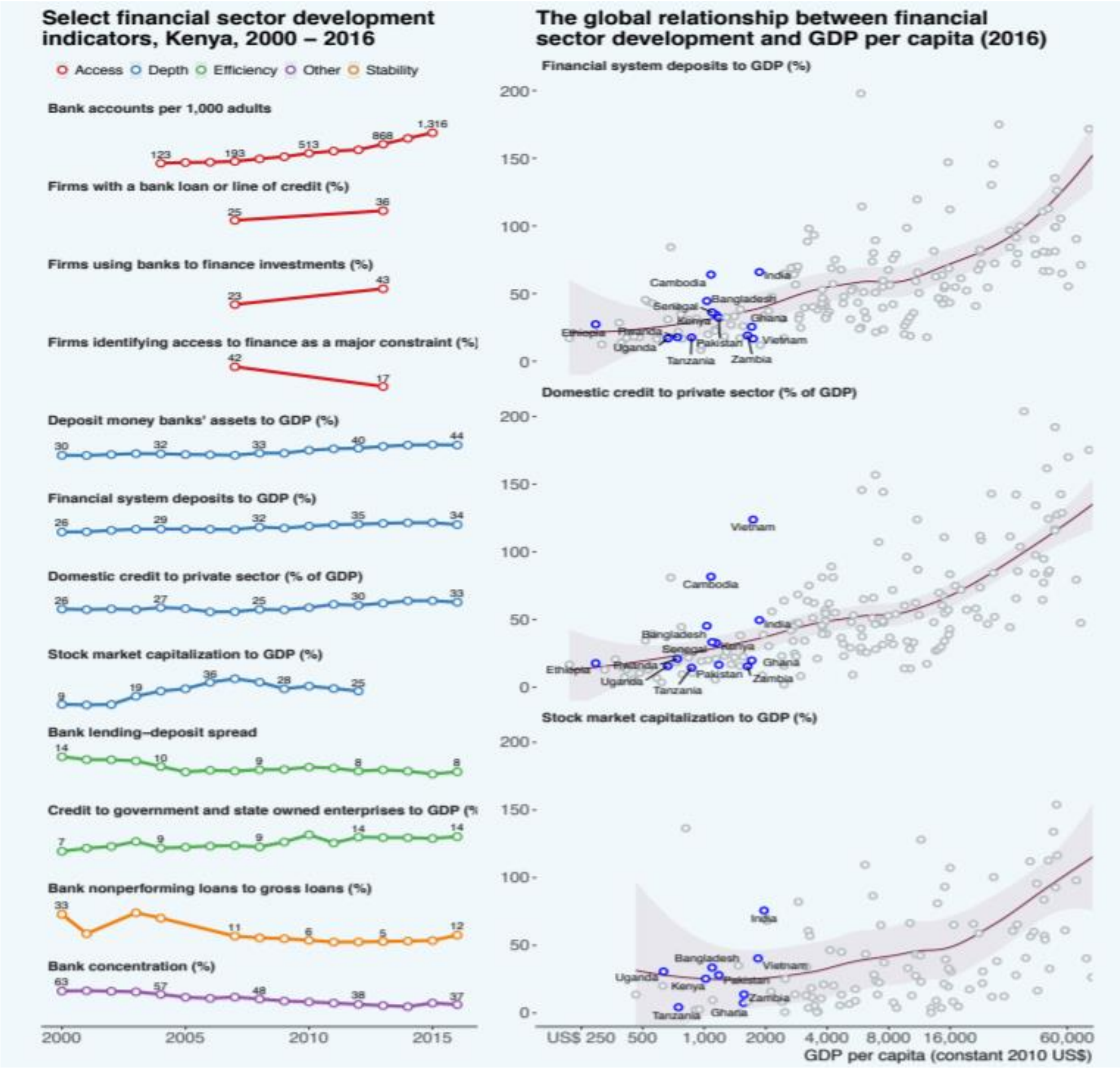

Fig. 3.2. Select indicators of financial development in Kenya

Source: World Bank, Global Financial Development Database

This likely reflects a combination of high transaction costs to intermediation in sectors more sensitive to domestic and international shocks, scarce or unreliable historic data on which to assess risk (especially where informal firms dominate) and higher or safer perceived growth and profit opportunities in other sectors. Instead, commercial bank lending is primarily channeled for personal and household uses (25.1 percent of gross loans in 2017), trade (19.3 percent) and real estate (16 percent). With the exception of real estate, which has risen significantly in importance in the loan portfolio, the composition of bank lending by sector has not significantly changed since 2009. After 13 years in which the quality of the banking sector's loan portfolio improved, the share of non-performing loans (NPLs) in the portfolio neared 13 percent in 2017. The recent deterioration in the quality of lending, derives primarily from the poor performance of loans in four sectors: trade, manufacturing, building and construction and real estate (Fig. 3.3).

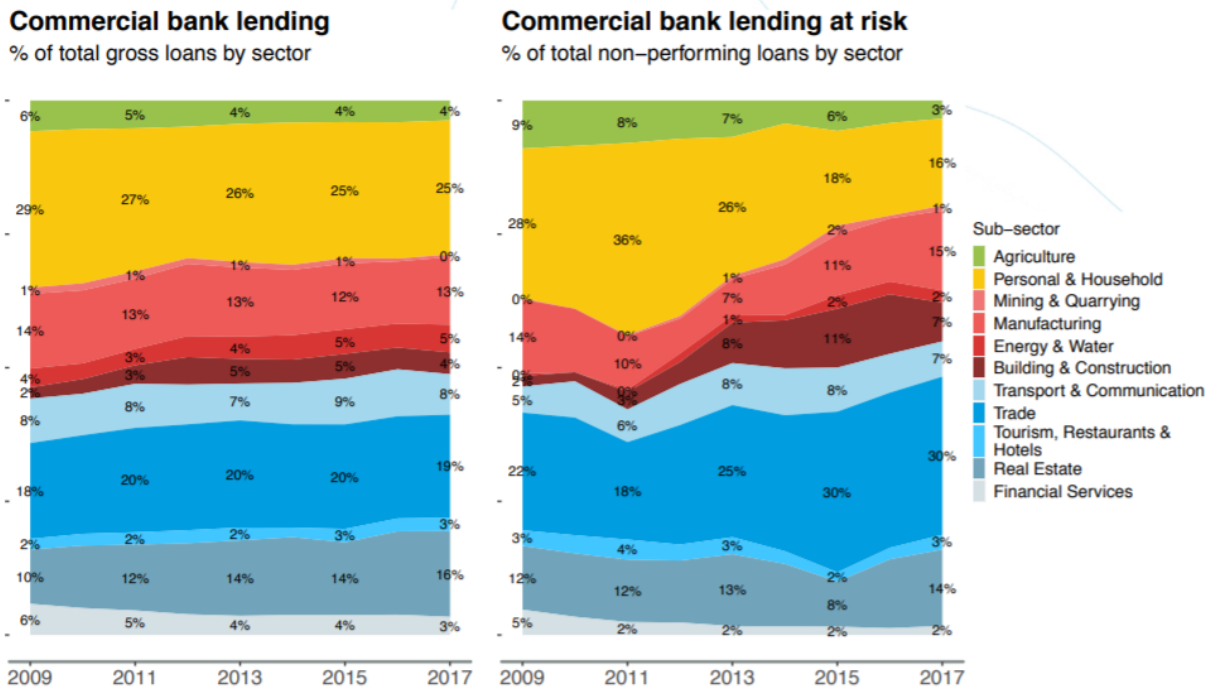

Fig. 3.3. The distribution of commercial bank lending by sector (gross loans and non-performing loans)

Source: Central Bank of Kenya (CBK).

With the objective of reducing the cost of lending, a law establishing caps on interested rates was introduced in 2016. These caps were among the most drastic ever enacted globally and created some adverse unintended consequences, including a decline in bank credit to small- and medium- sized firms especially in trade and agriculture, a reduction in the lending activity and profitability of small banks, reduced monetary policy effectiveness and an estimated reduction in short run economic growth of around 0.5 percentage points per year [47].

The Nairobi Stock Exchange (NSE) is Africa's fifth largest by value. But between 2003 and 2017, there were only 10 IPOs (and only 2 since 2013 that raised a total of USD 42 million). And since reaching a high of near 40 percent of GDP when Safaricom was listed in 2008, stock market capitalization as a share of GDP has since fallen to 25 percent. To counter the lack of interest in listing, in 2013 the NSE launched the Growth Enterprise Market Segments (GEMS) to provide SMEs with more financing options and in 2016 the Capital Markets Authority reduced listing fees. These efforts have largely fallen flat. Even though GEMS tailored listing requirements to smaller and younger companies, to date, only six firms have ever listed on the GEMS junior board. And while the direct costs of listing have gone done, the poor historical performance of IPOs and NSE's performance more generally continue deter listings (the NSE 20 index has fallen by 44 percent since 2010)[48].

In the past ten years, Nairobi has become a hub for private equity (PE) and venture capital (VC) funds seeking investment opportunities in Kenya and the region, providing alternative sources of investment for SMEs, early stage and high growth companies. Kenya is now the third largest source of PE transactions in Sub Saharan Africa, behind South Africa and Nigeria and accounts for a dominant majority of the deal flow and value in East Africa. In 2017 and 2018, the total cumulative value of PE deals in Kenya approached USD 1.2 billion (making up 87 percent of the total for East Africa) - by comparison in 2017 total commercial bank lending reached approximately USD 21 billion [47]. While PE investments in Kenya span a diverse range of sectors, the financial services sector (fintech), agribusiness and FMCG dominate [56]. In 2017-2018, some of the largest deals were in financial services, including a USD 150 million loan from the International Finance Corporation (IFC) to Coop Bank intended to expand its lending operations to the micro, small and medium sized enterprises segment; a USD

70 million Series B investment by IFC Venture Capital group and others in Branch international (a mobile branchless bank with operations in Africa that offers consumer credit through its app); a USD 55 million investment by AfricInvest (a pan-African private equity firm) in Britam (one of East Africa's largest financial services groups); and a USD 47.5 million Series C investment by The Rise Fund to Cellulant (a digital payments service provider).

Closely orbiting PE/VC funds are Development Finance Institutes (DFIs) which also execute private equity deals, impact investing firms (which emphasize social and environment returns over commercial returns) and a number of accelerators and business advisory firms that work with entrepreneurs and provide small amounts of capital, mentorship and access to investors. Taken together, there is an increasingly rich ecosystem of investment, technical assistance and advisory support for entrepreneurs in Nairobi. This ecosystem, however, is not without its critics [48]. Among the concerns are that western-linked start-ups are favored for funding over local teams, potentially hobbling the prospects of homegrown African tech. A 2018 study by Village Capital found that 90 percent of start-up funding went to foreign founders [54].

If part of this problem stems from the fact that the PE/VC industry predominantly fundraises from international investors and DFIs, part of the solution will be greater presence of local capital in the financing of new tech companies. One of the key constraints to the growth of the PE/VC industry in Kenya has been the lack of local institutional investors, namely pension funds and insurance companies [49]. In 2015, the assets under management of Kenya's pension fund industry were USD 7.8 billion, but less than 1 percent were invested in PE funds. While changes to pension fund investment guidelines by the Retirement Benefits Authority (RBA) in 2015 increased the amount pension funds can invest in PE from 5 to 10 percent of assets, a host of other barriers remain, including fragmentation in the pension fund industry, lack of familiarity among pension fund trustees with the PE/VC asset class and the significant amount of time and legwork required by PE fund managers to raise money from local institutional investors relative to other sources of capital. Participation in PE/VC investment by the Kenya's insurance industry is even more limited. Investment guidelines issued by the

Insurance Regulatory Authority (IRA) offer no specific guidance on PE investment, other than setting 'concentration limits' of 5 percent on foreign investments. Since many PE funds are not registered in Kenya, insurance providers wanting to invest would have to do so through "feeder funds" registered by the PE/VC fund locally [54].

3.2. Directions for the development of the financial sector in Kenya in the context of stimulating of financial deepening and economic growth

How are the developments in Kenya's financial sector connected to the trajectory and drivers of recent economic growth?

To what extent has finance played a role in shaping the distribution of the benefits delivered by that growth? Unfortunately, these questions are not easy to answer and the literature examining the systemic effects of Kenya's financial sector development and innovation is thin, so more definitive answers will depend on how the evidence accumulates going forward. Nonetheless, without an evaluation of the financial sector's role in Kenya's current growth trajectory, it will be difficult to identify how the financial sector might best support Kenya's ambitions to become a middle-income country and, in the process, transform the living and working contexts for a majority of Kenyans.

The available evidence from household surveys and analyses of macroeconomic data reviewed in Section 3.1 suggest two features of recent growth. The first is that economy wide labour productivity (and average incomes) has been growing relatively slowly since the early 2000s in Kenya compared to economic and regional peer countries. The second, is that two important channels are driving that growth. The first is the "structural" channel resulting from movements of labour from sectors with low to high productivity. The second is the "technology" channel resulting from improvements in productivity within sectors (Fig. 3.4).

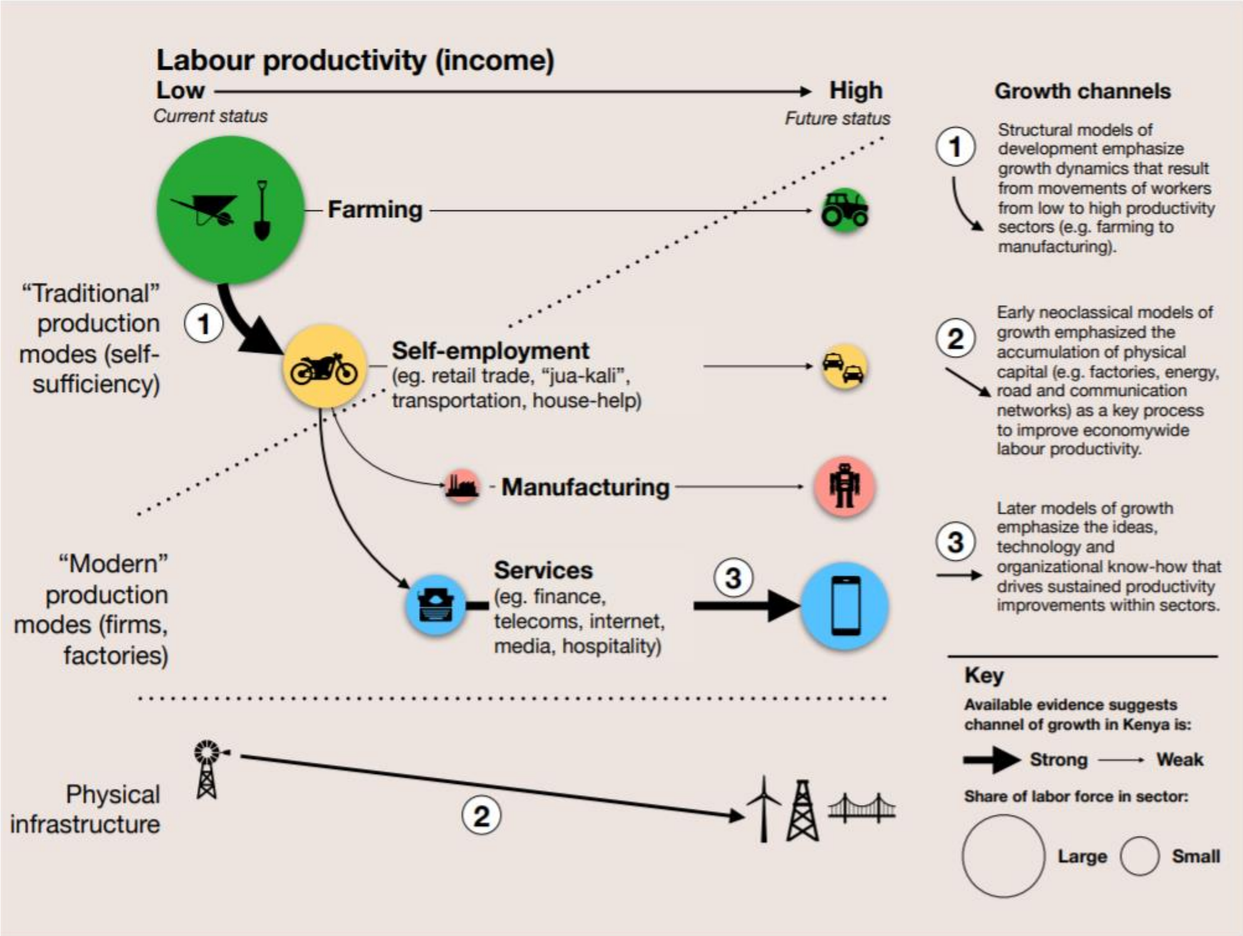

Fig. 3.4. Kenya's growth channels

Source: FSD Kenya. (2019). Inclusive Finance? Nairobi, Kenya: FSD Kenya. [55]

However, rather than the deep structural shifts that were evident in industrializing economies as labor moved from a small scale "traditional" mode of production (subsistence farming) to a large scale "modern" mode of production (factories), Kenya's current structural channel of growth can be characterized as an incremental shift within "self-sufficient" modes of production: from small scale farming to small scale self-employment activities in the services sector, which is offering rural families a tentative foothold out of poverty. Similarly, the withinsector channel of labour productivity growth has been evident mainly in modern services (ICT and financial services) which employ relatively few people, not in manufacturing or agriculture.

Finally, while large investments in physical infrastructure (such as roads, rail and energy generation and transmission) that have the potential to boost economywide productivity have begun to materialize in the past few years, the evidence suggests only a limited role of capital accumulation on growth since the early 2000s and by most accounts Kenya's infrastructure deficit remains significant. The following material examines the first two of these channels in turn, exploring the role of finance in each.

Growth channel 1: Rural households transition away from farming

Almost all of the improvements in real consumption between 2005 and 2015 occurred in rural areas largely as a result of the incorporation of more non-farm activities in household earning strategies. Available evidence suggests that it is likely that peer to peer mobile payments, mobile savings options and mobile communications technology are intertwined in this dynamic. In some ways, with the expansion of mobile network coverage, mobile phones and agent networks, rural households in Kenya are less isolated than they were before and more able to gather information and raise moderate financial capital (for example through better savings options and remittances) to aid in the transition from farm work to non-farm microbusiness.

These developments seem to have been particularly important for women, who - as primary caretakers (and quite often heading single-parent households) have less time and resources to access banks - perhaps could benefit disproportionately from the convenience and proximity of mobile money agents and the services available on a mobile handset. In addition, finance does seem to have played a role in technological change for lower-income households in rural areas by facilitating the purchase of moderately-valued assets – in particular motorbikes and solar panels. And in the latter case, the benefits are unlikely to show up fully in measures of consumption or poverty.

However, given that bank loans to agriculture (as a share of overall bank lending) are falling and now make up less than 4 percent of commercial banks' lending portfolio and only 3 percent of rural adults have ever accessed a traditional bank loan, suggests a very limited role of the banking system in facilitating capital investment in rural areas. Savings and credit cooperatives (SACCOs) and savings groups (chamas) are more ready sources of higher value loans (Fig.3.5), particularly for education, which are either the first or second most common use of these loans (35 percent of SACCO loans and 25 percent of chama loans are used for education) [53].

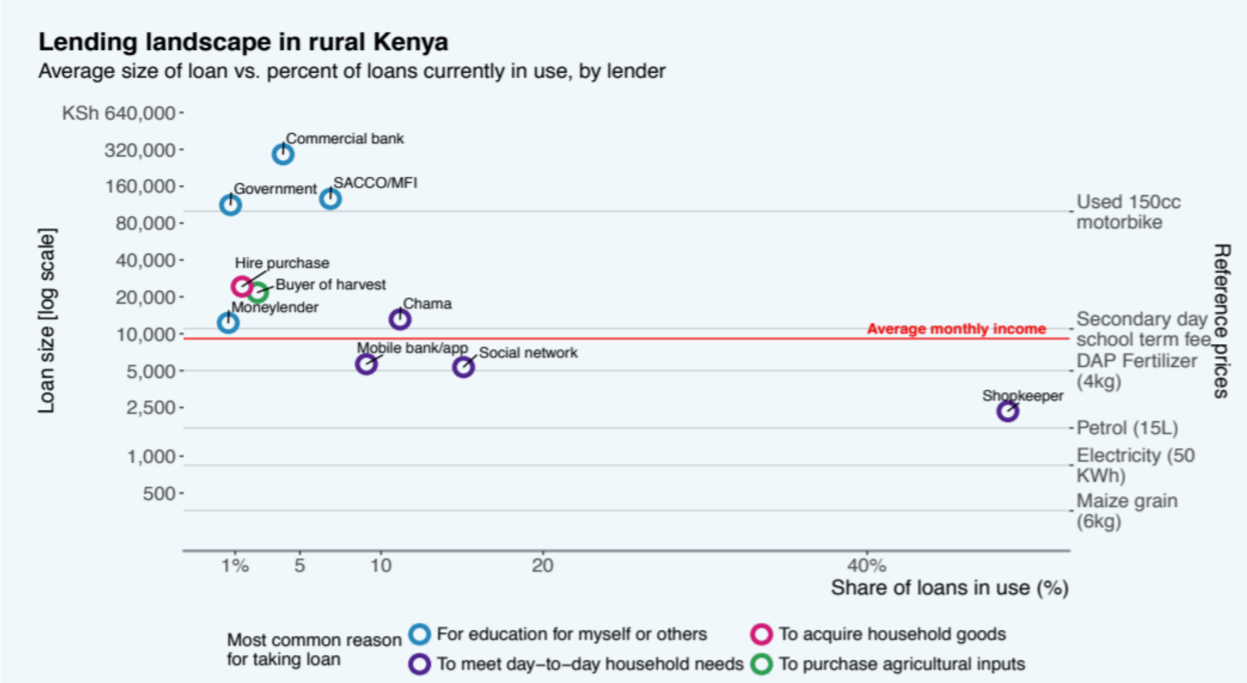

Figure 3.5. Loans used among adults in rural areas are primarily sourced from shopkeepers, social networks and digital lenders (mobile banking or apps) for day to day household needs

Source: 2019 FinAccess household survey (which recorded a total of 7,668 loans currently in use). Notes: Reference prices for Petrol, Electricity and Maize grain were obtained from the 2019 Economic Survey. The average price for a used 150 cc motorbike (eg. Boxer) was estimated from online classifieds. The out–of–pocket secondary day school term fee was obtained from the Kenya Minstry of Education.

Growth channel 2: A modern technology-led services sector grows

Macroeconomic analyses of the drivers of labour productivity in Kenya identify that productivity improvements within its non-agricultural sector have been important. The rise of modern companies in ICT and finance, such as Safaricom and Equitybank and more recently tech start-ups like M-Kopa, reflect a growing convergence between technology and the finance, and the remarkable vision and innovation within those companies to create business models and products that enabled them to tap into a large, but largely low income, mass market. The seeds of this productivity growth were the investments in cellular network infrastructure and the undersea fibre optic cables that lowered the cost and increased the speed of internet access, providing a key ingredient for a digital economy to emerge. While donors played an important role in financing the exploratory stages of early innovations (most prominently M-Pesa), a private equity and venture capital (PE/VC) industry is emerging to screen and finance start-ups, SMEs and growth firms which are developing and deepening consumer and business applications in service industries that leverage on Kenya's digital infrastructure and entrepreneurial energy.

The long-run impact of this ecosystem will likely be maximized if domestic sources of capital can be mobilized to help fund it (primarily pension funds and insurance companies) and if the know-how of screening and supporting the growth of viable, modern technology firms is transferred from foreign investors and founders with valuable international experience to local investors and entrepreneurs. From an economywide perspective, the challenge is that the good jobs that are being created in the fastest growing service sub-sectors (financial services and ICT) are skillintensive (requiring significant investments in education) and are relatively low in number. It remains to be seen whether other technology and service-sub sectors such as media, e-commerce, tourism and transportation can expand good employment opportunities enough to strengthen the "structural" growth channel and absorb larger shares of Kenya's labor force.

Kenya's missing growth channels. While within-sector productivity in modern services is growing and new-technology firms are sources of innovation, the manufacturing and agriculture sectors have been much less dynamic. In agriculture, there has only been a moderate increase in the adoption rates of chemical fertilizer and improved seed, and productivity in key household crops such as maize has not improved. Many of the largest Kenyan manufacturing firms either pre-date independence or were established when Kenya was actively supporting industry shortly after independence [50].

Lacking dynamism, the private manufacturing sector only created a net of 94 thousand jobs between 2000 and 2017, at a time in which the workforce expanded by over 10 million. As a result, the structural channel of productivity growth has been relatively weak: there are few good wageearning opportunities for low-skill workers in the labor market. In other settings, those jobs have been provided by factories. The relative scarcity of low-skill wage work perhaps helps explain why education is an increasing priority for families across Kenya who are making significant effort and financial sacrifices to put children through school, but this also means that the competition for jobs, even among Kenya's most highly educated workers, is intense. One recent example of this are reports of "essay-mills" in which Kenyan ghost writers are paid to write essays for university students in the United Kingdom [51].

Let's summarize the results of the research. The considered indicators of financial deepening cannot directly measure the degree of implementation of the functions of the financial system, which determines the vector of their further development. At the same time, the analysis conducted nevertheless allows us to conclude that the financial sector in Kenya is characterized by a low level of deepening, an insufficient degree of accessibility of financial services for economic agents, and the stability and efficiency of financial institutions and markets. During the crisis period, these characteristics deteriorated significantly. The financial system does not fully fulfill its functions of redistributing available resources for the purpose of their optimal use, which does not contribute to the development of the national economy.

Reconstruction of the Kenyan financial sector should not be limited to the implementation of palliative measures associated with the need to address the urgent problems of the crisis period. It is necessary to develop a goal-oriented program, covering in a strategic context a complex of interrelated areas that provide a radical change in the current situation:

- increasing the level of financial development and financial deepening of the economy, contributing to the growth of the competitiveness of the financial system to a level comparable to the financial systems of developed countries;
- transition to new instruments of monetary regulation, ensuring the economy's demand for money, based on replenishing liquidity through refinancing of Kenyan banks. The choice of monetary instruments should be based on the trends and requirements of economic development, taking into account the relationship between monetary policy and the reproduction process. At the same time, monetary policy should be aimed at guaranteeing economic growth at inflation rates that do not block investment activity. The criteria for the effectiveness of monetary instruments are the

degree of security of economic entities with money, the level of transaction costs of obtaining loans, the costs of functioning of the banking system and the stock market, the fullest use of national savings for the needs of the economy;

- development and launch of mechanisms that guarantee the orientation of cash flows to support production. Such mechanisms are primarily associated with an increase in the efficiency of state development institutions, which, through shared co-financing, support priority investment and innovation projects, as well as large infrastructure projects that contribute to overcoming infrastructural restrictions for economic growth, rational use of natural resources and the development of high technologies;
- lowering the key rate to a level comparable to the rate of growth of inflation, and a transition from average regulation of the level of rates to differentiated, which implies higher rates on short-term instruments while ensuring the availability of credit to finance current expenses and lower rates on long-term instruments, which will increase the availability of loans for investments;
- increasing the level of financial development and financial deepening of the economy, contributing to the growth of the competitiveness of the financial system to a level comparable to the financial systems of developed countries;
- stimulation of savings of the population, the introduction of new forms and types of deposits, the development of the market of certificates of deposit and other measures aimed at lengthening the passive base of banks, placing pension savings on bank accounts at preferential rates, but with certain conditions for their intended use;
- increasing the financial literacy of the population;
- adaptation of financial instruments, terms of their issue and appeal to the investment preferences of citizens;
- increasing the availability of financial services, creating legal, infrastructural and administrative conditions for organizing a network of financial institutions throughout the country, ensuring homogeneity and fairness of financial space, forming and diversifying the banking service network by removing territorial restrictions on opening operational offices;

- stimulating the development of stock centers and specialized widely branched networks of securities placement;
- establishment of an agency model for the sale of financial services legislative consolidation and development of technologies for electronic and mobile payments, remote financial services;
- regulatory recognition and implementation of new payment instruments, including electronic money;
- increasing the availability and stability of the financial market, an increase in the number of issuers and investors, the development of bank lending for investment and innovation projects, a significant increase in the assets of non-bank financial institutions, an increase in the level of insurance coverage of risks in the economy from the current 10-15 to 50-60%;
- restructuring and strengthening the financial system, improving its regulation, control of systemic risks.

At the heart of modern strategies for the development of the national financial system, taking into account the general trends of its development, opportunities and threats, should be determined as:

- proportionality to the scale of the economy and the ability to provide the country with economic sovereignty and competitiveness in the international arena;
- efficiency, expressed in the transformation of domestic savings into investments with the lowest transaction costs;
- assistance in the transition to an innovative type of reproduction by creating a mechanism for financial support of innovative priorities;
- formation of a financial base for the expansion of national business to foreign markets and the implementation of state policy to strengthen financial sovereignty;
- overcoming functional, structural and territorial gaps in financial development. The development of the financial sector should be considered only in the context of its role in the country's economy and development.

The combination of all these areas will contribute to financial development, ensuring sustainable growth of the national economy.

CONCLUSIONS AND PROPOSALS

The category "Financial deepening" was introduced in the late 1980s by the World Bank to reflect the relationship between the saturation of the economy with money, the degree of development of the financial and credit system, on the one hand, and the rate of economic growth, on the other. The World Economic Forum also conducts research on financial systems and capital markets. The analysis of the deepening of the world financial market is also carried out by the McKinsey Global Institute, which annually calculates a generalized indicator of financial deepening as the ratio of the market value of world financial assets, taking into account future returns to world GDP in percent. The main goal of these studies is to confirm the relationship between long-term economic growth and the financial deepening of a country's economy. Until now, this issue remains controversial. The financial deepening of an economy shows the extent to which businesses, households, and governments finance their activities through capital markets, banks and other financial intermediaries.

Having studied existing scientific research, we define financial deepening as the level of penetration of the financial sector into all sectors of the economy, development of the financial sector based on innovation, digitalization, stability and liquidity of the country's banking system, financial inclusion and ensuring the availability of financial services in order to meet the needs of users of financial services for stimulating economic development and economic growth.

The determining factor of economic growth for any type of economy is the level of development of its financial system, in general, and the credit and banking sectors, in particular. Modern economic realities confirm the decisive role of credit among sources of economic development. One of the most important directions of state economic policy should be the determination and provision of sufficiency and optimality of saturation of the economy with bank loans. The financial and non-financial sectors of the economy should be considered and functioned as a single national economic complex with common strategic development goals and tactical approaches to their achievement.

The analysis of the main trends of the economy of Kenya showed that Kenya's economy expanded by 5.4 percent compared to 6.3 percent in 2018. This was a strong performance in light of the delayed onset and below average rainfall experienced in the first half of 2019 that affected the agricultural sector. The services sector supported the growth in 2019. Overall inflation remained anchored within the target range in the FY 2019/20. It declined to 4.6 percent in June 2020 compared to 5.7 percent in June 2019, driven mainly by food prices. During the FY 2019/20, the current account deficit remained stable at USD 4,786 million compared to USD 4,727 million in the FY 2018/19 mainly reflecting reduced imports despite lower receipts from services and secondary income transfers. The capital account recorded reduced inflows by USD 66 million in the FY 2019/20, due to a decrease in project grants. The financial account recorded lower net inflows by USD 585 million in FY 2019/20. Government revenue (including grants) increased by 1.9 percent to KSh 1,753.5 billion (17.2 percent of GDP) compared to the previous fiscal year. Non-tax revenue increased by 91.2 percent on account of funds mobilised from parastatal deposits.

The analysis of the financial sector of Kenya showed that in FY 2019/20, monetary policy formulation and implementation was aimed at maintaining overall inflation at the target of 5.0 percent with a flexible margin of 2.5 percent on either side. Short term interest rates declined during FY 2019/20 in line with the accommodative monetary policy, which resulted in improved market liquidity. The average interbank interest rate was relatively stable at 4.64 percent in FY 2019/20 compared with an average of 4.47 percent in FY 2018/19. The Kenya foreign exchange market remained stable supported by a narrowing current account deficit and balanced flows. The Kenya shilling strengthened against the US dollar from an average of 103.42 per US dollar in the first quarter of the FY 2019/20 to exchange at an average rate of 101.88 per US dollar in the third quarter.

Innovations redefining the delivery of financial services, are the most significant factor of the financial deepening in Kenya. The year 2019/2020 witnessed major achievements in CBK's banking and payment services. A number of authorizations for payment service providers were completed, key regulatory guidelines were issued and security enhancements for SWIFT operations among commercial banks were implemented. Most notably, CBK completed a major upgrade of the Kenya Electronic Payment and Settlement System platform to give it unparalleled capabilities. This upgrade greatly improved efficiency and effectiveness of Kenya's payment, clearing and settlement systems.

The development of financial sector of Kenya and the financial deepening are particularly important as Kenya's Vision 2030 plan "aims to transform Kenya into a newly industrializing, middle-income country" by 2030. To achieve this vision Kenya will need to raise its GNI per capita from around USD 1,460 today to USD 3,895 in 2030, requiring an average growth rate of 7.8 percent per year, more than triple what it was between 2000 and 2017. In the short-run, the country's policy efforts are focused on achieving the pillars of its "Big Four" economic agenda: universal healthcare, food security, manufacturing and affordable housing. To give an example of the level of ambition embedded in the plan's targets, Kenya aims to increase the share of manufacturing in the economy from 9 percent of GDP in 2017 to 20 percent in 2022.

Formal financial inclusion has risen to 82.9 percent, up from 26.7 percent in 2006, while complete exclusion has narrowed to 11.0 percent from 41.3 percent in 2006. The disparities in financial access between rich and poor, men and women, and rural and urban areas have also declined remarkably. Key drivers of these changes include: the growth of mobile money, government initiatives and support, and developments in information and communications technology (ICT).

The available evidence from household surveys and analyses of macroeconomic data reviewed in the practical part of the thesis suggest two features of recent growth. The first is that economy wide labour productivity (and average incomes) has been growing relatively slowly since the early 2000s in Kenya compared to economic and regional peer countries. The second, is that two important channels are driving that growth. The first is the "structural" channel resulting from movements of labour from sectors with low to high productivity. The second is the "technology" channel resulting from improvements in productivity within sectors.

The formation of a financial sector focused on achieving sustainable economic growth requires the inhibition of various forms of destabilization of the financial sector, a significant change in financial proportions and the redistribution of financial flows. In turn, the implementation of these tasks is possible only on the basis of creating a new model of economic development, the competitiveness of which is primarily determined by the potential of domestic sources of financing not related to fuel and raw materials, which should be available to investors.

REFERENCES

1. Schumpeter, J. A. (1911). A theory of economic development. Cambridge, MA: Harvard University Press.

2. Goldsmith, R. W. (1969). Financial structure and development. New Haven: Yale Universi-ty Press.

3. McKinnon, R. I. (1973). Money and capital in economic development. Washington, D. C.: Brooking Institution.

4. King, R. G., Levine, R. (1993a). Finance and growth: Schumpeter might be right, The Quarterly Journal of Economics, 108(3), pp. 717–37.

5. King, R. G., Levine, R. (1993b). Finance, entrepreneurship and growth: Theory and evidence, Journal of Monetary Economics, 32(3), pp. 513–42.

6. Levine, R., Zervos, S. (1998). Stock markets, banks, and economic growth, The American Economic Review, 88(3), pp. 537–58.

7. Levine, R. (1991). Stock markets, growth, and tax policy, Journal of Finance, 46(4), pp. 1445–65.

8. Bencivenga, V.R., Smith, B.D., Starr, R.M. (1995). Transactions costs, technological choice, and endogenous growth, Journal of Economic Theory, 67, pp. 153–77.

9. Shleifer, A., Vishny, R. (1986). Large Shareholders and Corporate Control, Journal of Polit-ical Economy, 94(3), pp. 461–88.

10. Levine, R., Loayza, N., Beck, T. (2000). Financial intermediation and growth: Causality and causes, Journal of Monetary Economics, 46(1), pp. 31–77.

11. Beck, T., Levine, R., Loayza, N. (2000). Finance and the sources of growth, Journal of Fi-nancial Economics, 58(1–2), pp. 261–300.

12. Shleifer, A., Summers, L. (1988). Breach of Trust in Hostile Takeovers, Chapter in Corporate Takeovers: Causes and Consequences, pp. 33 – 68, University of Chicago Press.

13. Lucas, R. E. (1988). On the mechanics of economic development, Journal of Monetary Economics, 22(1), pp. 3–42.

14. Rousseau, P., Wachtel, P. (2002). Inflation thresholds and the finance-growth nexus, Jour-nal of International Money and Finance, 21(6), pp. 777–793.

15. Arestis, P., Demetriades, P. O. (1997). Financial Development and Economic Growth: Assessing the Evidence, The Economic Journal, 107(442), pp. 783–799.

16. Demetriades, P. O., Law, S. H. (2006). Finance, institutions and economic development, International Journal of Finance and Economics, 11(3), pp. 245–260.

17. Levine, R. (2005). Finance and growth: Theory and evidence, In Handbook of Economic Growth, Aghion P. and Durlauf S. (eds.), Vol. 1, pp. 865–934. http://www.nber.org/papers/w10766 (Accessed 5 December 2020).

18. De Gregorio, J., Guidotti, P. (1995). Financial development and economic growth, World Development, 23(3), pp. 433–448.

19. Rioja, F., Valev, N. (2004). Does one size fit all?: A reexamination of the finance and growth relationship, Journal of Development Economics, 74, pp. 429 – 47.

20. Law, S. H., & Singh, N. (2014). Does too much finance harm economic growth? Journal of Banking and Finance, 41, pp. 36–44.

21. Arcand, J. L., Berkes E., Panizza U. (2015). Too Much Finance? Journal of Economic Growth 20(2), pp. 105–148.

22. Sahay R., Cihak M., N'Diaye P., Barajas A., Bi R., Ayala D., Gao Y., Kyobe A., Nguyen L., Saborowski C., Svirydzenka K., Yousefi S. R. (2015). Rethinking Financial Deepening: Stability and Growth in Emerging Markets. IMF staff Discussion Note SDN/15/08

23. Easterly W., Islam R., Stiglitz J. E. (2000). Shaken and Stirred: Explaining Growth Volatili-ty. Annual World Bank Conference on Development Economics.

24. Demirgüç-Kunt, A., Feyen, E., Levine, R. (2013). The evolving importance of banks and securities markets, World Bank Economic Review, 27(3), pp. 476–490.

25. Rajan, R. G. (2005). Has financial development made the world riskier? Proceedings - Economic Policy Symposium - Jackson Hole Issue Aug 2005.

26. Stolbov, M. (2017). Causality between credit depth and economic growth: evidence from 24 OECD countries, Empirical Economics, 53(2), pp. 493-524.

27. Kindleberger, C. P. (1978). Manias, panics, and crashes: A history of financial crises. New York: Basic Books.

28. Beck T., Degryse H., Kneer C. (2014). Is more finance better? Disentangling intermediation and size effects of financial systems, Journal of Financial Stability, 10, pp. 50– 64.

29. Demirgüç-Kunt, A., Levine, R. (2001). Financial structures and economic growth: A cross-country comparison of banks, markets, and development. Cambridge, MA: MIT Press.

30. Levine, R. (1997). Financial development and economic growth: views and agenda, Jour-nal of Economic Literature, 35, pp. 688–726.

31. Dabla-Norris E., Srivisal N. (2013). Revisiting the Link between Finance and Macroeco-nomic Volatility. IMF Working Paper 13/29.

32. Love, Inessa, and María Soledad Martínez Pería. 2012. "How Bank Competition Affects Firms' Access to Finance." Policy Research Working Paper 6163, World Bank, Washington, DC.

33. Lucas R. E. On the Mechanics of Economic Development. Journal of Monetary Economics, 1988, no 22, pp. 3–42.

34. Miller M. H. Financial Markets and Economic Growth. Journal of Applied Corporate Finance, 1998, no 11, pp. 8–14.

35. Beck T., Demirgüç-Kunt A., Levine R. A New Database on Financial Development and Structure. World Bank Economic Review, 2000, № 14. – P. 597-605.

36. Keynes J. General Theory of Employment, Interest and Money. Moscow, Helios ART, 2002, 352 p.

37. Merton R. C., Bodie Z. A Conceptual Framework for Analyzing the Financial Environment. The Global Financial System: A Functional Perspective, Eds: D. B. Crane, et al., Boston, MA: Harvard Business School Press, 1995, pp. 3–31.

38. Loayza N., Rancière R. Financial Development, Financial Fragility, and Growth. Washington, DC: World Bank. Development Research Group, 2004.p.14

39. Dimitris K. Christopoulosa, Efthymios G. Tsionasb. “Financial development and economic growth: evidence from panel unit root and cointegration tests”. Journal of Development Econom-ics. Vol. 73 (2004), pp. 55–74.

40. Peter J. Montiei. “Macroeconomics in Emerging Markets”. Second edition, Cambridge University Press, 2011, pp. 493–495.

41. Demirguc-Kunt A. et. al. Finance for All? Policies and Pitfalls in Expanding Access. The World Bank Policy Report. - 2007. – P. 21.

42. Honohan P. Measuring Microfinance Access: Building on Existing Cross-Country Data. – World Bank Policy Working Paper № 3606, 2006.

43. Caskey J., Clemente R. D., Tova M. S. The Urban Unbanked in Mexico and the United States. – World Bank Policy Research Working Paper № 3835, 2006.

44. Honohan P. Household Financial Assets in the Process of Development. – World Bank Policy Research Working Paper № 3965, 2006.

45. Monnet C., Quintin E. Why Do Financial Systems Differ? History Matters. – ECB Working Paper № 442, February 2005. – P. 25.

46. Baliga S., Polak B. The Emergence and Persistence of the Anglo-Saxon and German Financial Systems. – Cowles Foundation Discussion Paper, Yale University, 2001. – P. 3.

47. World Bank. 2020. Global Financial Development Report 2019 / 2020: Bank Regulation and Supervision a Decade after the Global Financial Crisis. World Bank, Washington, DC http://www.worldbank.org/financialdevelopment. (Accessed 5 December 2020).

48. IMF Staff Discussion Note, SDN/11/16, October 19, 2011.PP.6-7.

49. Bank supervision annual report. 2019. Central bank of Kenya. https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/197965474_BSDANNUALREPORT2019%20.pdf (Accessed 5 December 2020).

50. Annual report and financial statements 2019/2020. 2020. Central bank of Kenya.
https://www.centralbank.go.ke/uploads/cbk_annual_reports/1738438903_Annual%20R

eport%20November%2017%20for%20upload%20(without%20bleeds).pdf (Accessed 5 December 2020).

51. Commercial Banks' Credit Officer Survey September 2020. Central bank of Kenya. https://www.centralbank.go.ke/uploads/banking_sector_reports/1060390065_CreditSurvey2020.pdf

52. Exploring the links between finance, technology and growth in Kenya. December 2019. FSD Kenya. https://responsiblefinanceforum.org/wp-content/uploads/2020/01/Vision-Paper-P.Gubbins-Jan2020.pdf (Accessed 5 December 2020).

53. FinAccess Database, 2019. Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS), and FSD Kenya. 2019. "2019 FinAccess Household Survey". Nairobi, Kenya: FSD Kenya.

54. Global Financial Development Database (GFDD), July 2018 version, The World Bank. Retrieved from: https://www.worldbank.org/en/publication/gfdr/data/global-financial-developmentdatabase. Methodology citation: Cihák, Martin, Asli Demirgüç-Kunt, Erik Feyen, and Ross Levine, 2012. "Benchmarking Financial Systems Around the World." World Bank Policy Research Working Paper 6175, World Bank, Washington, D.C.

55. FSD Kenya. (2019). Inclusive Finance? Nairobi, Kenya: FSD Kenya.

56. Kenya National Bureau of Statistics (KNBS). 2019. "Economic Survey 2019." Nairobi, Kenya. https://www.knbs.or.ke/download/economicsurvey-2019/ (Accessed 5 December 2020).