THE RELATIONSHIP BETWEEN JUDICIAL EFFICIENCY AND CREDIT MARKET DEVELOPMENT AMONG FINANCIAL INSTITUTIONS IN KENYA

IAN KIPROP

RESEARCH PROJECT PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER 2022

DECLARATION

I, the undersigned, affirm that this is my original work and that it has not been presented for a degree to any other learning institution or university other than the University of Nairobi.

Signed… …….. Date…**1st November 2022**……

IAN KIPROP

D61/33617/2019

This Research project has been submitted for examination with my consent as the University Supervisor.

Signed… …… Date…**10 November 2022**……

MR. DAN CHIRCHIR, FA, CPA, CFA

Department of Finance and Accounting

Faculty of Business and Management Science

This Research project has been submitted for examination with my consent as the University Co- Supervisor.

Signed…… …… Date11th November 2022……

DR. KENNEDY OKIRO

Department of Finance and Accounting,

Faculty of Business and Management Science.

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I am grateful to my supervisors, Mr. Dan Chirchir and Dr. Kennedy Okiro, as well as my family and friends, for their invaluable and unquantifiable guidance and support throughout this project process.

DEDICATION

I dedicate this work to my family, including my late grandparents Isaiah and Mary Murgor, my mother Sally Murgor, and everyone else who has helped me get this far.

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LIST OF ABBREVIATIONS

CBK- Central Bank of Kenya

GDP - Gross Domestic Product

WBD- World Bank Development

SME - Small and medium enterprises

CBP - Case Backlog Problem

SACCO - Saving and Credit Cooperative Organisation

CLE - Contract Level Evidence

USA - United States of America

FDH - Free Disposal Hull

ABSTRACT

Enforcement of agreement and contracts binding parties to their actions as far as lending is concern can have an impact on credit market performance since it affects the risk and cost of credit transactions which ultimately affects things like credit rationing. This notion is supported by empirical research into the relationship between judicial system efficiency and credit market development among financial institutions in Kenya. The quickness and ease of the legal process are indicators of its effectiveness. According to the regression results, indications of judicial efficiency were also statistically relevant in explaining the loan market, in addition to more conventional variables. Case clearance rate and credit market development indicators have an inverse relationship. A lower interest rate differential, even at a low significance level, indicates more established credit markets in years with better judicial enforcement. The arbitrary cut-off level of 0.05 does not, however, provide sufficient rationale for scientific results or economic or governmental actions.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial markets have always played a significant role in the economy of a country. The seamless and smoothness of the markets have always been the economic game-changer (Ha, Hoang Lan, 2003). They have played key roles in the economy, from being a saving tool and currency exchange to lending to individuals and businesses. As a result, this sector has been a key focus in terms of development. Credit markets, as part of the financial system, have a role in allocating scarce financial resources to competing individuals and businesses directed to uses distinct to them (Stiglitz, 1995).

Debt finance is borrowed money covered under contractual agreements that bind the lender and the borrower to their own words. These contracts are made up of complex setups that monitor the borrower throughout the agreement period. With this type of financing come risks that could be costly to the lender, which must be covered by judicial systems. Judicial inefficiency could lead to many things, from loan defaulting from opportunistic borrowers to those who are financially incapable (Shah, Attaullah, 2011). Any loophole in the judicial system meant to handle such upcoming in terms of ineffectiveness and inefficiency leads to reasonable losses and added costs tied up court proceedings. (North, 1990) argues that the greatest problem facing third-world countries was poor law enforcement practices causing underdevelopment and stagnation. Economic scholars have postulated various economic theories that we can apply to demonstrate the effect of judicial efficiency on credit market development. These theories include information asymmetry, modern credit rationing, and transaction cost theories. The judicial system plays a role defined in each of these theories with regard to credit market development.

A recent study has also found that judicial inefficiency negatively impacts financial development and the credit market (World Bank, 2005). Another study carried out in Italy on the metrics of judicial delays and over-formalization showed a correlation with the ease and availability of external finance in Italy (Jappelli, Pagano and Bianco 2005). Judicial delays may occur as a result of how procedural laws are set up to handle lending and borrowing (Rathinam, 2010).In Kenya, just like any other country, has its own legal infrastructure to offer protection to its credit market. This cruises from credit score verification arms to debt recovery procedures.

1.1.1 Judicial Efficiency

Judicial efficiency essentially refers to the delivery of justice without wastage of resources and time as far as the parties are concerned, including the court itself. The role played by various institutions makes the process of the development of an economy (Fauvrelle& Almeida, 2018). One of those institutions is the judiciary of a country. It is of course an essential part of an economy because it's meant to keep humanity within certain laid rules and laws that of course defer from country to country. When cases are resolved in a manner that does not waste time and does not take up much resources in terms of costs associated with the process, the process is deemed efficient, thus the term judicial efficiency. It's a mix of duration, procedures taken to solve a dispute and degree of formalism (Ha, Hoang Lan, 2003). Shah, Smith &Labianca (2017) defines judicial efficiency as the speed and costliness of a country's judicial system.

World Bank (2005) associated judicial delay and a high degree of formalism with negative growth and development in the financial sector. Banks tend to set their rationing standards high so that they can pick on a few firms and individuals who are capable of meeting what an agreement or the contract stipulates. High credit rationing moves mean that credit availability is low because banks and credit market players are trying to protect themselves from the inception due to an inefficient judicial system. Rathinam (2010) insists on the existence of

decent supportive laws to operationalize substantive laws by looking at legal development in the financial sector.

Judicial efficiency is measured in a couple of ways including duration taken to resolve a case, procedure involved in case resolution, degree of formalism just to mention a few. Odhiambo (2016) analyses technical efficiency of courts by relating judicial input to output. This was operationalized by relating court staff (including judicial and administrative staff) and the number of filed cases per court station serving as indicators of inputs to the number of civil cases and criminal cases filed per court station serving as indicators of outputs using FDH efficiency estimator. Ha, Hoang Lan (2003) measures judicial efficiency using duration taken to resolve a case, procedure involved in case resolution, degree of formalism operationalized by crosschecking them with two indicators of contract enforcements; law and order and contract enforceability index to establish their correlation.

1.1.2 Credit Market Development

Mishra, Das & Pradhan (2009) describes credit as the provision of loans to a borrower by the lender to be paid at a later date as per the contract binding the parties. In simple terms, the credit market is a platform where creditors promote investments and rescue situations by offering debt whether it's bank loans or bonds to those needs based on certain criteria and requirements. Credit has been playing a crucial role in promoting economic development when it comes to developing economies and markets by being an enabling factor (Srinivas, 2015). The credit market in Kenya has been growing significantly.

Credit market development is measured in terms of size, structure, and efficiency. It is also measured as a percentage of the GDP as it provides a true picture of how the case of Kenya where loans are majorly provided by commercial banks influences economic growth. Credit market development is portrayed by a number of indicators e.g., the ratio of the total assets of

deposit money banks to GDP, the ratio of the total value of loans granted by deposit money banks to the private sector to GDP, and the spread between interest rates for loans and interest rates for deposits (Ha, Hoang Lan, 2003).

Credit market development is determined by a number of things. Mishra, Das & Pradhan (2009) utilized bank credit as the variable to measure the increase of domestic banking system's private sector lending as a proportion of GDP on an annual basis from 1980 to 2008 in their research of credit market development and economic growth in India. According to De Gregorio and Guidotti (1995), bank credit is an appropriate indicator of the degree of credit growth. Ha, Hoang Lan (2003) measures credit market development in terms of its size, structure and efficiency across countries. This is respectively represented by the ratio of total assets of deposit money banks divided to GDP, the ratio of total value of loans granted by deposit money banks to the private sector divided to GDP and the spread between interest rates for loans and interest rates for deposits with all the data being secondary data.

1.1.3 Judicial Efficiency and Credit Market Development

Economics in the classical era never took into account information asymmetry, transaction costs, and the fact that there were existent vulnerabilities of human nature and that is what the new class of economics recognizes. According to Ha, Hoang Lan, (2003) credit markets are adversely affected by information asymmetry and transaction cost. Though firms can rely on other characteristics to ascertain whether to give out a loan or not and the possibility of repayment, information asymmetry has a significant effect on lenders not being able to evaluate the creditworthiness of a borrower and the viability of a project.

For a fact information asymmetry causes adverse selection and moral hazards. A moral hazard is when a party has hidden behavior that tends to show after an agreement has been reached

between parties. Banker, Darrough&Threinen (2019) describes adverse selection as a situation where the principal cannot get enough information on the agent's traits relevant to the situation.

Due to information asymmetry exposing institutions to moral hazard and adverse selection, in the credit sector, a credit contract is developed to protect the lender from such scenarios. Banker, Bolton & Scharfstein (1990) in the assumption that there is no information symmetry concludes that in order to protect banks from adverse selection and moral hazard banks and firms sign loan contracts that bind them to their word. In theory, these contracts are supposed to be self-enforcing such that parties know what they have gotten into and the terms that come with the contract. Sadly, with human nature that is not the case in all contractual agreements because of one reason or another. This is where an enforcing institution and legal system come in to make sure that an agreement is met to the later.

A legal system is a guideline made up of procedures and steps that bind enforcers to the right course while enforcing the rule of law. Law is a formal measure of controlling the actions of people. When it comes to playing the enforcement role on credit contracts there are financial laws that guide the process which are part of the larger legal system of a country meant to guide different types of rulings. These laws are not only there to protect the lender from bad debt but also to protect the borrower from exploitation. For example, interest capping laws seen in Kenya provide a regulatory mechanism to prevent exploitive interest rates. Before September 2016 Kenya's interest rates had been sailing up above the average world interest rates which were too high (Ng'ang'a, 2017).

In many cases when you traverse across the divide you find that the judicial system through the courts is responsible for all this. When we come back to the context of the credit markets the judicial system is responsible for solving credit agreements and contract disputes and more so defaulted payments instances. In Kenya it's a no different case, the courts are responsible

for providing a reasonable decision and force repayments in whatever way provisioned by the law.

In this case, the judicial system needs to be up to speed and efficiency in order to protect the lender from losses related directly to the contract and other losses related to delayed justice. Rathinam (2010) argues that any confusion and precariousness in the implementation of contract enforcement efforts leads to extra costs and related risks e.g increased frequency of defaulting of loans. Efficient judicial systems bring about a disciplined environment that promotes coexistence between lenders and borrows and promotes the development of the credit sector.

1.1.4 Financial institutions in Kenya

Financial institutions are organizations or companies that specialize in providing financial services such as investments, deposits, and loans. In Kenya, the Companies Act, the Banking Act, the Central Bank of Kenya Act, and the many prudential recommendations published by the CBK control the banking business in Kenya (Auka, 2006). Time and time again policies and reforms have been enacted in order to improve the stability, productivity, and efficiency of the sector. As it stands today Kenya has seen three times the growth of commercial banks over the last thirty years or so. In fact, in the year 2021, the number of commercial banks stood at 39 with 20 of them being local and private, 17 being foreign and two local public banks (Faria, 2022).

Their financial markets have also been flooded by microfinance institutions and SACCOs that offer the same service but on a relatively naive set-up in terms of investment and technological advancements. As of 2020, there were 14 microfinance operations in Kenya which is tremendous. Their regulations are largely under the Microfinance Act which ensures good conduct of the institutions in their services provision and general business undertakings. Their

presence has been an economic boosting adventure for low and medium-income individuals thus contributing to the quest for poverty eradication (Almas & Mukhtar, 2014). Additionally, microfinance institutions have provided a rather easy path to the sometimes complex existence of the banking system in terms of procedures and requirements to obtain services like loans.

Over time the financial industry has also witnessed a lot of advancement with the cropping up of mobile and internet banking to try and provide ease and flexibility in terms of banking services. Mobile banking services are provided via telecommunications devices. These services range from bank transactions to stock market activities via personalized mobile network setups like M-Pesa by Safaricom, and Airtel money by Airtel among others. In addition to network-based mobile banking apps, commercial banks have also incorporated their own mobile banking services like Mcoopcash for Cooperative Bank just to mention one.

As of February 2022 registered mobile money account was at an estimated 67.9 million (Faria, 2022).With all this advancement comes with easy accessibility to loans which would now be affected by judicial efficiency impact on things like credit rationing where financial institution might set standards high for one to get loans depending how they feel about the protection from the judicial system. An efficient judicial system will accommodate the growth and advancement in the financial industry by fostering credit market development.

1.2 Research Problem

The domestic credit sector is estimated to be 32.74% of the GDP as of 2020 (The World Bank, WBD Indicators, 2020). Of course, with other factors influencing like Covid-19, according to the CBK in their august 2021 report, the rate of non-performing loans stood at 13.9%. Credit markets have been and remain a critical part of the economy in matters of development and prosperity (Ha, Hoang Lan 2003). This is because investments require capital to bring them

into being and many times, we don't have it in abundance to make it all the way. Despite them being an essential part of the economy, creditors have been on the watch on how the law protects them in terms of judicial efficiency when it comes to cases of default.

Many studies have been done to explore the extent to which judicial efficiency affects the credit market in terms of performance and costs. Ha, Hoang Lan (2003) in their studies learned that the speed of a conflict resolution has a positive impact on enforcement and cost of lending. They also noted that judicial inefficiencies come with high economic costs when it comes to credit markets. Rathinam (2010) in his study on Procedural Law, Judicial Efficiency and Debt Finance: Evidence from India noted that effective law enforcement enhanced investment in the sector due to confidence in the system.

Numerous empirical studies have examined the relationship between regulatory obligations and their enforcement and the growth of the financial markets. Despite significant progress in understanding the significance of institutional factors in explaining financial development: The studies pays less attention to the discrete effects of legal institutions, which are crucial as far as development of financial markets are concerned. In order to close this gap, this study will examine how a legal system affects the growth of the credit markets.

Kenya being a less developed country, the existing empirical research still has a significant weakness, despite significant advances in recognizing the significance of institutional failure in explaining creditors' refusal to fund businesses and individuals in less developed nations. It does not distinguish between the consequences of court enforcement, accounting standards, and legal protection. This study looks to examine the specific impact of the standard of judicial enforcement on the performance of credit markets as it looks to close this gap.

There is very little or no literature on how judicial efficiency on credit market development which makes it the main motivation to look at it. Given that credit has been a crucial component of our economy, whether it is for lenders or borrowers, there is a significant gap in knowledge regarding the impact of judicial efficiency on the growth of credit markets, making the proposed research crucial for the success of the Kenyan economy in the future.

The specific questions that the study seeks to explore include: does the existence or lack of judicial efficiency affect the credit market and if so how so? To what extent does judicial efficiency affect lending by creditors? What is the importance of legal enforcement of contracts in credit markets? What are the effects of judicial policy reforms on credit markets?

1.3 Research Objectives

The objective of this study is to determine the effect of judicial efficiency on credit market development among financial institutions in Kenya.

1.4 Value of the Study

This study will be of great value for players in the credit market sector both existing and new entrants as it provides essential information that in one way or another plays a key role in matters going forward in the sector. When we talk of players this includes creditors, borrowers, regulatory agencies and bodies, judicial institutions, and insurance firms. Judicial efficiency goes a long way in fostering credit market development in terms of making transactions seamless and reducing the cost incurred in long court days and processes.

The resultant picture of this study will go a long way in influencing judicial policies and other policies that in one way or another trade the same path with judicial efficiency and credit market development. The finding of this will also serve as a reference not only in the credit market but

also in other institutions that suffer from judicial efficiency or lack of it thus influencing proceedings in those sectors and institutions in one way or another.

The outcome of this study will also contribute to future studies as a reference to researchers and scholars at the time. Valuable findings may be extracted from the study as well as research gaps.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter comprises the theories that this study will be revolving around. It also contains the empirical studies that are related and associated with this study as far as previous studies are concerned. It also includes the determinants of credit market development, a conceptual framework, and a summary of the literature review.

2.1 Theoretical Framework

In the context and argument of credit market development, judicial efficiency has been seen as an important factor in terms of enforcing a contractual agreement to the latter. To be precise, in the quest of reducing risk and cost associated with the enforcement of contracts and agreements, efficiency has time and time again been an important factor. This study will be supported by information asymmetry theory together with modern credit rationing theory and transaction cost theory.

2.1.1 Information Asymmetry Theory

Information is said to be asymmetric when one party knows more than the other party knows in a transaction, contract, or any other engagement e.g., a seller and a buyer. When it comes to employment the job seeker knows more about his ability than the employer. Akerlof (1970) in his study ‘The market of lemons’ which in that instance lemon referred to bad cars argued that there was information between car buyers and sellers which gave sellers an opportunity to trade poor-quality cars at higher prices. In this instance, the buyers were inferior because they didn’t have much information to make a distinction between bad and good cars.

It was until the emergence of Stiglitz's work and studies on the asymmetric nature of information that the argument got enough ground. Stiglitz & Weiss (1992) in their study on

asymmetric information in credit markets and its implications for macro-economic argues that in most markets there exists information asymmetry which leads to moral hazard and adverse selection. In credit markets, a moral hazard is when a party has not entered a contract or rather an agreement in good and might have provided misleading information about for example what it owns. Adverse selection on the other hand is where the riskiness of a loan increases as the interest rate increases.

Pagano &Jappelli (1993) in their study; Information sharing in credit markets using a model with adverse selection established that lenders ' motivation to share information is positively related to the size of the credit market. They added that increased information sharing leads to the high availability of loans as opposed to when there is limited information where lenders only deal with borrowers that they consider safe. This obviously hinders the development of the credit market.

Information Asymmetry Theory is relevant in this study because when it comes to lending and borrowing money there is the existence of two parties; the lender and borrower. In almost all instances there the borrowers know more about themselves than the lender does which clearly reflect the asymmetric nature of the information. When defaulting cases arise, the next step of contract enforcement has to take place by judicial organs whose efficiency now determines credit market development.

2.1.1 Modern Credit rationing theory

Credit rationing is the act of controlling the lending of loans based on the prevailing market conditions. There are several studies and arguments and proposals trying to explain and contribute to the credit ration theory dating to the 60s and even way back. An example is Hodgman (1960) who presented his argument in a model where lenders rated borrowers based

on the ratio of loans expected return to expected loss. The real game-changer came with though came with Stiglitz and Weiss (1981) model.

In their study of credit rationing in the market with imperfect information, they argued credit rationing from adverse selection and information asymmetry point of view. They argue that in a crowd of borrowers there are identical loan borrowers but the irony is some get loans some don't. These borrowers who did not receive a loan would influence the decision with an increased interest rate because a high-interest rate decreases the lender's profitability by increasing the riskiness of the lender's loan portfolio.

Judicial setups act as a cushion for the imperfect nature of information in credit markets thus covering the credit rationing consequences. Efficient judicial systems have low credit rationing measures which means more lending and a developed market or rather sector.

2.1.2 Transaction Cost Theory

Transactions costs are costs associated with buying and selling of goods and services. Examples of these costs are, contracting costs; the cost of coming up with a contract and implementing it, the monitoring cost; cost of ensuring that the agreement specified by the contract is followed and met to the later. Ronald Coase (1937) who is believed to be the pioneer of this theory argued that a transaction cost is a cost that emanates from making any economic trade in a market. He argued that these costs were mainly from firms searching for trade partners to facilitate the exchange of goods and services and later on the cost of coming up with a contract and enforcing it.

Later on, Williamson (1975) argued three determinants of transaction cost are the agent's intelligence in involvements to do with incomplete contracts due to the inability to foresee future occurrences, and opportunism that originates from partners' self-interests. Williamson

(1991) argued that the transaction cost theory acted as a predictor of future market or organizational occurrences and the possibility of new entrants.

This theory is relevant to this study because its documentation credit markets are made of transactions between the lender and the borrower. The lender in this case looks for borrowers in need, develops contracts and monitors them. In some cases, borrowers are opportunistic and act in their own interest which brings about enforcement measures in which the judicial system is one of the enforcers and has costs associated with the process.

2.2 Determinants of Credit Market Development

2.2.1 Macroeconomic Environment

Apart from what the study is trying to focus on, that is judicial efficiency, there are other factors that determine the success of a credit market and one of them is the Macroeconomic environment. The macroeconomic environment of a country refers to conditions that have a generalized existence in an economy as a whole rather than the sectorial divide. This includes the gross domestic product (GDP) of a country, inflation, and unemployment rate just to mention a few.

Makri, Vasiliki; Papadatos, Konstantinos (2014) while studying how accounting information and macroeconomic environment affect credit risk in the Greek banking sector; using a generalized method of moments found that aggregate loans provisions which is a measure of credit risk are affected positively by unemployment, public debt, loan loss. This supported the hypothesis that the macro environment affects credit risk which contributes to credit market development as a whole.

Koju& Wang (2019), studied macroeconomic determinants of credit risk while focusing on high-income countries. While using a generalized method of moment's estimator the study

found out that inflation decreased the purchasing power of money thus borrowers have less income and proceeds from the business to enable them to pay back loans. This leads to the growth of non-performing loans which as a macroeconomic factor affects credit market development. The study also argues that full employment has a significant positive impact on loan performance.

2.2.2 Information Sharing

Information sharing is key when it comes to the credit market. The creditor seeks to know as much information about the borrower as possible to facilitate judgment on the viability of a borrower in terms of the amount they are borrowed and their ability to repay. The opposite is also true whereby the borrower seeks information on the lender in terms of loan terms and obligations. However, the asymmetric nature of information is always experienced which leads to stringent measures of regulating lending which means high credit rationing measure which affects the availability of loans thus strangling the development of credit markets.

As a factor that affects credit markets, Pagano &Jappelli (1993) in their study on information sharing in credit markets argues that information about borrowers is positively correlated to the development of credit markets among other things like mobility and heterogeneity of borrowers. The study goes on and argues that the availability of information about borrowers increases the volume of lending as compared to when there is an adverse selection where lenders only lend to who they consider as a safe borrower.

Doblas-Madrid &Minetti (2013) investigated the effects of lenders' information on the performance of the credit market; CLE from U.S.A Firms. While agreements targeting 28,000 loans and leases extended to an estimated 4,000 businesses, they found out that information sharing reduced contract delinquencies and that information sharing improved loan repayment and enabled lending of small loans and leases.

2.2.3 Judicial efficiency

Enforcement of credit contracts has an effect on credit market development in terms of the cost associated with lengthy proceedings and overall credit risk. Moreover, when the law doesn't protect the lender, they tend to up the rationing level to lend to only those that they deem safe or very safe ventures and investments. Inefficient judicial systems may also bring about opportunistic behaviours due to low consequential implications when one defaults or breaks a loan agreement (Božović, 2021).

2.3 Empirical review

In this section of the study, we get to look at past literature of studies related to and in context with the current study. We try to look at these studies in terms of local and global or international studies.

2.3.1 Global Studies

Mc Namara, O'Donohoe&Murro (2020) in their study on Lending infrastructure and credit rationing of European SMEs found out that countries with more efficient judicial systems among other things that is, less efficient bankruptcy systems and greater trust levels have less credit rationing measures. The researchers used a sample size of 13,957 SMEs from eleven European countries to arrive at the findings. They tested their hypothesis on a model that estimated the probability of credit rationing given each country's lending infrastructure and other control variables.

Mora-Sanguinetti, Martínez-Matute& Garcia-Posada (2017) on credit, crisis and contract enforcement: evidence from the Spanish loan market investigated variation in the availability of credit and in non-performing loans ratios can be explained by regional differences in the quality of loan contract enforcement by enforcement institutions. This was based on sustained growth between 2001 and 2007 and the 2008 recession in the economy of Spain. The study

found out that an increase in the clearance rate of executions increases the ratio of total credit to GDP. Furthermore, in regions where efficiency is high, there are fewer non-performing loans that are past the 2008 recession.

Ha, Hoang Lan (2003) did a study on the effects of judicial efficiency on credit market development around the world. In the study speed and simplicity were used to measure the efficiency of a judicial system while the ratio of the total assets of deposit money banks to GDP, total value of loans granted by deposit money banks to the private sector to GDP and the spread between interest rates for loans and interest rates for deposits were used to indicate credit market development. With all data referring to the end of 1997, the first two were collected from the Financial Structure Database while the spread data was collected from the International Monetary Fund's International Financial Statistics. Based on the results from a regression model, a long and complex judicial process showed an inverse correlation with indicators of credit development. Countries with better judicially efficient systems displayed more development in their credit markets.

Jappelli, Pagano, & Bianco (2005) court and banks: effects of judicial enforcement on credit markets study based on a model of opportunistic debtors and inefficient courts argues that a judicial efficient system reduces credit ratio thus promoting lending thus promoting credit market development. The predictions were supported by data from the Italian provincial divide. Italian provinces with long trials or backlogs experienced less credit availability as compared to the provinces that were efficient.

One of the effects of judicial inefficiency is the cost associated with long court processes and delayed justice. Laeven&Majnoni (2005) measured interest rate spreads for 106 countries at an aggregate level and for 32 countries at the level of individual banks. This was in their study on if judicial efficiency lowers the cost of credit. They found out that judicial efficiency in addition

to inflation was the main driver of interest rate spreads across countries. This was after controlling some of the aspects that could affect credit cost alongside judicial efficiency. They suggest that better law enforcement in terms of legal contracts was key to lowering the costs associated with financial mediations.

2.3.2 Local studies

There are no studies that are directly related to this study when it comes to Kenya which contributes to the relevance of this study because of the existent research gap. Odhiambo (2016) in his study: Technical Efficiency of the Kenyan Judiciary found out that magistrate courts were inefficient compared to the resources they had and that optimization would improve case resolution. In general, he argued that with judicial reforms judicial efficiency has been improving though it was driven by a few courts which were deemed superefficient.

Makau (2014) in a study on factors influencing management of case backlog in the judiciary in Kenya found that inefficiency in solving cases that caused a backlog was attributed to, court rules and procedures, judicial structure and their physical set up among others. He recommends that the judicial structure should be reorganized and decentralized and the court rules and procedures should be amended to specify how long a case should last between filling and determination.

Kemboi (2021) in his study: The CBP in Kenya's Judiciary and the solutions measures the efficiency of major courts in Kenya. He associates the backlog in solutions of cases in Kenya to lack of personnel with a reference to the recent delay by the executive through the president to appoint the 41 judges. He also argues that rules should have a direct focus on efficiency as much as they focus on justice because justice delayed is justice denied.

2.4 Summary of the Literature Review

In this chapter, we have reviewed both theoretical and empirical literature that this study will be based on and anchored on. The theoretical setup is made up of the modern credit rationing theory, information asymmetry theory and transaction cost theory. There are a good number of studies that have been carried out in relation to this study; effects of judicial efficiency on credit markets development. The first relation context is on international grounds while the other is local studies though there is a limited existence of studies that relate to this study. An example of international studies is Mc Namara, O'Donohoe&Murro (2020) while focusing on European SMEs Lending infrastructure and credit rationing finds out that efficient judicial systems have fewer credit rationing measures. Laeven&Majnoni (2005) suggests that costs associated with financial mediations are lowered when contracts are enforced efficiently. On local grounds, judicial backlogs when it comes to cases have been associated with personnel shortage and inefficient court rules and procedures from previous studies.

On international grounds, studies have shown a seemingly typical result when it comes to relating judicial efficiency and credit market development and due to the lack of a study on the same in Kenya, this study looks to add to the international study bank on the same.

2.5 Conceptual Framework

Conceptual framework is a diagrammatic representation of the link between independent and dependent variables. It clearly reflects the existing link and relationship between diverse variables.

Independent variables **Dependent variables**

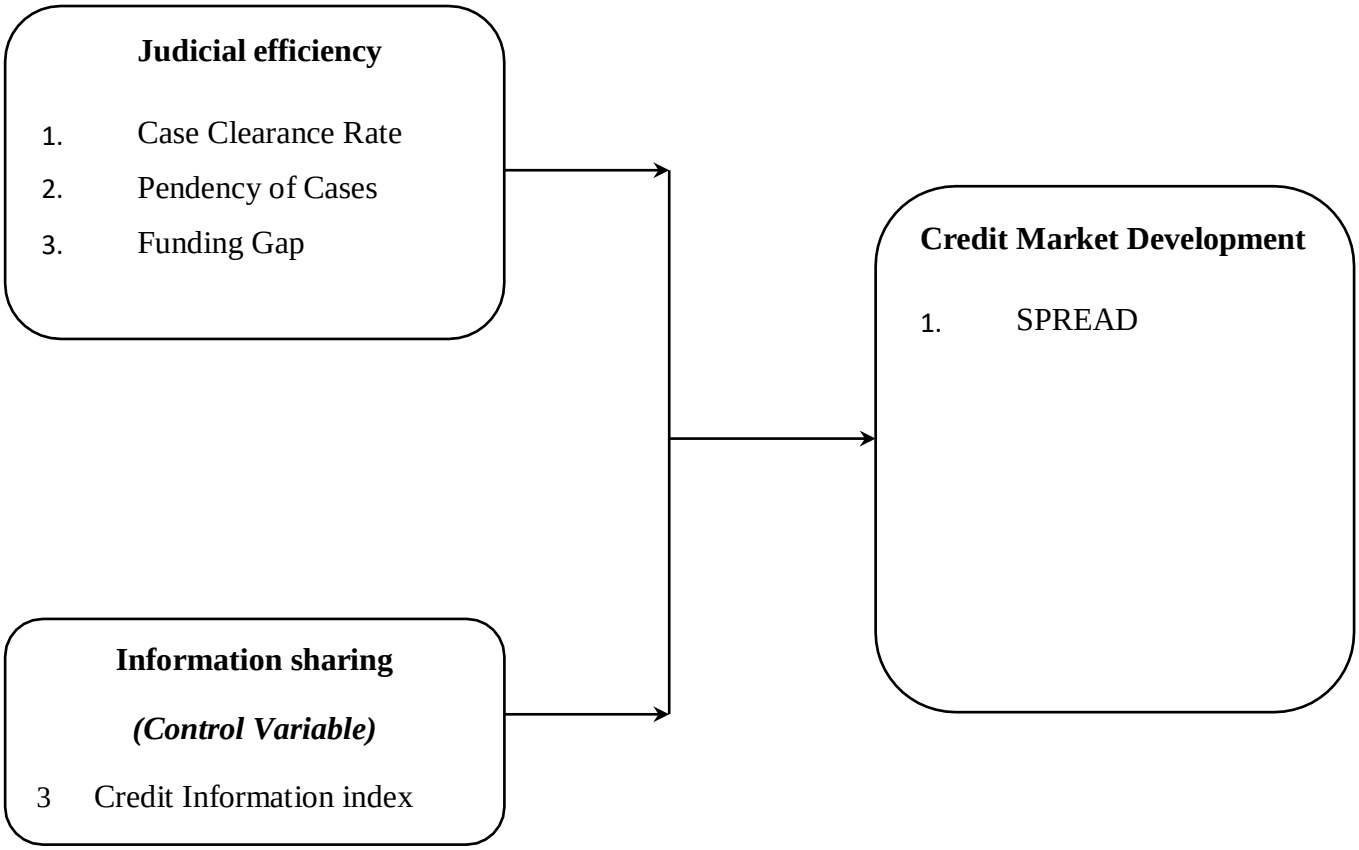

Figure 2.1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter entails the research methods that will be tasked to complete this research. This includes coverage from research design, data collection, diagnostic measures, and tests statistical analysis.

3.2 Research design

Research design is a strategic setup or framework that works as a harmony between research questions and the implementation of the research as a whole (Durrheim, 2006). This study will use a descriptive research design whereby phenomena and variables are described systematically with a clear outline of their characteristics.

3.3 Population and Sample

Polit and Beck (2010) argues that population is the totality of people or elements whose study results are relevant to a study and have similar and defined characteristics. A sample is a small portion or part of something larger taken to stand in or represent the larger population or element (Mujere, 2016). My research population will be made of cases from courts across the country which will be used to arrive at indicators of judicial efficiency against the indicator of credit market development, that is, the spread. This study is limited to a 10-year study period. The macroeconomic economic conditions and information-sharing indicators will act as control variables. Because of its basis on secondary data, the samples will be based on the most recent available data which in this case is 10 years from the year 2021.

3.4 Data Collection

Data will be obtained from secondary sources using a data collecting sheet from a range of platforms. Kenya's Judicial System is my unit of analysis and its performance department is

housed at Milimani Law Courts which is where I will get the data for my study's judicial efficiency variables. The data used to monitor the growth of the credit market will be gathered via online platforms Worldbank being one of them and the same applies to the control variables data.

3.5 Diagnostic Tests

These are tests done to ascertain the soundness and fitness of data collected before analytical measures are employed. The study's most relevant research model design will be established and validated by a test. It is critical for the study's empirical findings to be sustained and for correct policy suggestions and conclusions to be reached. The advantage of secondary data is that it considers both path and space, making the test easier to complete and allowing for a heterogeneity effect. The Haussmann specification test will be used to assess whether a random effect or fixed-effect model should be used on the assumption that there is no link between financial deepening and financial institution performance.

3.6 Data Analysis

This section elaborates on the proposed data analysis model that will be used to calculate, analyse and interpret data. It also contains a model representing the operationalization of variables and the ultimate significance test.

3.6.1 Analytical Model

Ordinary least square regression

$Y = \beta X1 + \beta X2 + \beta X3 + \beta X4 + \varepsilon$

Y = Credit Market Development

βX1 = Case Clearance Rate

βX2 = Case Pendency

βX3 = Funding Gap

βX4 = Information Sharing

ε = Error Term

3.6.2 Operationalization of study variables

Category	Concept	Measurement	Description
Dependent Variable	Credit Market Development	SPREAD	Spread between loan interest rates and bank deposit interest rates
Independent Variable	Judicial Efficiency	Case Clearance Rate	Resolved cases as a percentage of total filed cases within a specific period
		Pendency of Cases	Unresolved cases by the end of period under reference
		Funding Gap	Gap between requested and allocated funds
Control Variable	Information sharing	Credit reports requested	Credit reports requested by banks from credit bureau

Table 3 1 Operationalization of study variables

3.6.3 Significance Test

Tests of significance are done to relate the relevance of statistical results from a study to a given hypothesis; it is used to establish statistical soundness. This study will use F-test to establish the overall soundness of the model, while the T-test will be used to establish the soundness of the specific variables.

CHAPTER FOUR

DATA ANALYSIS AND REPRESENTATION OF FINDING

4.1 Introduction

This chapter covers the analytical phase of the research and its findings in terms of the data collected. This is in line with the objective of the study which was to find out the relationship between judicial efficiency and the credit market among financial institutions in Kenya over a period of 10 years.

4.2 Descriptive Statistics

This section presents the data as mean, minimum, maximum, and standard deviation. The statistics represent the dependent variable of credit market development in connection to the predictor variables of judicial efficiency. The statistics were based on 10 years of data analysed annually.

Table 4 1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Funding Gap	10	5.0000	60.0000	35.90000	17.22	296.544
Case clearance rate	10	41.5708	162.8150	94.38414	33.26	1106.458
Pendency	10	299472	649112	528407.3	102630.3	10532982021.
Information Sharing	10	1015327	3866516	1273647 5	1392072 2.	19378651526247 2.
Interest Rate Spread	10	4.7681	8.6717	6.5848	1.5347881	2.356
Valid N (listwise)	10					

The average funding gap in relation to resources allocated to the Judiciary stood at 35.9% implying that there was a relatively large gap between the funds required by the Judiciary to realize its obligation to the funds allocated to them by the government. The standard deviation for the financing gap was 17.22%, meaning that individual observations were 17% spread from the mean. The financing gap stood at a minimum of 5% and a maximum of 60%. Another measure of judicial efficiency was the case clearance rate. The mean case clearance rate stood at 94.38% and the standard deviation was 33.26% showing that the case clearance rate was spread around the mean with 33.26%. The minimum case clearance rate was 41.57% and the maximum was 162.81%. The third measure of judicial efficiency was pendency whose mean was established to be 299472 cases with a standard deviation of 649112 which implies a spread of 649112 points from the mean.

Information sharing mean was 1015327 reports while the standard deviation was 13920722.51 showing that the individual observation was spread around the mean by about 13920722 reports. Credit market development was measured using the interest rate spread between loan interest rate and interest rate on deposits (SPREAD). The mean as far as credit market development in indicator is concerned was 6.584880%. The standard deviation was 1.5348% implying the individual observations were spread around the mean with 1.5%. The minimum spread stood at 4.768% and the maximum interest rate spread stood at 8.6717%.

4.3 Diagnostic tests

The diagnostic tests procedures include testing for heteroscedasticity, multicollinearity, and normalcy. The tests' goal was to make sure that the regression model used was reliable.

Table 4 2 Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Interest Rate Spread	.199	10	.200*	.874	10	.112

a. Lilliefors Significance Correction

The goal of the test was to determine whether the data were standard. The researcher employed Shapiro-Wilk to determine whether the data were standard. The null hypothesis assumes that data is normally distributed. Consequently, when conducting a Shapiro- Wilk test the alpha value should be greater than 0.05 for normal data; if less, then data is not normally distributed. The Shapiro-Wilk test on the data indicated a significance value above the alpha value of 0.05. This showed that the data followed a normal distribution.

Table 4 3 Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	Funding Gap	.412	2.429
	Case clearance rate	.568	1.762
	Pendency	.267	3.751
	Information Sharing	.489	2.044

a. Dependent Variable: Interest Rate Spread

In the test for multicollinearity variable VIF and Tolerance values were used to establish whether there existed multicollinearity or not. Normally for VIF, a value between 1 and 5 indicates a moderate correlation between a given predictor variable and other predictor

variables in the model, while a value between 5 and 10 is evidence of a high correlation between variables and is often severe enough to require attention because often results in less reliable statistical conclusions. When it comes to Tolerance values, they should be greater than 0.2. In this case, the findings established that there was multicollinearity in none of the variables because all of them had VIF values greater than 1 but less than 5 and tolerance >0.2 thus suggesting moderate and acceptable correlation, as shown in Table 4.3.

Table 4 4 Heteroscedasticity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.411	4	.103	.198	.929[b]
	Residual	2.596	5	.519		
	Total	3.007	9			

a. Dependent Variable: SQRES
b. Predictors: (Constant), Information Sharing, Case clearance rate, Funding Gap, Pendency

Existence of heteroscedasticity in a study means the error term is not constant over time. In this study, this was tested using Breusch-Pagan statistics which assumes that the error term should be constant over time. The parameters for making deduction are that when the significance value is less than 5% then there is the existence of heteroscedasticity, and the error term is not constant over time. When the significance value is greater than 5% then there exists, no heteroscedasticity meaning the error term is constant over time. According to the finding from the test, the significance value is greater than 5% meaning that there is no heteroscedasticity in the data because the test shows that the error term will remain constant throughout time.

4.4 Regression analysis

Regression analysis was conducted to determine the relationship between judicial efficiency and credit market development among financial institutions in Kenya. This was intended to

explain the extent to which changes in the dependent variable can be accounted for by the changes in the predictor variables.

Table 4 5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.822[a]	.675	.415	1.1738108	.675	2.597	4	5	.162	1.394

a. Predictors: (Constant), Information Sharing, Case clearance rate, Funding Gap, Pendency
b. Dependent Variable: Interest Rate Spread

While studying the relationship between judicial efficiency and credit market development among financial institutions in Kenya, the independent variables in the study could only account for 67.5% as far as credit market development is concerned as shown by the R Squared. Consequently, this means that when it comes to credit market development the four variables contribute to 67.5% of credit market development while other factors not represented in this study contribute 32.5% of credit market development.

Table *4 6* ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.311	4	3.578	2.597	.162[b]
	Residual	6.889	5	1.378		
	Total	21.200	9			

a. Dependent Variable: Interest Rate Spread
b. Predictors: (Constant), InformaionSharing, Case clearance rate, Funding Gap, Pendency
F statistic (2.597) > than F-critical (2.26), meaning that the model is fit for the study.

From the analysis of variance, the calculated F-statistics was 2.597) which was greater than the F-critical (2.26), meaning that the model used was fit for the study. The P statistic is greater than 0.05 meaning that there was no significant relationship between judicial efficiency and credit market development among financial institutions in Kenya. This can be shown by the significant level which is 0.162 which is more than 0.05. The P-value alone, however, cannot be used to accept or reject the null hypothesis. However, for scientific findings and economic or governmental decisions, the arbitrary cut-off level of 0.05 does not give enough justification.

Table 4 7 Correlation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.905	4.147		2.388	.063
	Funding Gap	-.025	.035	-.275	-.692	.520
	Case clearance rate	-.004	.016	-.077	-.227	.829
	Pendency	-2.567E-6	.000	-.172	-.348	.742
	Information Sharing	-5.876E-8	.000	-.533	-1.462	.204

a. Dependent Variable: Interest Rate Spread

The result from regression analysis showed that when funding gap, case clearance rate, pendency and information sharing are held constant, the interest rate spread between loans and deposit stands at 9.905. The analysis also showed that case pendency and Information sharing have a low impact on the Interest rate gap which is an indicator of credit market development. In relation to interest rate spread, there is a negative relationship between funding gap to interest rate spread and Case clearance rate to interest rate spread as indicated by their coefficients which are -.025and -.004 respectively.

4.5 Discussion of finding

The study had the objective of establishing the relationship between judicial efficiency and credit market development among financial institutions in Kenya. Measures of judicial efficiency that is Funding gap, case clearance rate, and pendency with control variables of information sharing formed the predictor while credit market development was measured using interest rate spread between loans and deposits.

The study established that the relationship between all the predictor variables and the dependent variables was negative according to the correlation analysis outcome. However, the effect of pendency and information sharing on credit market development was low compared to the other two variables. Although there was an established correlation between the variable all the predictor variables were correlated with the interest rate spread on a significance level above greater than 0.05 which means judicial efficiency had very little observable effects on credit market development.

The findings of this study are consistent with a number of earlier global investigations. Mora-Sanguinetti, Martnez-Matute, and Garcia-(2017) Posada's study, Credit, Crisis, and Contract Enforcement: Evidence from the Spanish Loan Market, is one of the researches that discovered that an increase in the clearance rate of executions improves the ratio of total credit to GDP, which was a sign that the credit market had evolved more as a result of more effective contract enforcement. Additionally, Interest rate spreads were studied by Laeven & Majnoni (2005) for 106 nations overall and for 32 countries at the level of specific banks. The study's main conclusion was that enforcing legal contracts was essential for reducing the price of financial mediations justified by low spread in more effective judicial systems. This is due to decreased credit costs caused by judicial effectiveness.

In conclusion, the credit rationing theory's propositions could also be noticed in the study where the predictor variables significance level in relation to the independent was low. This is because ineffective legal systems encourage credit restriction in order to protect lenders, which acts as a buffer, rendering judicial deficiency and inconsistencies inconsequential.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Introduction

The primary goal of the study was to ascertain the connection between judicial effectiveness and the growth of the credit market among financial institutions in Kenya. The section provides a summary of the study's findings, its conclusions, and its policy and practice suggestions. Additionally, it emphasizes any shortcomings and offers ideas for additional research.

5.2 Summary

The goal of the study was to prove a connection between the growth of the lending market among financial institutions in Kenya and judicial effectiveness. An overview of the results with respect to the study's goal and variables is presented in this section.

The financing gap, case clearing rate, pendency, and information sharing (control variables) were moderate predictors of the dependent variable, interest rate spread, according to the study's regression analysis. This is seen by the value of R square is 0.675, which shows that 67.5% of the growth of the credit market can be attributed to judicial effectiveness.

The lack of a strong correlation between judicial efficiency and credit market development seen in the data could have been a result of a couple of things that could explain the scenario. Financial institutions are always defensive and cautious when it comes to protecting themselves from risks associated with their financial undertaking which in this case is lending. One of the explanations that could explain the outcome of this is the credit rationing theory. When banks find out that lending is risky, they raise the bar of lending in terms of qualification. These cushion them from loss in a dangerous lending environment. Therefore, the effects of judicial efficiency may not lead to an increase in lending rates which increases the spread because of the alternative of credit rationing.

The second scenario is that judicial efficiency is not the only factor that affects credit market development and in this case the interest rate spread which is a measure of credit market development. Government intervention and monetary policies on interests, especially lending interest is one of the factors. In Kenya, an interest rate cap was enacted in 2016 that, among other things, placed a ceiling of 4% over the interest rate set by the Central Bank of Kenya for financial institutions subject to the Banking Act's regulation. Through a proposal from the former president of Kenya, this rule was later repealed. However, it is outside the purview of this study to analyse additional factors that affect interest rate spread.

5.3 Conclusion

This study of the relationship between judicial effectiveness and credit market development revealed how well-connected a nation's judicial system is to its credit market in terms of the ability to enforce contracts. By establishing an effective method to defend and enforce contracts, it builds its foundation on lowering the risk and costs associated with lending, which can have an impact on the growth of credit markets.

Empirical findings show that indices of judicial efficiency, together with those that indicate the relationship between the judiciary and credit market characteristics, are equally important in explaining the growth of the credit markets in Kenya, albeit not as much on their own. Better judicial enforcement is demonstrated by a larger banking sector and a narrower interest rate spread, which has an impact on the development of credit markets. We may also have seen that the funding gap hasn't posed a major issue on its own, and the data show a negative rather than a positive correlation.

5.4 Recommendation for Policy

This study offers numerous justifications to guide Kenyan policymaking. Being a developing nation, Kenya faces particular difficulties in ensuring that all of its organs operate smoothly

and are typically effective. This study underlines the need for an effective institutional architecture since the growth of the credit market is a critical component of an economy. In this instance, it illustrates the significance of a strong judicial system for the development of the financial markets and the economy.

Additionally, this study lays the foundation for reforming judicial efficiency policies and generally upgrading judicial infrastructure in emerging nations that have been dealing with institutional inefficiency that cripples important sectors that are vital to a nation's economy. Policymakers are informed by the regression's findings on the need to step up efforts to clear cases for a negative impact on interest rate spreads.

Finally, it should not be assumed that the issue of judicial efficiency is the sole one influencing the growth of credit markets. The degree of development and price stability continue to be crucial determinants of how the credit market develops. Other elements that place substantial costs on the development of the credit market include regulations that do a poor job of protecting the rights of creditors and strong government intervention in the banking industry.

5.5 Limitations of the study

The main purpose of the judiciary is to enforce the law and ensure that justice is served to parties in any nature of the conflict. One of the problems this study faces is that in empirical research, the assessment of the quality of law enforcement is troublesome since such quality is hard to quantify. If at all it was convincingly quantifiable then we would have a more convincing argument and pictures of the relationship between judicial efficiency and credit market development.

The second drawback of this study is the extent to which the data are covered. Even though it included every court in the nation, a breakdown by county would have provided a more accurate picture of the situation. The issue is that credit markets and judicial evaluations have

not yet been segmented by counties. The information is still presented as a whole, with Kenya as the representative nation. Additionally, the judicial performance department is a recent phenomenon in terms of its establishment therefore judicial performance accountability does not go so far

Another issue with the present measurements of Judicial efficiency is that they are vague and indirect, offering no guidance to developing nations on how to change their legal systems to promote development. For instance, a glance at the case clearance rate would not be as helpful as a look at the actual litigation process in this area if we want to discover what makes the litigation procedure for resolving credit disputes inefficient.

5.6 Recommendation for further research

This study is among the first inquest into how judicial systems affect credit market development in a third-world country which in this case is Kenya. This leaves a wide room for a further and detailed inquiry into the same to establish quality and sufficient to support arguments relating judicial systems to credit market development. In any case, as time elapses a wide range of data becomes available fine tuning on arguments surrounding the relationship between judicial efficiency and credit market development among financial institutions in Kenya.

Additionally, future studies should put into consideration digital lending as it becoming the order of the day in Kenya which comes with different risks that are dimensionally different from the old lending system. An example is their nature of being unsecured loans. Its leaves room for research in terms of how their regulatory framework is and its accommodation of the judiciary when it comes to dispute resolution. Lastly, Secondary data from the internet and publications were utilized in the study. Secondary data has a historical bent and might not accurately represent the judiciary's precise situation at the moment. It is challenging to

determine whether the data is correct if the organizations disseminate false information that may be deceptive.

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APPENDIX

Appendix I: Data Collection Form

Year	Annually	SPREAD	Case Clearance Rate	Case Pendency	Funding gap	Credit Reports requested
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						