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**EFFECT OF TAXATION ON THE  
PROFITABILITY OF BANKS IN KURDISTAN OF  
IRAQ**

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## **List of Abbreviations**

CIB	Central bank of Iraq
CIT	Corporate income tax
DTA	Debt to assets
DTE	Debt to equity
FAT	Financial Activity Tax
FDIC	Federal Deposit Insurance Corporation
FSC	Financial Stability Contribution
FSC	Financial Stability Contribution
GDP	Gross Domestic Product
IFRS	International Financial Reporting Standards
IQD	Iraqi Dinar (Currency)
KRG	Kurdistan region government
MENA	The Middle East and North Africa
OCED	The Organization for Economic Co-operation and Development
PBT	Profit before tax
RO	Research objective
ROA	Return on assets
ROE	Return on equity
RQ	Research question
SMEs	Small and medium-sized enterprises
VAT	Value-added tax

## **Dedication**

I would like to dedicate this dissertation to several individuals and institutions who have been instrumental in my academic journey and the successful completion of this work.

First and foremost, to my beloved family: your unwavering support, encouragement, and love have been my pillars of strength. Without your faith in me, this accomplishment would not have been possible. Your patience and understanding during the many late nights and long hours spent on my research have meant the world to me. This achievement is as much yours as it is mine.

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## **ABSTRACT**

I explore the effect of taxation on the profitability banks in Iraqi Kurdistan the quantitative research study examines the relationship between Corporate Income Tax (CIT) and different financial performance metrics from 2009 to 2021. Data source is financial statements from Central Bank of Iraq, the Iraq Stock Exchange, Chan Bank for Investment and Finance it is network is of 12 branches. The study investigates the effects of CIT on loan activities, leverage ratios, liquidity, return on assets (ROA), and profitability before taxes (PBT) using descriptive statistics and correlational analysis in SPSS version 26. The findings reveal significant positive correlations between CIT and lending activities, leverage ratios, liquidity, return on assets, and profit before tax, suggesting a substantial impact of corporate income tax on banking operations and profitability. Necessitating further research to understand underlying mechanisms. Policy implications recommend steps to lessen the tax burden on banks to increase profitability, while managerial implications emphasize the significance of tax planning techniques to maximize financial performance. For banks in Kurdistan, operational approaches emphasizing revenue diversification and cost effectiveness are also advised.

Future directions for research include cross-country comparisons to comprehend the effects of different regulatory frameworks, longitudinal studies to monitor changes in corporate income tax and financial measures, and analysis of lengthy time periods to spot patterns in banking operations and tax laws. Policymakers and industry stakeholders can use this data to optimize financial plans and effectively navigate regulatory frameworks. In conclusion Based on the comprehensive correlational analyses conducted in this study, several significant findings emerged regarding the relationships between Corporate Income Tax (CIT) and various financial metrics within the banking context.

## **1. INTRODUCTION**

Region of Iraq is referred to as the Kurdistan bank system. An independent territory in northern Iraq, Kurdistan has its own banking system and administration. Kurdistan's banking system is made up of both state-owned and privately held banks that provide a variety of financial services to residents, companies, and government agencies, including loans, deposits, and investment goods. The Central Bank of Iraq and the Kurdistan Regional Government (KRG) control and regulate these banks operations. The Kurdistan bank system is essential to the region's ability to do business and conduct financial transactions. Over time, Iraqi Kurdistan's banking sector has changed dramatically, reflecting the region's economic growth and growing integration with the international financial system. The Central Bank of Iraq (CBI), which has its head office in the capital city, overseeing the regulation of the financial sector even though Iraqi Kurdistan has its own autonomous government, complete with a parliament and ministries. The Iraqi central bank dominates banks, determines monetary policy, and runs the country's financial system throughout, including in Kurdistan. The financial sector in Kurdistan is composed of both domestic and international organizations. Local banks are both privately held and state-owned businesses that offer a variety of financial services, including investment services, trade financing, retail banking, and corporate banking. In addition to local banks, there are several some banks operating in Iraqi Kurdistan. By providing specialized services, these banks meet the needs of international investors, multinational companies, and individuals with international banking requirements. Over the past ten years, Iraqi Kurdistan has experienced phenomenal economic growth, partly attributable to its oil and gas resources and investments in infrastructure and other sectors. This expansion has led to an increase in the banking sector as both new and old institutions have expanded their activities. Despite the progress made, there are still certain challenges facing the banking sector in Iraqi Kurdistan. These include cybersecurity risks, regulatory compliance, and the availability of funding for small and medium-sized enterprises (SMEs). However, there is also potential for further growth and development, particularly as the region attracts more investment and diversifies

its sources of income. The Kurdistan Regional Government (KRG) has taken action to strengthen the banking sector and promote financial inclusion. This means passing legislation to strengthen the legal framework encourage innovation in financial services and increase the accessibility of banking services for disadvantaged populations. All things considered the stability and economic prosperity of the Iraqi Kurdistan region depend on the functioning of its financial system. As the field evolves .Any region's economic environment is greatly developed by the Innovative communication of government policy and finance. Within this framework, the effect of taxes on bank profitability is a particularly important and complex field of research. This study examines the condition of Kurdistan in Iraq, an area that has experienced remarkable economic growth recently. The government's fiscal policies, especially those regarding taxation, have a significant impact on the financial performance of banks and are therefore critical in determining the region's overall financial stability. Taxation can be a double-edged sword for financial organizations as a tool for revenue creation and economic regulation. On the one hand, it gives governments the money they need to build infrastructure and public services, which advances society. However, the amount of taxes that banks must pay can have a significant impact on their capacity to compete in the market, as well as their profitability and operational effectiveness. Comprehending the complex relationship between taxation and bank profitability becomes essential in the context of Kurdistan, where the financial sector is important to the growth of the economy. The purpose of this study is to analyze the complex relationship between progressive taxes and bank profitability in Kurdistan. I attempt to eliminate the complex processes at work by closely examining the tax policies that are in place, assessing their effects on banking operations, and subsequently studying the impact on financial performance measurements. Policymakers, banking experts, and researchers can obtain knowledge that will guide strategic choices, promote financial stability and support the long-term expansion of Kurdistan's banking industry by thoroughly examining this relationship. The effect of progressive taxes on Kurdistan bank profits in Iraq is a topic of significant interest and importance. Several studies have explored various factors that influence

bank profitability including bank-specific determinants liquidity risk, credit risk, liquidity management, risk competition and profit management (Athanasoglou et al., 2008) (Aziz et al., 2017) An Applied Study on Private Banks Listed on the Iraq Stock Exchange on Profit Management and its Effect on Market Value (Ibrahim, , 2017). However, there is a lack of research specifically focusing on progressive taxes effects on bank profitability in the context of Kurdistan of Iraq. Bank-specific determinants such as size have been found to significantly affect bank (Athanasoglou et al., 2008) It has also been determined that credit risk and liquidity risk play significant roles in determining how profitable commercial banks are in Iraq. (Jadah et al., 2021). Additionally, a relationship between profitability and liquidity management has been analyzed in the context of Islamic banks in Kurdistan Region of Iraq (Aziz et al., 2017) These studies provide valuable insights into the factors that contribute to bank profitability but do not directly address the impact of taxation. One study conducted in Pakistan discovered an adverse effect of progressive taxation on the banks' profits while this study is not specific to Kurdistan of Iraq, it suggests that taxation can have a detrimental effect on bank profitability. There is no research in Kurdistan focused on the effects of corporate income tax there are not many studies looking at how corporate taxes affect banks in Iraqi Kurdistan. As a result, nothing is known about how Kurdistan's corporate income tax affects the region's economic environment. Further research is needed to understand the specific implications of taxes on the bank profits in Iraq's Kurdistan. The management of profits effecting market value in private banks has been studied in the context of Iraqi the profit management of individual banks and how it affects market value an applied study of privately managed banks listed on the Iraq Stock Exchange in 2019. This research provides insights into the practices of profit management but does not directly address how taxation affects the profitability of banks. The impact of liquidity on Iraqi commercial banks profitability has been examined Ibrahim (2017). While this study does not specifically focus on taxation, it highlights the importance of liquidity in determining bank profitability. Taxation can potentially affect the liquidity position of banks, which in turn can impact their profitability. Overall, there is a gap in

the literature on the specific impact which taxes have on the bank profitability in Iraqi Kurdistan. Further research is needed to understand how taxation policies in the region affect the profitability of banks and to identify potential strategies for mitigating any negative effects. This research is important for policymakers, regulators and banks operating in Kurdistan of Iraq to make informed decisions and ensure the stability and growth of the banking sector.

The banking sector in Iraq has developed significantly. As an investment model for all financial institutions the banking sector is regarded as a key component of the any economy. The financial market has gradually experienced an economic downturn because of a reversal in the investment sector which has resulted in many changes in the corporate climate that have impacted whole economies. Banks are rated depending on several aspects such as gross profit margin, operations growth, and profitability.

The key role of banks is to raise funds from depositors and other sources, and then invest these funds by making loans and other investments to earn profits. These profits can then be distributed to shareholders in the form of dividends, while also ensuring the bank covers its operating costs (Acharya, 2003). Alternatively say, banks with a large operational level would make a lot of money. In addition to competition expenses among local and international banks, technological advances have made a significant change in the banking monetary and Fiscal climate. As a result, assessing the impact of a bank's profitability the primary goal in the corporate world (Baggs & Brander, 2006). Taken another way certain nations in the MENA region (Middle East and North Africa) now have weak financial and capital markets including Iraq. Commercial banks thus have a crucial and essential function in regional markets. As a result, a weak banking system compounded by low profitability could negatively impact the affected nation's global banking system, or spread worldwide, particularly in global banking activities. A large portion of deposits made by people, companies, governments, and other organizations are held by banks.

## **1.1. Research gap**

Despite the importance of taxation and profitability in banking, there may be limited empirical studies specifically focusing on the Iraqi Kurdistan region. Research could explore the unique characteristics of this region's banking sector, such as its regulatory environment, tax policies, and economic conditions, and how they affect profitability. Many existing studies may be cross-sectional or limited to short-term analyses. Continuous studies tracking the effects of taxation on profitability over an extended period could provide valuable insights into trends, patterns, and the dynamics of the relationship between taxation policies and bank profitability in Iraqi Kurdistan. Tax policies and regulations in Iraqi Kurdistan may go through changes over time. Research could examine the impact of recent or proposed tax reforms on bank profitability. This could include assessing how changes in corporate tax rates, deductions, or incentives affect banks' bottom lines and overall performance. There may be limited research on how banks in Iraqi Kurdistan respond behaviorally to taxation policies. For example, do banks adjust their lending practices, investment strategies, or operational efficiencies in response to changes in taxation? Understanding these behavioral responses could provide valuable insights for policymakers and bank managers. Existing studies may focus on macroeconomic indicators or aggregate data, overlooking the micro-level effects of taxation on individual banks within the Iraqi Kurdistan banking sector. Research could delve into how different banks, based on size, ownership structure, or business models, are affected differently by taxation policies and how they adapt to optimize profitability. Comparative studies between Iraqi Kurdistan and other regions or countries with similar or different tax regimes could help identify the relative impact of taxation on bank profitability. This could include comparisons with neighboring countries, regions with similar economic characteristics, or jurisdictions with different tax policies.

While profitability is a crucial metric, research could explore how taxation influences other non-financial performance indicators in the banking sector, such as risk management practices, corporate governance, or social responsibility initiatives. Understanding these more

comprehensive impacts can provide a more comprehensive assessment of the interplay between taxation and bank performance.

Taxation interplay on Bank Profitability in Iraq's Kurdistan in Iraq is a topic that has not been extensively studied in the existing literature. Although certain research has examined at the relationship between taxes and economic growth (Ahmed & Ali, 2020) as well as the factors that affect the profitability of commercial banks (Demirgüç-Kunt & Huizinga, 2001).

There is a lack of research specifically focusing on the impact of corporate income tax on the profitability of bank in Kurdistan of Iraq. One possible research gap in this area is the need to understand how different tax policies and rates affect the profitability of banks in Iraqi Kurdistan. Taxation is an important factor that can significantly impact the financial performance of banks. Different tax policies and rates can affect the profitability of banks in different ways. For example, higher tax rates can reduce the profitability of banks by increasing their tax burden, while tax incentives or exemptions can enhance profitability by reducing the tax liability of banks (Demirgüç-Kunt & Huizinga, 2001). Another research gap is the need to examine the specific challenges and opportunities that taxation presents for banks in Kurdistan of Iraq. The banking sector in Kurdistan of Iraq operates within a unique economic and regulatory environment, which may have implications regarding how taxes affect bank profits. Factors such as the political and economic stability of the region, the level of government support for the banking sector, and the effectiveness of tax administration and enforcement can all influence the effect of taxation on banks profitability (Aljanabi et al., 2019) Furthermore, there is a need to explore the potential interaction between taxation and other factors that may impact the profitability of banks. For instance, how taxes affect bank profitability may be influenced by factors such as liquidity management, capital structure (Aziz et al., 2017) (Mahmood et al., 2022) and customer satisfaction with electronic banking services (Ibrahim, 2022). Understanding these interactions can provide a more comprehensive understanding of how taxes affect the profitability of banks in Iraq's Kurdistan.

Future research should focus on examining the effects of different tax policies and rates, understanding the unique challenges and opportunities presented by taxation in the region and exploring the interaction between taxation and other factors that can affect bank profitability. This research can provide valuable insights for policymakers, regulators, and banks in Kurdistan of Iraq in formulating effective tax policies and strategies to enhance bank profitability. Obviously, the risks are much higher for region tax authorities when it comes to taxing their banking industries. The banking industry generates a lot of benefits, employs a lot of people, and generates a lot of tax revenue. Banking industry taxation also has significant welfare consequences for bank customers, and in the longer term, it can have a significant influence on economic development. In these conditions several nations continue to rely on their financial industries for significant tax revenues, whereas others have chosen to lower taxes to encourage their banking systems. Now, policymakers have no scientific evidence to direct them into taxing their internationalizing financial system. The purpose of this research is to fill some of the gaps. Addressing these research gaps could contribute significantly to the existing body of knowledge on the interplay between taxation and profitability in Iraqi Kurdistan's banking sector, providing valuable insights for policymakers, regulators, and banking professionals.

## **1.2. Problem statement**

Despite the significance of taxation policies in shaping the financial performance of banks, there exists a lack of comprehensive empirical research specifically investigating the relationship between taxation and profitability within the banking sector of Iraqi Kurdistan. Given the different economic, regulatory, and geopolitical dynamics of this region, there is a need to understand how taxation policies impact the profitability of banks operating in Iraqi Kurdistan. Additionally, the absence of localized studies focusing on this specific context hinders the ability of policymakers, regulators, and banking stakeholders to formulate effective strategies and policies to optimize the balance between taxation revenue generation and the sustainable profitability of banks. Therefore, the research problem at hand is to empirically examine the interplay between taxation policies and bank profitability in Iraqi Kurdistan, aiming to fill this crucial gap in the existing literature and

provide actionable insights for both academic and practical purposes. Although the Kurdistan region of Iraq has an incredible potential to grow in terms of both human and material resources, especially following oil and other natural resource exports like gas, their tax structure has remained stagnant throughout time. Additionally, it is important to switch from one main resource to numerous resources and to diversify the sources of government budgets. Thus, it is relevant to look for the required solutions, strategies, and policies to address this issue.

The effect of taxes on the bank profitability in Iraq's Kurdistan is a significant concern that requires further investigation. While there have been studies on the factors influencing bank profitability in Iraq, such as liquidity risk and credit risk (Jadah, Alghanimi, & Al-Husainy, 2021). Considering the connection between profitability and liquidity management in Kurdistan's Islamic banks. There is a need to analyze how taxes affect the profitability of banks in this region. Taxation policies can have a valuable effect on banks'. The problem statement of the study, the interplay of taxation on the profitability of banks in the Kurdistan region of Iraq is a critical issue, given the region's focus on economic diversification and the unique tax laws and practices in the area. Understanding how taxation affects the profitability of banks in this specific economic and regulatory context is essential for informing policy decisions and supporting the sustainable growth of the banking sector in Kurdistan. This problem statement highlights the importance of the issue, the specific context of the Kurdistan region, and the need for research to inform decision-making and sector development. The specific challenges and opportunities faced by banks in Kurdistan, coupled with the different geopolitical and economic factors at play, make it essential to assess how taxation influences the financial viability of these institutions. A well-defined problem statement is crucial to guide research efforts and shed light on the small ways in which taxation interplay the profitability of banks in Kurdistan. Profits as they directly affect the financial performance and bottom line of these institutions. However, there is limited study on how taxes specifically affect the profitability of banks in Iraq's Kurdistan. Understanding this impact is crucial for policymakers, regulators, and banking institutions to make informed

decisions and develop effective strategies to enhance the profitability and sustainability of banks in the region. Additionally, it is important to consider the more comprehensive macroeconomic factors that may influence bank profitability in Kurdistan of Iraq. Previous research has highlighted the significance of macroeconomic determinants, such as inflation and business cycles, on bank profitability (Athanasoglou et al., 2008). Therefore, it is essential to find out how taxes, economic factors, and bank profitability are connected to gain a comprehensive understanding of the challenges and opportunities faced by banks in Kurdistan of Iraq. Furthermore, the introduction of bank levies in Europe has been shown to influence how profitable commercial banks are subject to various regulatory measures and economic policies, which can significantly impact their financial performance and operational strategies (Puławska, 2021).

Therefore, it is relevant to explore whether similar effects can be observed in the context of Kurdistan of Iraq. This comparative Analysis may give insightful information. into the potential impact of taxation policies on bank profitability in the region. In conclusion, there is a need to investigate the interplay of taxes on the bank profitability in Iraq's Kurdistan. This research will contribute to the body of current research by offering insights regarding the specific challenges and opportunities faced by banks in the region and will inform policymakers and banking institutions in developing strategies to enhance profitability and sustainability.

### **1.3. Research objectives, research questions and hypotheses**

The study primary goal is to investigate how taxes in Kurdistan, Iraq, affect banks' productivity.

The research objectives (RO) are the next:

RO1: To determine the correlation between corporate tax rate changes and loan growth/lending.

RO2: To find out the relationship between bank leverage and tax rates.

RO3: To examine the association between liquidity choice and corporate income taxation.

RO4: Discovering the important connection between return on assets and corporation taxation.

RO5: To determine the correlation between corporate income tax and profit before tax.

**Based on the research objectives the research questions (RQ) are the next:**

RQ1: Is there any significant relationship between corporate income tax and lending.

RQ2: Is there any significant relationship between corporate income tax and leverage—debt to equity and debt to assets.

RQ3: Is there any significant relationship between corporate income tax and liquidity.

RQ4: Is there any significant relationship between corporate income tax and return on assets?

RQ5: Is there any significant relationship between corporate income tax and profit before tax?

**Hypothesis development:**

H1: There is a significant relationship between corporate income tax and lending in Kurdistan/Iraq.

H2: There is a significant relationship between corporate income tax and leverage in Kurdistan / Iraq.

H3 There is a significant relationship between corporate income taxes and bank liquidity choice in Kurdistan / Iraq.

H4: There is a significant relationship between corporate income tax and return on assets in Kurdistan / Iraq

H5: There is a significant relationship between corporate income tax and profit before tax in Kurdistan / Iraq

(see 2 Table)

#### **1.4. Research contribution**

The study contributes empirical evidence on the relationship between taxation policies and profitability specifically within the context of Iraqi Kurdistan's banking sector. This empirical

evidence would add to the existing body of knowledge on how taxation impacts the financial performance of banks, especially in regions with unique economic and regulatory environments like Iraqi Kurdistan.

The research may throw light on the effectiveness of current taxation policies in Iraqi Kurdistan and their implications for the profitability of banks operating in the region. This can have significant policy implications for policymakers, helping them understand how tax policies can be designed to support the banking sector while ensuring sustainable profitability.

By focusing specifically on Iraqi Kurdistan, the study may provide insights into the interplay between taxation and profitability understudied in this region. This regional focus could offer valuable insights for researchers, policymakers, and practitioners interested in understanding the dynamics of banking and taxation in emerging or developing economies, particularly in conflict-affected regions like Iraqi Kurdistan.

Methodological Contribution depending on the methodology employed, the research may contribute methodologically by introducing innovative approaches or adapting existing methodologies to suit the context of Iraqi Kurdistan's banking sector. This could enhance the methodological tools available for studying similar issues in other regional contexts.

The findings of the research may have practical implications for banks, policymakers, and other stakeholders operating in Iraqi Kurdistan's banking sector. For example, it could provide guidance on how banks can navigate taxation policies to improve their profitability, or it could inform policymakers on potential adjustments needed in tax regulations to foster a more conducive environment for banking sector growth.

Overall, the research contribution likely disinformation in providing empirical insights, policy implications, regional perspectives, methodological advancements, and practical guidance related to the interplay between taxation and profitability in Iraqi Kurdistan's banking sector.

In my pursuit of shedding light on the complex relationship between corporate taxes and bank operations, we are diving into a subject of economic significance that has long been neglected in

prior studies. Banks, barring a few exceptions, hold a significant involvement in the global economic perspective. When it comes to discussions on corporate taxation, banks and financial institutions have often been left out of the equation, as if they do not play an essential role. There is one important exception to this pattern in the body of research that explores the impact of corporate taxes on a specific aspect of bank operations their leverage decisions. My work however, takes a more comprehensive approach, contributing to the body of knowledge about corporate taxation by offering a rich set of statistics regarding significant bank decisions in the context of corporate income taxation. We are not just talking about a few changes here and there we are operating within a country where tax rates have gone through numerous transformations. This not only adds resilience to my findings but also allows us to maintain a significant sample size, facilitating my exploration of how the tax-leverage association varies across different economic cycles and among different types of banks but we do not stop there. The research also explores the complex and at times, seemingly incompatible objectives that banks pursue. Previous studies have examined the relationship between banks' diverse goals, including the pursuit of profits, the maintenance of regulatory capital and dealing with taxes. What sets my contribution apart are multiple, first, I shine a highlight on a range of fundamental banking operations, some of which are gaining increasing importance in today's financial institutions. Second, my research is with great care designed to help us identify the tax-related frictions that impact the decision-making processes of banks. A previously disregarded objective I am starting into is the management of liquidity risk, and I am uncovering how taxes come into play in this concerning to round out my analysis also consider the impact of state taxes on businesses. Earlier research has indicated that state taxes offer significant opportunities for tax planning. My data supports these findings, demonstrating that changes in corporate income taxation have a profound effect on the capital structure and risk-taking of non-financial organizations. This emphasizes the idea that state taxes are an essential expense for businesses, which is in line with my focus on banking institutions. In my research, I take a comprehensive approach, examining how changes in state tax rates influence

various crucial decisions made by banks, including lending, leverage, liquidity management, ROA, and profit before tax. Understanding these banking actions is key for two key reasons. Firstly, banks play an important role in providing the capital and liquidity required to support the growth of non-banking businesses. Secondly, the risk-taking and liquidity management decisions made by banks directly impact the potential for bank failure, which in turn, has repercussions on various fronts. Bank failures not only contribute to an increase in the poverty rate but also impose financial burdens on taxpayers and impede the growth of local jobs and personal income. My findings, therefore, hold significance for a diverse audience. From legislators to banking regulators and investors, everyone stands to gain from policies that support the enthusiasm and operations of banks. After all the state of banks goes hand in hand with the prosperity of our economy, and that is a cause that should concern us all.

## **2. LITERATURE REVIEW**

### **2.1. The study's theoretic background**

These theoretical underpinnings offer a basis for examining how taxes affect the earnings of banks profitability, considering both the macroeconomic variables influencing the larger banking industry and the microeconomic factors influencing specific banks. (Konvisarova et al., 2016) Conducted a comprehensive study that compared the taxation of commercial bank revenues in Russia with those in industrialized nations across the globe. The key finding of this research was that while tax rates in Russia were relatively high, they remained lower than those in many other countries. This discovery pointed out the need for enhancing tax policies aimed at benefiting members of the credit business and the banking sector. Chaudhry et al., (2015) examine the regulatory and tax frameworks for banks across various countries, aiming to propose a balanced approach for fair and efficient taxation. They emphasize the interplay and potential overlaps between regulatory measures and taxation, highlighting strategies to mitigate distortions caused by these factors.

Building upon this research, Andries et al., (2017) investigated the connection between taxation and the performance of commercial banks, focusing on aspects like lending, liquidity, earnings, and leverage. The outcomes of this research demonstrated that fluctuations in income tax rates indeed have a significant impact on the medium- and long-term operations of banks. This effect was particularly obvious during periods of economic recession, underlining the sensitivity of banks to tax policies. While following research by Andries et al., (2017) explored into the more comprehensive implications of taxation on the banking sector, particularly during recessions in the economy and the fierce competition for financial sustainability. These findings collectively emphasize the importance of well-crafted tax policies for the stability and resilience of commercial banks in various regions. The structure and parameters of financial markets have changed dramatically since mid. 1980 due to changes in policy, demand distribution and technology. All

these developments have increased in quantity competition, particularly in conventional lending, decreased underwriting margins, and encouraged banks to expand their revenue streams and improve Manufacturing and distribution performance. The euro's adoption removed most of the remaining obstacles. Intensive competition has taken hold within the nation's banking sector since the adoption of an able currency banking taxation in Europe is far from being incorporated, banks overall fiscal treatment remains under the control of state governments, according to European regulatory frameworks imposing minimum standards on their strategies. I look at how changes in corporate income taxes may have affected banking operations. Several factors have been influencing the structure and dynamics of credit markets over the last 20 years. Regulatory framework, demand structure, and technology advances have intensified competition, particularly in conventional lending, decreased margins, and enabled banks to expand their revenue streams and improve manufacturing and distribution performance. During this period, significant modifications to corporate income taxation took place. Considering the connections and the model highlights, it is acceptable that these fiscal changes played a role in forming the evolution of the banking sector.

In the given table provides a comparative analysis of the corporate income tax rates in eight countries within the Euro area, the United States, and the United Kingdom. The corporate income tax is a crucial element in the tax systems of these nations. It accounted for about 2.7 percent of GDP at the end of 2003 (3.4 percent in all OECD countries), and the portion relating to banks is particularly significant. Around 1981 and 2003, the past rates of corporate income tax indicate that government fiscal officials adjusted their rates frequently.

In 1. Table you will find a concise overview of the official corporate income tax rates spanning from 1981 to 2003. This table clarifies the legal tax rates during this extended period.

This study relies on data provided by the Institute for Fiscal Studies, which was used in the calculations made by the authors. The data is presented in percentage points, and it pertains to the year.

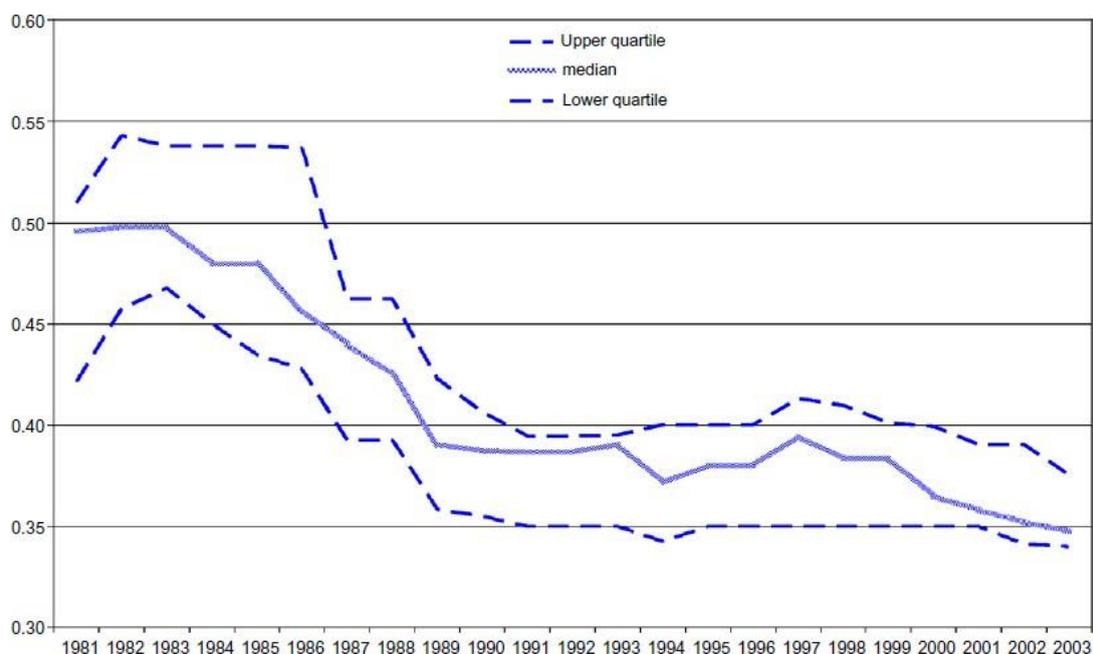
**1. Table. Summary statistics for the corporate income tax (statutory rate) (1981–2003)**

Countries	Average	Median	Min.	Max.	SD	Number	Number of	Number of	Average	Average	Taxes on corporate
						Of	Tax	Tax	magnitude of tax	magnitude of tax	income (% GDP) (1)
						Changes	Increases	decreases	Increases	Decreases	
Austria	43.8	39.1	34.0	61.3	12.4	2	0	2	0.0	13.7	2.3
Belgium	41.3	40.2	34.0	45.0	2.7	5	1	4	1.2	3.0	3.5
France	41.0	39.5	33.3	50.0	6.2	12	2	10	4.2	2.3	2.9
Germany	56.6	58.6	38.3	62.7	7.8	9	3	6	2.0	4.9	1.0
Italy	45.1	46.4	36.3	53.2	5.3	7	4	3	3.4	5.0	3.2
Netherlands	38.7	35.0	34.5	48.0	5.2	4	0	4	0.0	3.4	3.5
Portugal	42.5	39.6	33.0	55.1	7.3	6	0	6	0.0	3.7	3.6
Spain	34.7	35.0	33.0	35.0	0.8	1	1	0	2.0	0.0	3.2
Euro area	43.0	39.6	33.0	62.7	6.0	46	11	35	1.8	4.5	2.9
United Kingdom	36.5	33.0	30.0	52.0	7.7	8	0	8	0.0	2.8	2.9
United States	42.1	39.3	38.4	49.6	4.9	2	1	1	0.9	11.2	1.0
Total	42.2	39.4	30.0	62.7	3.5	56	12	44	1.5	4.1	2.7

Source: Authors' calculations based on data from Institute for Fiscal Studies. Percentage points. Data refers to 2003.

Researchers have seen 56 changes during this time span, with 12 increased taxes and 44 tax declines. This implies that the CIT rate varied significantly in about a quarter of the country-year panel measurements. The country with the most adjustments (12) was France, whereas Spain had the least (1). Tax cuts were generally larger than tax rises (4% vs +2%, respectively).

1. Figure indicates that there is a global pattern to lower corporate income tax rates, but that this trend is not uniform throughout nations.



### 1. Figure The corporate income tax rates

Source: Authors' computation using data from the Institute for Fiscal Studies.

The corporate income tax rates have seen changes (1. Figure) over time, with a focus on examining the tax systems in Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain, the United Kingdom, and the United States. These countries have been ranked and divided into two groups, with the median serving as the dividing point. The upper quartile represents the top 25% of the ranked countries, while the lower quartile distinguishes the bottom 25% from the top 75%. These changes in corporate income taxes may have influenced interest rate background. Interest rates have fallen significantly over the last two waves, despite the decrease in the rate of inflation. Furthermore, the difference (the gap Regarding the relationship between the deposit rate and the short-term lending rate). It is widely assumed that its decline is due primarily to the restructuring of the banking sector that accompanied economic stabilization.

(Burietz et al., 2023) demonstrate that banks located in countries where the tax levy was implemented exhibit heightened participation. These banks not only show increased willingness to extend credit but also significantly boost loan amounts. Particularly notable are the substantial increases observed among large banks and those facing greater capital constraints Several research studies, using data from European banks, have highlighted that the decrease in interest

rates has been shaped by factors such as interest rate risk, credit risk, and operational expenses. Shackelford et al., (2010) explore which types of taxes are best suited to achieve conflicting objectives. They critically evaluate proposed or implemented financial transactions taxes, bonus taxes, and taxes on financial sector firms based on criteria such as size, bank liabilities, or excess profits. As I have shown in the previous section, the Corporate Income Tax (CIT) rate has a noticeable impact on lending interest rates, while it appears to have no measurable effect on deposit interest rates. This suggests that the CIT rate is significantly linked to the overall interest rate trends. This indicates that the decrease in corporate income taxes may account for at least part of the spread decrease in recent times. The findings are consistent with most scientific findings on the financial consequences of taxes on the banking industry accessible to other nations. Research into the impact of corporate income tax on banking operations has garnered attention, as exemplified by Albertazzi & Gambacorta (2010) have illustrated that such banking. According to Gaganis et al., (2013), they also discover that the impact of taxation on profit efficiency is amplified by concentration in the banking sector. taxes lead to elevated capital expenditures, subsequently resulting in higher loan interest rates. The theory that a higher corporate tax leads to stronger net interest margins is backed by scientific proof from large samples of nations. This tax is entirely carried on to the customer. According to Chiorazzo & Milani, (2011) European banks will pass 45 percent of this tax burden to customers in the short run and 80 percent in the longer term, a figure that is predicted to be 90 percent. On the other hand, indicate that the reliability of these findings is contingent on how possible diversity issues are handled their discoveries indicate that, even when considering potential endogenous regressors, there is minimal transmission of corporate tax burden to the interest rate margins of banks the impact of various bank taxes on a sample of 2,987 banks in 23 European nations, showing that European banks raised interest rates on loans by 20 to 24 basis points. There is a rise in deposit demand (and interest rates) compared to many other forms of funding to the degree that deposits are partly tax-exempt. Relative to many other bank assets (such as own

assets and loans). Since the rise in loan interest rates is the primary impact of bank taxes, the end leads to an increase in financial performance. Buch et al., (2016) looked at how the German banking system's 2011 tax changed the structure and scale of banks' balance sheets, as well as interest rates. This tax is imposed primarily on bank liabilities net of the own funds and retail deposits. These researchers show that banks influenced by the tax react with lower lending growth and higher interest rates on new deposits than banks not influenced, by using technique of variations in gaps (prior to the actual implementation of the tax, distinguishing among banks influenced and not impacted by the tax). The latter impact needs to encourage financing sources away from taxable capital and into non-taxed ones, such as deposits. officially revealed these findings, showing that taxed banks raised the interest rates on their loans by around 0.14 percentage points. De Nicolo in 2010 examined the effect of a Financial Stability Contribution tax (FSC) that taxes bank obligations net of own capital as well as an extra Financial Activity Tax (FAT) that taxes pre-tax income, on bank financial performance, bankruptcy likelihood and GDP. In particular, the potential impacts are detrimental and minimal though in some cases, atax on economic activities combined with a 100-basis point tax on net liabilities may decreaseGDP growth by 0.26 percentage points.

Tax theory looks at how producers, like banks, and consumers, like customers, split the cost of a tax. It is possible to forecast how changes in tax laws may impact banks' profitability by having a thorough understanding of tax incidence. Corporation Taxation Theory: This theory explores the ways in which corporation taxes impact the capital structure, profitability, and investment decisions of businesses. It considers several elements that affect banks' after-tax profitability, including tax rates, credits, deductions, and incentives.

Financial Intermediation Theory: By transferring money from savers to borrowers, financial intermediaries like banks are essential to the economy. This theory investigates the effects of taxes on banks' capacity to perform this duty effectively and profitably. These theoretical backgrounds offer a basis for examining how taxes affect the earnings of banks in Kurdistan, Iraq, considering

both the macroeconomic variables influencing the larger banking industry and the microeconomic factors influencing specific banks.

Several studies have explored this subject and provided insights into the theoretical aspects of optimal taxation. One relevant reference is the paper by Mankiw et al., (2009) which discusses optimal tax theory and its application in OECD tax policy (Organization for Economic Cooperation and Development). The authors highlight lessons from optimal tax theory and compare them to the tax policies implemented in recent decades. This Author provides a comprehensive overview of the theoretical foundations of optimal taxation and its practical implications. Another relevant reference is the study by Gropp & Heider (2010) which examines the determinants of bank capital structure. While not directly focused on optimal taxation, this reference contributes to the understanding of elements that affect banks' capital structures. Understanding the determinants of bank capital structure is crucial for designing optimal tax policies Kanbur et al., (2006) explored into the domain of encouraging efficiency and stability within the financial perspective of the banking industry. They particularly examine behavioral public economics as a unique component of this overarching paradigm and provide a comprehensive perspective on the body of work relating to non-welfare optimal taxes. In simpler terms, their study focuses on promoting efficiency and resilience in the financial operations of banks. They take a closer look at how human behavior and decision-making influence the economics of public finance. Furthermore, they offer a consolidated overview of the literature that deals with taxes that may not necessarily align with traditional welfare standards. This work contributes to a better understanding of how policies and taxes can be customized to enhance the banking industry's performance and resilience. Provides insights into alternative approaches to optimal taxation that go beyond traditional welfare-based criteria. Understanding non-welfarist perspectives is important for developing tax policies that consider behavioral responses and distributional concerns. Zhang (2020) explores optimal taxation in the growth model with public goods. While not specifically focused on banks, this reference contributes to the more

comprehensive literature on optimal taxation by examining its implications for economic growth. Understanding the relationship between taxation and economic growth is essential for designing tax policies that promote long-term prosperity. Gawehn, (2020) reviews the empirical literature on the intersection of banks and corporate income taxation. In conclusion, the literature on optimal taxation of banks encompasses various theoretical and empirical perspectives. By considering the insights from these references, policymakers can develop tax policies that promote financial stability, economic growth, and social welfare. The impact of tax evasion on a company's overall value appears to be insignificant, suggesting that it may not work hard to have an immediate influence on its profitability. The interplay of taxes on company value was investigated by researchers, who also investigated the interactions between taxes and company profitability. Economic decisions about work, savings, interstate migration, investments, and corporate organization can be influenced by tax laws. Although the study concentrates on the African environment, other research has looked at how taxes affect businesses in other areas. (Sabbar & Sabri, 2021). The researchers explored that a significant decrease in tax evasion through related party transactions. Intriguingly, factors such as company size, profitability, and leverage do not appear to have a noticeable impact on this practice (Bernando & Oktaviano, 2023).

## **2.2. Empirical literature on taxation of bank**

Empirical studies are often used in empirical research on the effects of taxation on bank profitability in Kurdistan, Iraq to examine the direct correlation between corporate taxes and performance indicators of the bank, such as return on equity and return on assets. They also examine frequently using event studies or panel data methodologies, how tax policy changes, such as adjustments to tax rates and deductions, impact banks' profitability. Researchers also look at the ways in which banks modify their operations in response to taxes, for as by using tax planning techniques or changing their lending and investment practices. Studies that compare various areas with comparable economies provide insight into differences in tax loads and regulatory

frameworks, and assessments of tax laws targeted at the banking industry gauge their efficacy and potential effects on the financial the empirical literature on bank taxation has mostly examined how taxes affect financial institutions' decisions about capital structure, financing, investments, and lending practices. Several scholarly investigations have emphasized the importance of taxes in influencing banks capital structure decisions and the actual consequences of taxing banks. For instance, a study discovered that lending to already-existing businesses decreases when bank taxes are suddenly increased. According to (Gallemore, Gipper, & Maydew (2019) The findings indicate a higher inclination of potential clients towards selecting tax intermediary banks over non-tax intermediary banks' choices. These studies advance the knowledge of how bank taxes impact financial institutions operations and what that means for the actual economy (Hemmelgarn & Teichmann, 2014). This comprehensive research encompasses a diverse selection of topics, forming valuable light on the confusing relationship between taxes and the behavior of banks. A multitude of studies have illustrated the impact of taxes on banks' capacity to assume risks. These investigations collectively provide us with invaluable insights into how the tax perspective influences the decisions and actions of financial institutions (Luo & Tanna, 2014, Gawehn, 2020). These studies have found that higher taxes can incentivize banks to take on more risk to maintain profitability. Additionally, research has shown that the tax treatment of banks differs from that of other industries, which can create unique incentives and challenges for banks in managing their tax liabilities (Joshi et al., 2020). Furthermore, there is evidence that taxation can affect bank profitability. A study on EU banks found that explicit taxation including corporate income tax and value-added tax, has implications for financial stability and can impact bank profits (Chiorazzo & Milani, 2011). The study also introduced a proxy for VAT paid on bank inputs and examined its effect on bank behavior. Another study found that differences in interest margins and profitability among commercial banks can be influenced by factors such as taxation. The impact of taxation on the tax burden of the banking industry has also been examined. An empirical analysis of China's banking industry found that it is over-taxed compared to other industries (Zhang, 2019). The study

used cross-country and cross-time comparative analysis to demonstrate this finding. In addition to the specific impact of taxation on banks, there is a more comprehensive literature on the relationship between taxation and international capital flows. This literature has grown significantly in recent years and provides insights into how taxation affects foreign direct investment and cross-border banking activities (Feld & Heckemeyer, 2011; Huizinga et al., 2014). Nolivos and Vuletin (2014) argue that by considering the concept of central bank independence (CBI), it becomes feasible to harmonize the principal theoretical implications derived from models of optimal taxation and seigniorage with empirical observations.

Overall, the empirical literature on the taxation of banks highlights the importance of considering the unique characteristics of the banking industry when creating tax policies. It demonstrates that taxation can have significant effects on bank behavior, risk-taking, profitability and the overall stability of the financial system. Policymakers should take these findings into account when formulating tax policies that aim to promote a stable and efficient banking sector. To fully understand the subtleties of bank taxes in Kurdistan, it is necessary to examine the policies that have been put in place in the area. A fundamental understanding of the financial environment in which banks operate can be gained by examining transaction levies, corporate income taxes and other fiscal policies that are specific to Kurdistan. Empirical research frequently evaluates the impact of taxes on banks' economic conduct. Studies conducted in the Kurdistan setting can provide insight into bank lending patterns, investment choices and financial stability in reaction to tax laws. Policymakers need to know this information to create tax structures that target a balance between generating money and developing a strong and stable banking industry.

Evaluating the profitability and stability of commercial banks is a complex attempt that is essential to comprehend these organizations' financial well-being and their wider influence on the economy. Analyzing a bank's ability to turn a profit in connection to its loans, investments, and operating expenses is known as profitability assessment. Important financial indicators that are used to assess the profitability and efficiency of a bank's operations include net interest margin, return on equity,

and return on assets. On the other hand, a stability assessment examines a bank's ability to experience risks and other economic uncertainties. This includes assessing asset quality, stress testing, and capital adequacy ratios to make sure the bank has the reserves needed to fight shocks and remain solvent. To ensure the stability of the banking industry and, consequently, the general stability of the economy, regulators, investors, and policymakers need a strong evaluation of profitability as well as stability. This evaluation should inform strategic choices, risk management procedures, and the creation of financial policies.

To determine a company's financial health, it is imperative to carefully Review its financial records. Performance is typically assessed based on metrics such as net earnings and operating cash flows. Various methods, including benchmarking and comparisons to budgets are employed to evaluate the economic results of other organizations. Profitability ratios are widely utilized in banks as they serve as indicators of credit analysis, closely linked to the management of results. The most frequently used ratios for this purpose are Return on Equity (ROE) and Return on Assets (ROA). ROE, as proposed by Gardi et al., (2021) and employed to determine the profit generated by a company's equity. It signifies a company's ability to generate profit from its own equity. The efficient utilization of assets to generate profits is also an integral aspect of this competence. The company's capability to efficiently invest in creditors and generate revenue through sound credit policies is directly associated with its managerial ability in handling debtors (Qader et al., 2021). Scholars, bank executives, financial market participants, and regulators have all directed their attention to the factors influencing the quality of financial reporting. A study by Hamza et al., (2021) reveals a significant correlation between credit risk management and a bank's overall performance. Enhanced credit risk management practices are associated with better bank performance. It is important for bank officials to engage in effective credit risk management to safeguard the bank's assets and protect the interests of its shareholders. Emphasizing the importance of risk dispersion through diversifying the loan portfolio is paramount in achieving this goal. Contemporary portfolio theory points out the need for having a diversified loan portfolio

as it typically carries fewer risks than a single loan. Credit management significantly impacts a company's performance, as suggested by Hamad et al., (2021) implying that adopting an optimal credit strategy can optimize revenue management with creditors, promote financial position, and bolster overall performance. Therefore, making smart choices in credit policy is closely associated with achieving high profitability (Maina & Mungai, 2019). An empirical study on the relationship between corporate taxes and risk-taking it is essential to mention corporate taxes and risk-taking are topics of interest in both the business and economics fields. Several studies have examined the relationship between corporate tax avoid and firm risk, as well as the impact of tax incentives and governance structures on tax avoid (Guenther et al., 2017). One study found that corporate tax avoidance strategies are often persistent and do not increase firm risk on average. This suggests that firms can engage in tax avoidance without significantly increasing their exposure to risk. Another study analyzed the links between tax avoidance, high-powered incentives for managers, and corporate governance structures (Desai & Dharmapala, 2006). The findings indicated that tax avoidance is related to the growth of high-powered incentives and can be influenced by the structure of corporate governance. The corporate tax rate has also been found to have an impact on risk-taking behavior for firms that can expect to use their tax losses, a higher tax rate is associated with increased risk-taking (Langenmayr & Lester, 2018). However, for firms that cannot utilize their tax losses, a higher tax rate is associated with decreased risk-taking. This suggests that the effect of the corporate tax rate on risk-taking depends on the ability of firms to offset their losses. The level of risk-taking in a corporation can also mediate the relationship between managers expectations and tax avoiperform (Li & Wu, 2022). Managers with irrational expectations may engage in higher levels of risk-taking, which in turn can influence their decisions regarding tax avoiperform. This highlights the complex interplay between psychological factors, risk-taking behavior, and tax avoiperform strategies. Furthermore, the level of tax avoiperform has been found to be related to tax risk and corporate governance (Choi & Park, 2022). Higher levels of tax avoiperform are associated with decreased tax risk, while lower levels of tax avoiperform

are associated with increased tax risk. This suggests that tax avoidance can have implications for corporate governance and the overall risk profile of a corporation. The personal tax rates of managers have also been found to influence corporate risk-taking (Armstrong et al., 2018). Higher personal tax rates are associated with increased risk-taking by managers. This suggests that the tax environment faced by managers can influence their decision-making regarding corporate risk-taking. Overall, the relationship between corporate taxes and risk-taking is complex and multifaceted. It involves factors such as tax avoidance strategies, tax incentives, corporate governance structures, personal tax rates, and the ability to utilize tax losses. Understanding these relationships is important for policymakers and practitioners in managing corporate tax systems and assessing the impact of tax policies on firm behavior. Taxes have a major influence on business risk-taking, according to previous studies. Ljungqvist et al., (2017) examine the impact of tax on non-financial businesses risk-taking practices by using phased increases in region corporate income tax rates. They claim that taxes have an asymmetric impact on risk-taking because the state shares in the profitability (profits) of risky investments but not just the drawback. They provided support that tax rate rises are linked to business lowering the risk, but still no indication that tax rate reductions have the same impact. Researchers discover that underlying tax loss laws reduce the impact of taxes on risk-taking, which is compatible with tax loss offsets assigning a few of the downside risks to the nation. Likewise, Langenmayr & Lester, (2018) find that risk-taking is strongly associated to the extent of tax loss periods, and that tax rates are positively (negatively) correlated to risk-taking for businesses looking to use beneficiaries (for firms that are unable to utilize the losses). There has been no documented study that has applied these findings to the banking industry to understanding. Because of the unique regulatory climate in which banks work, it is unclear if taxes have a significant impact on bank risk-taking as they do on manufacturing industries. Investigation practices focus on assessing a bank's resources, assets, management, earnings, liquidity, and susceptibility to market risk. according to the Federal Deposit Insurance Corporation (FDIC) Risk Management Manual of Examination Policies (Federal Deposit

Insurance Corporation, 2017). Furthermore, since their capital requirements and deposit insurance are risk adjusted, banks spend more money as risk goes up. As a result, the strong monitoring atmosphere in which banks operate, combined with higher risk-taking costs, can assist in reducing tax-induced risk-taking.

The ability to understand how taxation affects bank risk-taking is particularly important for policymakers. During the 2007-2009 economic collapse unnecessary bank risk-taking was recognized as a significant factor to bank difficulties (Ellul & Yerramilli, 2013). Numerous studies have investigated the impacts of CEO fiscal policy and government support during the recent financial crisis on the risk-taking behavior of banks (Ho et al., 2016; Dell'Ariccia et al., 2017; Duchin & Sosyura, 2014). As of latest knowledge, there exists no concrete statistical evidence establishing a connection between income taxes and the propensity of banks to take on risks. It is indeed a crucial endeavor to explore the specific relationship between bank risk-taking and corporate tax policies, particularly given the essential role banks play within the more comprehensive economy corporate tax aggressiveness refers to the extent to which businesses employ strategies to minimize their tax liabilities. One key factor that can influence a bank's approach to tax management is the presence of equity risk incentives. These incentives can drive managers to make more Risky decisions in terms of financing and investment (Rego & Wilson, 2012). Such brave actions have the potential to increase the volatility of stock returns and enhance the value of stock option portfolios. As a result, managers are incentivized to adopt more assertive tax strategies in Rego & Wilson, (2012) study they conducted research to explore the relationship between corporate tax aggressiveness and equity risk incentives. Their findings revealed a clear connection between higher levels of stock risk incentives and an increased willingness to take on tax-related risks. This implies that managers with greater equity risk incentives were more likely to engage in risky tax avoiperform strategies. The study also found that these results were strong across different measures of tax risk (Rego & Wilson, 2012).

The study's results highlight an important impact of equity risk incentives on corporate tax

aggressiveness. Managers with greater equity risk incentives are predisposed to adopt riskier tax strategies. This, in turn, can yield both advantageous and disadvantageous outcomes for both the bank and its managerial team. These findings highlight the importance of considering equity risk incentives when analyzing corporate tax behavior and the potential implications for firm performance and shareholder value. In addition to the study Brühne & Schanz, (2022) conducted a study to explore how firms define and manage tax-related risks. They conducted interviews with tax risk experts and found that tax risk management practices varied across firms. Overall, the research by and contributes to my understanding of the relationship between equity risk incentives, corporate tax aggressiveness, and tax risk management practices. These studies highlight the importance of considering the incentives and motivations of managers when analyzing corporate tax behavior and the need for effective tax risk management strategies in corporate settings. Mullineux (2012) advocates for achieving parity in treatment between large "too big to fail" banks and smaller banks that can be permitted to fail. This goal is pursued through a blend of prudential regulations or non-revenue generating taxes alongside fiscal measures involving revenue generation from banks.

### **2.3. Theoretical framework and hypotheses development**

Theoretical framework and hypotheses development contemporary research, exemplified by the works of Heider & Ljungqvist (2015), Langenmayr & Lester (2018), Doidge & Dyck (2015) as well as Ljungqvist et al., (2017) shows that tax characteristics including rate and loss carry back requirements influence business practices. Though new studies have strengthened scholars' knowledge of the role of taxes in non-financial business strategies, there is indeed a lot of disagreement about how taxes affect banks results and assumptions (Fama, 2011), (Doidge & Dyck, 2015), considering that a significant body of research delves into the realm of taxes and its impact on the choices made by businesses includes major corporations, most likely due to their unique regulatory and operating circumstances, there is much less data on the role taxes

played in bank decision-making to present. Researchers pursue prior findings that look at the impact of taxation on different, interconnected business outputs by looking at many outcome variables collectively. For example, (Doidge & Dyck, 2015) the connection between different corporations and alterations to a Canadian tax law, which imposed an entity-level income tax on publicly traded income trust businesses that were previously exempt from the corporate income tax system, is a compelling story of adaptation and strategic response. In the past, publicly traded income trusts had enjoyed a unique status in the Canadian business perspective. They were a favored choice for businesses, particularly in sectors such as energy and real estate, due to their tax advantages. The absence of corporate income tax at the entity level made income trusts an appealing option, enabling them to distribute a significant portion of their earnings to investors, making it an attractive investment choice for those seeking regular income. However, the tax law modification brought a significant transformation. The Canadian government aimed to address what it perceived as a tax gap by imposing an entity-level income tax on these trusts. This change effectively leveled the tax playing field between traditional corporations and income trusts.

This change meant that corporations operating under an income trust structure had to reevaluate their financial strategies. A few decided to go back to regular corporate status to mitigate the impact of the new tax, while others looked for alternative means to continue their income distributions to investors. This transformation prompted significant shifts in corporate structures, financial planning, and dividend policies. Beyond the corporate environment, the modification had more comprehensive economic implications. It impacted the investment perspective in Canada, especially for income-oriented investors who had relied on income trusts for regular dividends. The change in tax treatment influenced investment decisions, and it had consequences for the stock market. The interplay between corporations and this tax law amendment can be characterized by a series of strategic adjustments. Corporations were compelled to adapt to the new tax perspective, either by altering their structures or finding

innovative ways to fulfill investor expectations. Additionally, the government's decision to modify the tax law demonstrated its capacity to reshape the corporate perspective and influence the behavior of businesses. . The relationship between corporations and the changes to Canadian tax law, which introduced entity-level income tax for publicly traded income trust businesses, showcases a compelling narrative of adaptation and evolution. The shift in tax treatment had considerable implications for corporate structures and investor expectations, underscoring the dynamic interplay between government policy and corporate strategy in the Canadian business arena.

### **2.3.1 Corporate tax and loan growth**

Researchers utilize tax as an instrument to analyze variations in the taxation of bank revenues, leveraging several unique datasets on banks, loans, and corporates. Through an extensive empirical analysis at the bank, loan, and corporate levels, we investigate the transmission effects of bank taxation (Sobiech et al., 2021) Corporate tax policies have the potential to impact loan growth by affecting the cost of borrowing, business investment decisions, bank profitability, the overall economic environment, and regulatory and market conditions. The association between loan growth and corporate tax rates is not always straightforward, as it the outcome largely turns on the economic perspective and how these various elements combine with one another Policymakers must carefully consider these dynamics when formulating tax policies to promote economic growth and maintain a healthy lending environment. Corporate tax policy has been a topic of interest in economics and finance research. Many research studies have delved into this topic.

Relationship between corporate tax and loan growth, as well as its impact on economic growth. Desai & Dharmapala (2006) analyze the links between corporate tax avoidance, high-powered incentives for managers, and the structure of corporate governance. While their study does not directly address the relationship between corporate tax and loan growth, it provides insights into the strategies employed by corporations to minimize their tax burden. Dyreng et al., (2013) find

that multinational corporations can avoid more taxes than domestic-only corporations. Although their study does not specifically focus on loan growth, it suggests that tax avoidance strategies may have implications for corporate financial decisions, including borrowing. Shevlin et al., (2020) document that corporate tax avoidance is associated with higher debt costs, as indicated by increased bank loan spreads and public bond issuance yields. This finding suggests that corporate tax avoidance may have a negative impact on loan growth, as higher debt costs can discourage borrowing. (Yalaman, 2019). They have been digging into the link between economic growth and the legal corporate tax rate amidst the global financial crisis. What they found shows a solid inverse connection between economic growth and the corporate tax rate While this study does not directly address loan growth, it suggests that higher corporate tax rates may have adverse effects on overall economic performance, which could indirectly impact borrowing and loan growth. In summary, while there is limited direct research on the relationship between corporate tax and loan growth, existing studies suggest that corporate tax policy, including tax avoidance and tax rates, can have implications for corporate financial decisions and economic growth. Corporate tax avoidance may increase debt costs, potentially affecting loan growth. Additionally, higher corporate tax rates may have negative effects on economic growth, which could indirectly impact borrowing and loan growth. The impact of taxes on corporate investment activities are well documented (Hanlon & Heitzman, 2010). Since bank profits are primarily derived from interest and fees earned on loans, lending is the most fundamental investment aspect of a bank's business model. Furthermore, since lending is a major source of capital for businesses and entrepreneurs, knowing the effect of business taxes on bank lending is crucial to comprehending non-banks' access to resources and funding. It is uncertain how income tax reforms would affect lending decisions. On the one side, all factors being equal, higher income tax rates decrease after-tax income. A significant increase in tax rates must be adversely correlated with bank lending because they redirect operational cash flows to the government that banks otherwise would allocate to new lending structures. In the light of mounting tax rates, quite a statement assumes that bank executives are reluctant to

compromise loan quality or pursue additional options of capital to finance loan operation. A recent study has demonstrated an impressive finding: in cases where international businesses fail to collect sufficient benefits from local infrastructure, the competitive edge in taxation decreases, leading to a decline in both investment and profits for domestic companies. (Han et al., 2023). Changes in tax rates can encourage banks to account for diminished operating cash flows by shifting sources of funding or cutting other operating expenses until compromising productive lending opportunities, considering the pre-eminence of lending in bank business strategies. On the other hand, banks have a potential avenue to counterbalance escalating tax costs if their top brass is fixated on upholding a predetermined level of net income, even in the face of tax rate hikes. To achieve this, management teams may ramp up lending by boosting pre-tax returns and tacking on higher interest rates for fresh loans, all the while relaxing the standards for loan quality. In summary, the empirical question of whether and how tax rates impact bank lending remains unresolved.

**H1: There is a significant relationship between corporate income tax and lending in Kurdistan / Iraq.**

### **2.3.2 Corporate income tax and leverage**

Corporate tax policies play a crucial role in shaping a company's decision to use leverage as a financial strategy. Tax deductions of interest expenses can provide a significant incentive for companies to take on debt to reduce their tax burden. However, it is essential for companies to strike a balance between leveraging for tax benefits and managing the financial risks associated with high levels of debt. Additionally, regulatory changes and the overall economic environment can impact how corporate tax policies affect a company's leverage decisions and financial health. Corporate tax and leverage are closely related topics in the field of finance and economics. Numerous research has been conducted into the relationship between corporate tax and leverage, providing insights into how taxes affect a firm's capital structure decisions. One study by

(Huizinga et al., 2008) The researcher found that differences in tax rates between the parent company and its foreign subsidiaries, as well as the local corporate tax rates, do affect the capital structure of foreign subsidiaries. However, they also concluded that, in the grand scheme of things taxes had a relatively limited economic impact on leverage. In another study (Ivanov et al., 2020). explored the connection between taxes and business leverage by examining variations in state corporate income tax rates. The findings suggested that taxes have a depressive effect on corporate borrowing, indicating that higher tax rates may lead to lower leverage. Dallari et al., (2018) conducted an empirical study and found that countries with higher tax rates on corporate income tend to have higher corporate leverage ratios. This suggests that taxes can influence a firm capital structure decision. Faccio & Xu, (2015) evaluated the joint effect of corporate and personal taxes on leverage. Their research highlighted that a company's choices regarding its capital structure are impacted by both corporate and individual taxation. Furthermore, Overesch & Voeller (2010) explored into the influence of corporate and individual taxes on capital structure decisions. They revealed that personal income taxation played a role in determining debt ratios, with dividend taxes positively affecting the debt-to-asset ratio and personal interest income taxation having a negative impact on corporate leverage.

Overall, these studies provide evidence that corporate tax rates and tax-related factors can influence a firm leverage decision. Higher tax rates may lead to lower leverage, while differences in tax rates between founders and corporations' firms can affect capital structure choices. Additionally, both corporate and personal taxes can have an impact on a firm capital structure decision. Graham (2006) and Hanlon & Heitzman (2010) recognize the significance of taxes in corporate capital structure and investment decision. While the concept of interest tax defenses is obvious, with interest reductions lowering debt's after-tax costs, the position of taxes in these choices is still being debated (see, for example, Doidge & Dyck, (2015); Heider & Ljungqvist, (2015) utilize shifts in national corporate income tax rates to measure the influence of taxation on capital structure in a recent publication. They show that taxes have a first-order, beneficial effect

on the leverage of non-financial companies. If interest tax offers make sense in a non-financial or industrial context, it is unclear if the corporate tax scheme would have the same effect on the banking industry in at least two ways. First, unlike non-financial companies, banks' business models require them to finance extended investments with narrow demandable deposits, implying that they must use leverage. Although both banks and non-banks are eligible for the interest tax shelter, bank leverage is significantly higher than the average than non-bank leverage. Second, except for non-financial companies, banking institutions impose stringent capital requirements and focus attention on bank leverage. Variances from federally enforceable leverage ratios will result in a fine and sometimes even bank insolvency. As a result, previous studies of the relationship between corporate income taxation and non-financial firm leverage do not always educate investigators on the importance of taxation and bank leverage. Researchers discovered that the expenditures associated with corporation taxes and legal audits significantly affect the profitability of businesses. Corporate income tax (CIT) is levied on resident companies worldwide income in Nigeria (Oyinkansola et al., 2023). Furthermore, although virtually all banks use short-term financing to fund long-term investments (such as loans), the structure of this narrow financing varies considerably between banks. Banks have a variety of insured deposits, among these revenue streams has different change costs and risk profiles, therefore tax rates can affect them differently.

Researchers expect banks' non-deposit financing to be progressively more vulnerable to tax rate adjustments than deposit funding because non-deposit funding is usually longer in duration, at a greater expense than deposits, and uninsured by the Federal Deposit Insurance Corporation (FDIC). If that is indeed the case, the corporate tax system could influence banks' vulnerability to financing provider runs to the degree that short-term non-deposit debt is much more susceptible to runs than deposits (especially insured deposits). In countries with higher corporate income tax rates, banks tend to exhibit higher leverage and hold less risky assets, regardless of whether risk is measured by the average regulatory risk weight, loan-to-assets ratio, or the share of non-

performing loans (Horváth, 2020).

**H2: There is a significant relationship between corporate income tax and leverage. in Kurdistan / Iraq.**

### **2.3.3 Corporate taxes and liquidity**

Santini & Indrayani (2020) found that profitability, leverage, and firm size significantly influence market performance, while liquidity and capital intensity do not. They also highlighted the relationship between tax aggressiveness and market performance.

Corporate taxes have a significant and attractive impact on a company's liquidity. Managing the timing of tax payments, utilizing tax credits and deductions, attractive in effective tax planning, and understanding the impact of tax laws on liquidity are critical components of maintaining a healthy cash flow. A company's ability to strike a balance between meeting its tax obligations and preserving liquidity is crucial for its financial stability and growth. Corporate taxes and liquidity are two important factors that can significantly impact the financial health and decision-making of companies. Several studies have explored the relationship between corporate taxes and liquidity, shedding light on the various factors and mechanisms at play. Desai & Dharmapala (2006) discuss the determinants of corporate tax avoidance which is closely related to the issue of corporate taxes. They argue that understanding the factors that drive tax avoidance is crucial for understanding the overall perspective of corporate tax. While their study does not directly address the relationship between corporate taxes and liquidity, it provides valuable insights into the motivations and strategies behind corporate tax planning. Lyroudi & Bolek (2022) examine the relationship between costs, taxes, and liquidity in companies listed on the Warsaw Stock Exchange. They hypothesize that costs have a negative influence on taxes due to managers tax avoidance attitudes, which in turn affect liquidity and debt levels. Their research findings confirm the expected negative correlation between costs and taxes as well as their relationship with liquidity. This study provides empirical evidence of the interplay between costs, taxes, and liquidity. Sander et al., (2014)

explores the valuation of cash holdings in the context of distributed profit-based corporate taxation.

### **H3: There is a significant relationship between corporate income tax and bank liquidity in Kurdistan / Iraq**

#### **2.3.4. Corporate income tax and return on assets.**

The relationship between corporate taxes and return on assets (ROA) can be understood through the impact of taxes on a company's profitability. Corporate income tax directly affects a company's net income, which is a key component of the ROA calculation. When corporate taxes increase, net income decreases, leading to a potential decrease in ROA. This relationship is supported by research, such as a study on the financial performance of listed manufacturing firms in Ghana, which found an inverse relationship one important measure to assess the value of the firm which is calculated as Income divided by total assets. There can be an important connection between return on assets (ROA) and corporation taxation. The relationship revolves around how taxes impact a company's profitability and, consequently, its return on assets. Higher corporate taxation can reduce a company's after-tax earnings, affecting its overall return on assets. Conversely, a favorable tax environment can contribute to higher net income, potentially boosting the return on assets for a corporation. Understanding this connection is crucial for businesses to navigate financial strategies and optimize performance in varying tax structures between return on assets and corporate income tax (Gatsi et al., 2013). The interplay between corporate taxes and return on assets is a critical factor in the financial dynamics of businesses. Corporate taxes represent a mandatory financial obligation that directly impacts a company's profitability. The level of taxation a corporation faces can significantly influence its ability to generate returns on assets. High corporate taxes may reduce the net income available for reinvestment or distribution to shareholders, limiting a company's capacity to optimize its return on assets. Conversely, strategically navigating the tax structure through legal deductions and credits can enhance a company's after-tax profitability and, consequently, improve its return on assets. This complex

relationship demonstrates the importance of tax planning and efficiency in corporate financial strategies, as it directly affects a company's ability to maximize the returns derived from its asset base. Balancing tax liabilities with the imperative of achieving robust returns on assets remains a constant challenge for businesses navigating the complex terrain of modern finance.

Moreover, the relationship between corporate taxes and return on assets extends beyond the immediate financial impact. It also influences more comprehensive business decisions and investment strategies. Corporations, in their quest to optimize returns, often evaluate the tax implications of various operational and investment choices. For instance, decisions related to capital expenditures, acquisitions, or divestitures are not only guided by financial performance but also by the potential tax consequences. Effective tax planning can lead to improved cash flow, reduced overall tax liabilities, and enhanced returns on assets. Furthermore, the regulatory environment and changes in tax policies can introduce an element of uncertainty, shaping corporate behavior. Companies may adapt their operational structures or geographic presence to align with tax-efficient strategies. This adaptability reflects the complex performance between corporate taxes and asset returns as businesses navigate an ever-evolving fiscal structure.

#### **H4: There is a significant relationship between corporate income tax and return on assets in Kurdistan / Iraq**

##### **2.3.5. Corporate income tax and profit before tax**

The flexibility of tax laws and the Unbalance worldwide corporation tax system allow for a wide range of legal strategies to reduce tax bills. Corporate income tax (CIT), together with value-added tax and labor tax, is one of the most significant categories of business taxes. Consequently, it is helpful to assess how effective businesses are at reducing their CIT. Thus, the effect of corporate income tax planning on business financial performance is the study's topic in the realm of corporate finance, the interplay between taxation and profitability stands as a crucial dynamic shaping business decisions and economic outcomes. Of particular interest is the correlation

between corporate income tax and profit before tax, a relationship that not only influences a company's financial health but also carries significant implications for fiscal policy and regulatory frameworks. My work explores the intricacies of this correlation, exploring its specifics, impacts, and potential implications for businesses and policymakers alike.

Understanding corporate income tax represents an essential revenue stream for governments worldwide, serving as a cornerstone of fiscal policy. This tax is levied on a corporation's profits, typically calculated as the difference between revenue and expenses. The tax rate varies across jurisdictions, with governments setting rates based on economic considerations, revenue needs, and political priorities. For corporations, managing tax liabilities is a strategic imperative, often requiring complex tax planning and compliance efforts.

Profit Before Tax (PBT) a key financial metric stands as a fundamental financial metric that showcases a company's operational performance before accounting for tax obligations. It reflects the total earnings generated by a corporation from its core business activities, excluding taxes but including other expenses such as operating costs, depreciation, and interest payments. Profit before tax serves as a crucial indicator of a company's profitability and efficiency, guiding investor perceptions and strategic decision-making. The correlation between corporate income tax and profit before tax is complex and multifaceted, influenced by various factors spanning economic, regulatory, and managerial domains. At a basic level, an increase in corporate income tax rates directly impacts a company's bottom line by reducing its after-tax profits. Conversely, a decrease in tax rates can lead to higher retained earnings, potentially bolstering profitability. However, the relationship between tax and profitability extends beyond simple cause and effect. Corporations employ various strategies to manage their tax liabilities, including tax planning, deductions, credits, and international tax optimization. These strategies can influence reported PBT figures, sometimes masking the true impact of tax policies on corporate performance. Additionally, non-tax factors such as market conditions, operational efficiency, and industry dynamics can significantly affect profit before tax, complicating the direct correlation with tax

rates. Implications for Businesses. For businesses, navigating the correlation between corporate income tax and profit before tax requires a balanced approach that integrates tax considerations into more comprehensive financial and strategic planning. Effective tax management strategies can help optimize profitability while ensuring compliance with relevant tax laws and regulations. Moreover, understanding the details of tax planning enables companies to adapt to evolving tax views and minimize tax-related risks. Implications for Policymakers face a delicate balancing act in setting corporate tax policies that promote revenue generation, economic growth, and fiscal sustainability. The correlation between corporate income tax and profit before tax demonstrates the need for policymakers to consider the more comprehensive economic implications of tax decisions. High tax rates may deter investment and hinder business expansion, while excessively low rates can strain public finances and exacerbate inequality. Striking the right balance requires a nuanced approach that accounts for economic conditions, competitiveness, and distributional effects. The correlation between corporate income tax and profit before tax highlights a complex concept relationship shaped by economic, regulatory, and strategic dynamics. While tax policies directly impact corporate profitability, the true extent of this influence is modulated by various factors, including tax planning strategies and more comprehensive market forces. Businesses and policymakers alike must navigate this complex environment with a modest understanding of the interplay between taxation and profitability, fostering an environment conducive to sustainable growth and fiscal responsibility.

**H5: There is a significant relationship between corporate income tax and profit before tax in Kurdistan / Iraq**

#### **2.4. Differing Effects of Taxes on Bank Activities**

The exploration of heterogeneity in the effect of taxes on bank activities represents a delicate and complex field of research within the domain of financial economics. Taxation exerts a multifaceted influence on the behavior of banks and understanding the different impacts across different

institutions and contexts is crucial for policymakers, regulators, and researchers. This heterogeneity can manifest in various dimensions. recognizing and comprehensively analyzing the heterogeneity in the effect of taxes on bank activities is essential for crafting effective financial policies. This delicate understanding enables policymakers to custom tax regulations that not only optimize revenue generation but also foster a stable and efficient banking sector, promoting economic growth and financial stability. Prior research investigating the effect of taxes on economic outcomes suggests that the impacts of tax rate changes are often delicate and context specific. For example Ljungqvist & Smolyansky (2014) provide evidence that state corporate income tax rate cuts increase economic activity only during recessions, when they have significant positive effects on employment and income. There are reasons to expect the effect of corporate taxation on banking activities to also vary with economic conditions and firm attributes. The challenging subject of how taxes impact bank operations has attracted the attention Various research studies have illustrated into the relationship between taxes and bank operations, analyzing closely aspects like tax evasion, profit shifting, and the influence of tax benefits. For instance, in a study conducted by Dutt et al. (2019) an examination of the data contained in European banks country-by-country reports revealed a surprising mismatch between reported profits and actual business activities. This investigation revealed significant disparities among several tax-free zones and bank groups starting from various home countries. Consequently, it suggests that the influence of taxes on bank operations can vary significantly depending on the specific tax haven and the country where the bank is headquartered. Another study by Joshi et al. (2020) further contributes to this body of research. This study investigates the impact of publicly accessible country-by-country reporting on the practices of revenue shifting and tax evasion within the European banking sector. The research findings suggest that the influence of public reporting primarily centers around banks involved in activities within tax. This indicates that the effect of taxes on bank activities is not uniform across all banks but is influenced by their specific activities in tax. Leaven & Levine (2009) Examine the relationship between bank governance, regulation, and risk-taking.

They find that the effect of regulations on bank risk depends critically on each bank's ownership structure. This suggests that the impact of taxes on bank activities may also vary depending on the ownership structure of the bank discuss the perception of significant activities in tax haven countries as particularly harmful. This highlights the public's concern about the activities of banks in tax and suggests that taxes can have a significant impact on bank activities in these jurisdictions. Furthermore, Ding et al. (2022) find that banks' activities are influenced by corporate income tax. This indicates that taxes can affect the behavior and decision-making of banks, potentially leading to changes in their activities. Huizinga et al. (2014) examine the impact of international taxation on cross-border banking. They find that international double taxation alters the activities of international banks, and that the happening of double taxation is executed by bank customers in the foreign supporting country. This suggests that taxes can have a significant impact on the bank's international operations. In summary, the effect of taxes on bank activities is heterogeneous and depends on various factors such as the specific tax, the ownership structure of the bank, and the type of activities the bank engages in. Taxes can influence profit shifting, tax avoid, risk-taking, and the decision-making of banks. The impact of taxes on bank activities is an important area of research that requires further investigation. Previous research on the influence of taxes on economic outcomes has shown that tax rate adjustments often yield delicate and context-specific effects. For instance, as demonstrated by Ljungqvist & Smolyansky (2014) reductions in state corporate income tax rates tend to stimulate the economy most effectively during recessions, positively impacting income and employment. It is reasonable to figure out that the impact of corporate taxes on banking operations can vary based on specific business characteristics and the prevailing economic conditions. For instance, in times of economic downturns, funding providers may exhibit a greater tendency to withdraw from banks, as highlighted by the work of Gertler & Kiyotaki (2015). This emphasizes the importance of internal funding, which involves generating cash flows, in managing liquidity risk and mitigating the adverse effects of income taxation. Therefore, during recessions, the significance of income taxation in relation to liquidity risk

becomes more pronounced. Furthermore, alterations in tax policies can work hard an influence on bank lending, primarily because banks may become more vulnerable to economic downturns. Such economic challenges can constrain their ability to tap into alternative funding avenues for their investments. It is worth observing that changes in tax rates might exhibit a positive correlation with shifts in leverage under normal economic conditions. However, during recessions and periods marked by elevated credit risk costs and uncertainty, the process of increasing leverage in response to tax rate could prove to be more powerful. The impact of taxes on bank operations is accountable to fluctuations during periods of economic instability. Banks frequently rely on the interbank market to address their short-term liquidity risks. This market offers banks a convenient and predictable avenue for securing funding when credit risks are stable and relatively low. However, when credit risk becomes uncertain, and there's heightened fluctuations inside the bank market, banks may find it impractical to utilize this process for managing liquidity risk. In such scenarios, banks are more likely to shift their focus towards operating cash flows and maintaining liquid assets. Consequently, when the interbank funding markets cannot be relied upon as alternative sources of liquid assets, adjustments in tax rates may exhibit a positive correlation with the accumulation of liquid assets by banks. When a bank decides to keep a greater portion of its assets in liquid form rather than extending loans, it can lead to a reduction in lending activities. Similarly, the impact of taxes on a bank's performance can be tempered by the unique characteristics of the bank itself. Previous studies have suggested that during crisis periods, such as those examined in the works of Cornett et al. (2011) and Berger et al. (2013) large and small banks may be influenced differently as they often rely on different sources for funding and capitalization. As a result, the response to changes in the tax rate may vary between larger and smaller banks. For example, larger banks may exhibit less sensitivity to alterations in income tax rates due to their access to more comprehensive depositor and investor bases, as well as more extensive information resources that reduce borrowing expenses. In terms of bank profitability, it is conceivable that it plays a moderating role in the relationship between shifts in state income tax rates and actual bank

operations. This perspective arises from the data connecting bank profitability with capital management activities and earnings. While more profitable banks are likely to experience a greater impact from shifts in income tax rates in terms of cash tax payments, they might also possess greater capabilities to tap into funding sources, support capital reserves, and navigate through tax-related fluctuations. The relationship between fluctuations in tax rates and their effects on banking outcomes is likely influenced by the level of bank capitalization. Beatty & Liao (2011) for example, suggests that concerns related to capital, especially during economic downturns, can significantly influence lending activities. Furthermore, they note that lending activities are closely linked to the provisions made by enterprises for potential loan losses. Capital requirements serve to impose limits on bank leverage, and as a result, changes in the dynamics between tax rates and leverage tend to influence the augmentation of bank capitalization. Furthermore, given that funding providers often view the capital ratio as a concise measure of a bank's financial health, banks with lower levels of capitalization could be more accountable to a run by depositors, short-term fund providers, or holders of credit lines. Consequently, the effects of tax rate adjustments on lending, leverage, liquidity, and risk-taking activities are anticipated to vary based on the bank's size, profitability, and capitalization.

#### **2.4.1 Factors impacting Iraqi Commercial Banks' Firm Performance**

In both developed and developing nations, the backbone of financial systems has historically been established by traditional banks. In developing nations, various factors such as low per capita income, constrained assets, lax accounting regulations, and a corporate situation primarily comprised of small, family-owned businesses have enhanced the dominant situation role of banks as the primary financial institutions. Given these circumstances, it is unsurprising that banks and other financial intermediaries have taken center stage in the financial sectors of these developing nations, with capital markets fading in importance. Nevertheless, banks separate themselves from other businesses primarily because of their essential dependence on external funding. This reliance

is a consequence of the diversity in their financing origins and the nature of their operations. As a result, banks conduct thorough assessments of financing sources, considering factors such as risk levels, costs, returns, timeframes, management involvement, interest conditions, and repayment schedules. Optimizing their financial structure becomes a critical attempt for banks, as it directly impacts the assessment of both debt and equity, ultimately influencing the overall value of the institution. While banks are expected to serve as trusted intermediaries and play a vital role in the economy, their use of banking sector services faces limitations and barriers in developing countries. Individuals may find it challenging to trust banks with their savings and depend on them as primary financial intermediaries in their daily lives and business activities, as noted by Demir et al. (2018). This lack of trust is particularly clear in developing countries, where the strategic performance of banks remains uncertain, decreasing investor confidence. Addressing this issue, Budur & Poturak (2021) emphasize the need for banks to enhance their strategies focus on better management, rebuild trust, and transform it into a competitive advantage. Additionally, competition has become a major challenge in the contemporary business perspective, requiring organizations to establish clear plans and goals for sustaining and growing, as highlighted by Budur & Poturak (2021) The primary objective for companies. Firms with limited profitability may struggle to achieve their goals, as retained earnings may not suffice as an internal source of funds, as pointed out by Abdullah & Tursoy (2021). A company's improved performance is often reflected in its relentless pursuit of profit. Larger companies may invest in and manage existing resources extensively for the benefit of shareholders, based on the principle of increasing income profitability, as discussed by Kumar et al. (2022). Alam et al. (2021) recognized the essential role of the financial sector, including banks, in economic growth and financial development. Scholars have focused on factors influencing their performance, particularly in developing countries post the global financial crisis and during a period of rapid technological advancement (Rasul et al., 2022). These factors are typically classified into external and internal variables (Abdullah & Tursoy, 2021) making this a critical issue for investigation within the banking sector, especially in

developing countries, considering recent global financial developments and technological advancements. Furthermore, changes in financial regulations, such as the adoption of the International Financial Reporting Standard (IFRS) by stock markets, could potentially impact bank performance. The International Accounting Standards Board introduced IFRS codes with the aim of harmonizing accounting information globally and creating a universal business language that can be comprehended by all (Akalpler & Abdullah, 2020). Iraqi banks have been mandated to adopt IFRS and align their financial statements with it since the financial year 2016, as highlighted by (Abdullah et al., 2021) A bank is a type of financial institution that accepts deposits from the public and offers credit to deserving individuals. There are two ways to lend: directly or indirectly through the capital markets' circulation structure. Due to the importance of banks in the financial system, there are differences in how they are run. between different countries. The common structure used by most economies is referred to as fragmented saving banking. These forms of financial institutions maintain liquidity resources in (Anastasiou et al., 2019) which only a small portion of their present duties. Even though there are several requirements to Banks usually rely on the minimal minimum of capital to ensure liquidity ratio. based on an evaluation of the world's capital the purpose of performance evaluation in the banking sector is to analyze the financial statements to assess various aspects, including profitability, sustainability, debt repayment capacity, and dividend policies. It also involves evaluating a bank's ability to generate sustainable profits can influence the performance of businesses positively by providing access to private information, leading to decreased agency costs and improved access to capital. However, such influence can also be detrimental if banks prioritize their interests over shareholders, potentially leading to conflicts of interest (Bhagat & Bolton, 2019). Banking performance encompasses various goals, including contributing to economic development, achieving profitability, and managing finances efficiently (Akalpler & Abdullah, 2020). It involves assessing a bank's financial, credit, and investment positions, management efficiency, and money public investment, all aimed at enhancing competitiveness (Abdullah, 2017). Given the critical role of banks in a

country's economic welfare, experts and policymakers continually monitor banking performance, often focusing on profitability metrics like return on assets (ROA) and return on equity (ROE) (Katusiime, (2021); Abdullah & Tursoy, (2021) In the empirical review, past research has explored the factors influencing bank profitability, categorized into bank-specific variables, economic indicators, and government factors. These factors include bank size, equity-to-total-assets ratio, liquidity, leverage, PBT, credit risk, and economic indicators such as GDP growth, interest rates, inflation, and unemployment. Government factors like regulatory quality and political stability also impact bank profitability (Jadah et al., 2021). Research on Iraqi banks specifically found that bank size, equity-to-total-assets ratio, and total loans-to-total-assets ratio positively affect profitability, while factors like credit risk, inflation, interest rates, unemployment, and political unrest have negative impacts (Jadah et al., 2021). Additionally, the financial performance of Erbil Bank for Investment and Finance in the Kurdistan Region of Iraq improved over time, influenced by liquidity ratios, asset quality ratios, credit performance, and profitability ratios (Adam, 2014). Technological advancements have the potential to impact banking sector performance. A study on Nigerian commercial banks from 2010 to 2019 found that digital banking had a positive but modest effect on bank performance, emphasizing the need for a stable network and customer education on digital banking advantages and cybersecurity (Chukwu & Molokwu, 2022).

#### **2.4.2 Understanding the Tax System in Iraqi Kurdistan**

The Kurdistan Regional Government (KRG) has taken steps to improve taxation transparency and administration. In 2020, the KRG approved reforms to update auditing practices and increase transparency in the taxation system. In the Kurdistan region, approximately 25,000 companies are officially registered with the Directorate of Income Tax and Public Properties in Erbil. Shockingly, only 50% of these entities follow by to their tax obligations, as reported by tax authorities. The small and medium-sized businesses engage in unsure tax evasion practices, and a significant number of businesses operate off the, escaping the scrutiny of tax authorities. Uncomfortably,

high-ranking officials within the tax authorities are involved in covert financial transactions, extracting illegal payments from businesses through unofficial channels.

The Kurdistan Regional Government (KRG) oversees managing its own tax system. Because of its autonomy, it is administered differently from the rest of the nation.

It is probable that since then, changes have been made to the tax system's specifics, including tax rates, exemptions, and regulations. Even if a person does not reside in Iraq, they must pay taxes on any money they receive from the country. The effective corporate income tax (CIT) system in Iraq lacks a progressive tax rate scale and is based on a statutory CIT rate of 15% at all income levels, apart from partnerships. The current corporate income tax rate for all industries is a rate of 15%.

According to the tax law, Progressive Tax System in Iraqi Kurdistan General Income Tax Rates:

- Income from IQD 0 to 250,000: 3%
- Income from IQD 250,001 to 500,000: 5%
- Income from IQD 500,001 to 1,000,000: 10%
- Income above IQD 1,000,000: 15%

Employment Income Tax Rate All employment income: 5%

With its own political and economic environment, Iraqi Kurdistan has a tax system that is distinctive and represents the region's autonomy inside Iraq. Comprehending the tax framework in Iraqi Kurdistan is essential for enterprises and individuals conducting business inside its boundaries. The administration of Iraqi Kurdistan, which is in the country's north, is somewhat autonomous. The Kurdistan Regional Government (KRG) is empowered to manage some facets of government, such as taxation, on its territory thanks to its autonomy. Thus, the federal tax system of Iraq and the tax system in Iraqi Kurdistan are distinct Iraqi Kurdistan's tax system

**Income Tax:** Individuals and corporations in Iraqi Kurdistan are subject to income taxation, which is determined by their income. Depending on the taxpayer's position and the sort of income generated, different rates and thresholds apply. The income tax system seeks to promote economic

progress while ensuring a fair contribution to the region's finances.

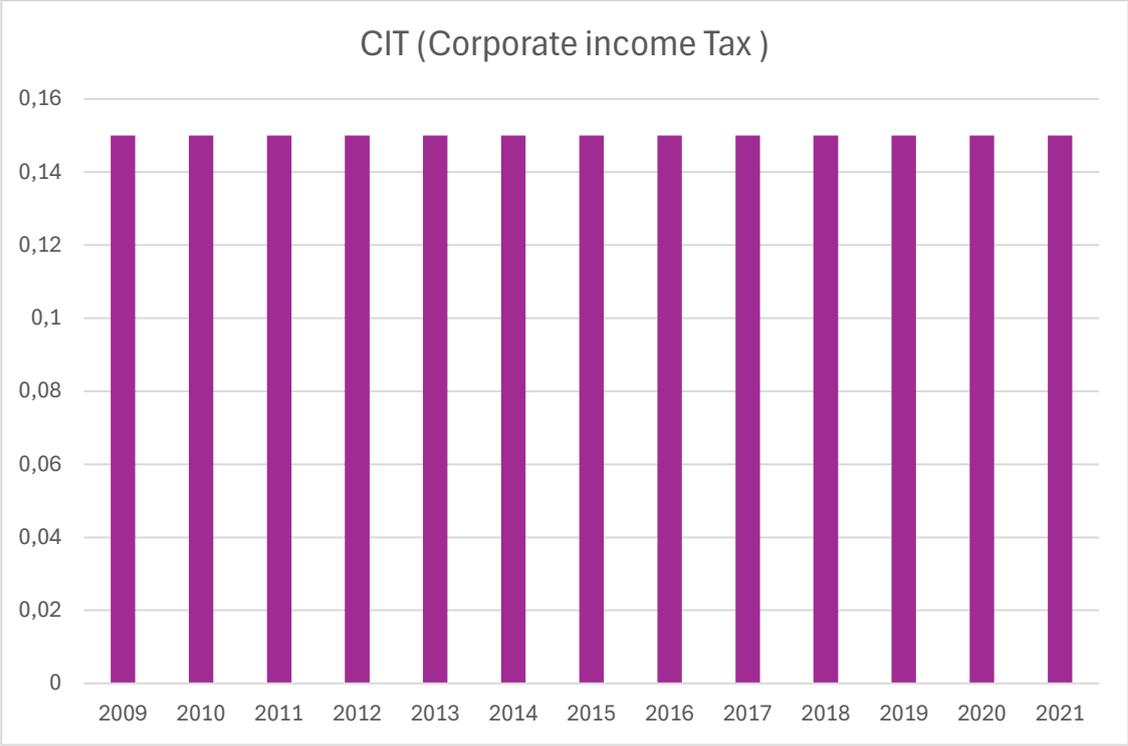
Businesses who operate in the Kurdistan region of Iraq must pay corporate tax on their earnings. The industry sector and the size of the company are two examples of variables that may affect the corporate tax rate. By providing businesses with incentives and competitive tax rates, the KRG promotes investment and boosts economic growth.

**Value Added Tax (VAT):** This tax is levied at every point in the supply chain on the value that is added to products and services. It is a consumption tax. VAT is applied in Iraqi Kurdistan, although there are certain rules and fees. The region's financial resources, which are used to fund infrastructure and public services, are greatly bolstered by VAT revenue. **Customs Duties:** When imported items reach Iraqi Kurdistan, they are subject to customs duties. The government collects revenue from these tariffs, which also work to safeguard homegrown businesses by controlling imports. Customs duties are routinely revised by the KRG to conform to international trade agreements and economic goals. **Tax Administration:** The Ministry of Finance and Economy of the Kurdistan Region oversees managing taxes in Iraqi Kurdistan. It creates tax laws, upholds legal requirements, and gathers money for funding infrastructure improvements and public services. To improve taxpayer awareness and compliance with tax regulations, the ministry also runs tax education and compliance programs. **Compliance and enforcement:** people and companies doing business in Iraqi Kurdistan must abide by the country's tax regulations. Through audits, assessments, and fines for non-compliance, the KRG enforces tax compliance. Building confidence between taxpayers and the government through transparent and effective tax administration supports economic growth and stability.

**Opportunities and problems:** The tax system in Iraqi Kurdistan has both opportunities and problems. It serves as a framework for generating money and governing the economy. These difficulties include preventing tax evasion, maintaining tax equality, and adjusting to changes in the economy. The area does, however, also provide reform-related opportunities, such as strengthening tax administration capabilities, expanding income streams, and encouraging fiscal

sustainability.

In summary: In Iraqi Kurdistan, the tax system is essential to the government and economic growth of the area. It is crucial for everyone to comprehend its elements, rules, and ramifications—individuals, corporations, and legislators included. Iraqi Kurdistan may achieve sustainable growth and prosperity by utilizing its tax system to encourage compliance, openness, and efficiency.



**2.Figure. Corporate Income Tax (CIT) from 2009 to 2021**  
Source: Author's own

The 2 Figure shows the Corporate Income Tax (CIT) rate for a series of years from 2009 to 2021. The rate remains constant at 0.15 (or 15%) throughout the entire period.

**2.4.3 General issues of corporate tax in Iraqi Kurdistan**

Like in many other places, corporate tax concerns in Iraqi Kurdistan can be caused by several circumstances. The economic and regulatory climate of Iraqi Kurdistan will have an impact on the features and consequences of corporate taxation on bank operations.

1. Tax Rates: Banks in Iraqi Kurdistan may pay different corporation tax rates than those in other

regions of the nation or abroad. These rates, which are often set by local government entities, affect the overall tax burden that the region's banks own.

2. Regulatory Framework: Banks in Iraqi Kurdistan would be subject to the tax laws and regulations established by the regional government. This includes any specific regulations governing banking operations, compliance standards, and tax reporting requirements.

3. Tax Incentives: The regional administration of Iraqi Kurdistan may offer tax discounts or incentives to attract investment and promote economic growth in the territory. Banks may benefit from these incentives, which can include reduced tax rates for types of investments or activities.

4 Tax Treaties: Iraqi Kurdistan's tax system may be impacted by any tax treaties or agreements it has with other countries or territories. These treaties may have an impact on the distribution of tax rights among countries and the taxation of cross-border transactions.

5 Reporting and Compliance: Banks operating in Iraqi Kurdistan would have to respect transparency in their tax processes and comply with local tax reporting regulations. This means appropriately reporting income, expenses, and other financial activity for tax purposes.

6. Tax Planning Techniques: Banks may employ tax planning strategies to optimize their tax position if they fall within the purview of Iraqi Kurdistan's tax laws. This may mean managing taxable income, structuring transactions, and utilizing relevant credits or deductions to lower tax responsibilities.

7 Government Policies: The corporation tax code in Iraqi Kurdistan may vary in response to adjustments made to the country's policies or economic objectives, which could influence banks. Banks would need to update their tax planning strategies in response to any changes to the tax legislation.

8. Enforcement and Penalties: Banks doing business in Iraqi Kurdistan that break tax laws risk penalties or other legal consequences. Therefore, it is crucial to make sure that tax laws are followed to reduce the negative effects on one's finances and reputation.

Together, the problems influence the tax environment that banks doing business in Iraqi Kurdistan

must deal with, which has an influence on their tax obligations, business plans, and financial planning.

**2. Table. Summary of Research question, Research objective and Hypothesis**

<b>Research questions</b>	<b>Research objectives</b>	<b>Hypothesis</b>
1- Is there any significant relationship between corporate income tax and lending?	1- To determine the correlation between corporate tax rate changes and loan growth/lending	H1: There is a significant relationship between corporate income tax and lending in Kurdistan / Iraq.
2- Is there any significant relationship between corporate income tax and leverage—debt to equity and debt to assets?	2- To find out the relationship between bank leverage and tax rates.	H2: There is a significant relationship between corporate income tax and leverage in Kurdistan / Iraq.
3- Is there any significant relationship between corporate income tax and liquidity?	3- To examine the association between Liquidity choice and corporate income taxation	H3: There is a significant relationship between corporate taxes and bank liquidity choice in Kurdistan / Iraq.
4- Is there any significant relationship between corporate income tax and return on assets?	4- Discovering the important connection between return on assets and corporation taxation.	H4: There is a significant relationship between corporate income tax and return on assets in Kurdistan / Iraq.
5- Is there any significant relationship between corporate income tax and profit before tax.	5- To determine the correlation between corporate income tax and profit before tax.	H5: There is a significant relationship between corporate income tax and profit before tax in Kurdistan / Iraq.

#### **2.4.4. Existing Iraqi Kurdistan Taxation Practices**

Kurdistan's tax structure Kurdistan has different tax rules and regulations from the federal republic of Iraq because it is an autonomous province of that country. Iraqi Kurdistan's Current Taxation Procedures. The taxation practices in Iraqi Kurdistan are subject to the laws and regulations of the Kurdistan Regional Government (KRG). However, specific details may have changed since then, so it is essential to consult the most recent legal sources or tax authorities for the latest information. In general, Iraqi Kurdistan has its own tax system separate from the federal government of Iraq. The KRG has authority over various taxes, including income tax, corporate tax, sales tax, and customs duties within the Kurdistan:

1. **Income Tax:** Individuals and businesses operating in Iraqi Kurdistan are subject to income tax. The rates and thresholds may vary depending on the income level and type of taxpayer.
2. **Corporate Tax:** Companies operating in Iraqi Kurdistan are typically subject to corporate income tax on their profits. Like income tax, the rates and regulations regarding corporate tax may vary.
3. **Sales Tax:** The KRG imposes a sales tax on goods and services sold within the Kurdistan Region. The rates and specific items subject to sales tax may be defined in local legislation.
4. **Customs Duties:** Goods imported into Iraqi Kurdistan are subject to customs duties. The rates and regulations regarding customs duties may be set by the KRG.
5. **Tax Administration:** The KRG has its tax authority responsible for administering and enforcing taxation laws within the Kurdistan Region.
6. **Tax Treaties:** Iraqi Kurdistan may have entered into tax treaties or agreements with other countries to prevent double taxation and facilitate cross-border trade and investment. These treaties could affect the taxation of income earned in Iraqi Kurdistan by foreign individuals and businesses.
7. **Tax Incentives:** Like many other regions, Iraqi Kurdistan may offer tax incentives to attract

investment and promote economic development. These incentives could include tax holidays, reduced tax rates, or other benefits for specific industries or activities.

8. Value Added Tax (VAT): Iraqi Kurdistan may levy a value-added tax (VAT) on the consumption of goods and services. VAT is a common form of indirect taxation, and its rates and regulations may be set by the KRG.
9. Tax Exemptions and Deductions: The KRG may provide tax exemptions or deductions for certain types of income, investments, or activities to promote economic growth and development. These exemptions and deductions could be available to individuals, businesses, or specific industries.
10. Tax Compliance and Enforcement: The KRG's tax authority is responsible for ensuring tax compliance and enforcing tax laws within the Kurdistan Region.
11. Taxpayer Rights and Obligations: Taxpayers in Iraqi Kurdistan have rights and obligations outlined in the tax laws and regulations. These include the right to appeal tax assessments, the obligation to keep accurate records, and the responsibility to file tax returns and pay taxes on time.
12. Tax Reporting and Documentation: Taxpayers in Iraqi Kurdistan are required to report their income, expenses, and other relevant financial information to the tax authorities. This may involve maintaining proper documentation and records to support tax filings.
13. Tax Disputes and Resolution: In case of disputes or disagreements between taxpayers and the tax authorities, there are mechanisms for resolving these issues through administrative procedures or judicial review.
14. International Taxation: Iraqi Kurdistan's taxation system may also involve considerations for international taxation, especially concerning cross-border transactions, foreign investments, and the taxation of non-residents.
15. Tax Updates and Reforms: Taxation practices in Iraqi Kurdistan, like any other jurisdiction, may undergo updates, reforms, or changes in response to economic, legal, or political

developments. It is essential for taxpayers and businesses to stay informed about any updates or reforms in the tax laws and regulations.



### **3. RESEARCH METHODOLOGY**

This section develops a realistic framework to help understand the interplay of taxation on bank profitability in Kurdistan (Iraq). The research approach is focused on using quantitative methods to empirically analyze the study involves the collection and analysis of numerical data related to corporate income tax, return on assets, profit before tax, lending, liquidity, and leverage. To explain the characteristics of knowledge and to arrive at findings and analyses them efficiently, the process is analyzed in a series of measures that will be described in Chapter IV. Financial data related to corporate income tax, return on assets, profit before tax, lending activities, liquidity measures, and leverage (debt to equity and debt to assets) would be collected from the financial statements of the Bank of Kurdistan Iraq. This data could span multiple years to capture trends and patterns. I applied descriptive statics and correlational study. The primary objective of this research is to examine the relationship between corporate income tax (CIT) and various financial performance indicators of Bank in Kurdistan, Iraq, over the period 2009 – 2021. The financial performance indicators under consideration include Return on Assets (ROA), Profit Before Tax (PBT) Lending Liquidity and Leverage.

#### **3.1. Research design**

The investigation is based on quantitative methods. Analysis design refers to the entire procedure connected with a research model. An investigator's attention plan of action until grasping his evaluation work is known as study design. The researcher has connected with research design to study and concentrate on the issue in this investigation. The prime objective of a serious examination is to represent the situation, events, and circumstances. Illustrations are based on clear judgments that have been revealed to be consistently accurate and precise alternative strategies. Additionally, the research design would likely include control variables to account for other factors that may influence the relationship between corporate income tax and financial

performance indicators. Control variables could include economic conditions, industry factors, regulatory changes, and other relevant variables that may impact the results.

### **3.2. Selection procedures and sample characteristics**

The research approach is likely quantitative. This is because the study aims to examine the relationships between corporate income tax and various financial performance indicators using numerical data. Quantitative research involves collecting and analyzing numerical data to understand relationships and make inferences. In a study like this, the researchers would likely employ a specific sampling method to select a representative sample of banks or financial institutions, possibly including the Banks of Kurdistan, depending on the scope and objectives of the research. The sample characteristics include relevant financial data related to corporate income tax, return on assets, profit before tax, lending, liquidity, and leverage for the selected banks or financial institutions over a specified period. Additionally, the sample size and composition would need to be carefully considered to ensure the reliability and generalizability of the findings. This subsection deliberates the greatest significant matters connected to the samples selected in the study. In my study, leverage the variations in income tax rates among national banks in Iraq to examine the hypothesis. This approach, as opposed to alternative methods like analyzing cross-country tax rate fluctuations or individual bank-level effective tax rates, offers several advantages. Firstly, within-country design allows me to explore the impact of taxes on bank productivity in a setting where regulatory and economic conditions are relatively uniform across banks. While it is true that cross-country settings may offer a wider range of business tax rates compared to the relatively stable tax environment in Iraq Kurdistan, a cross-country approach could introduce significant concerns related to omitted variables, particularly in terms of variations in bank regulations and macroeconomic trends. Secondly, the Iraqi context offers a unique advantage by allowing us to pinpoint the precise statutory tax rates for banks with greater accuracy. As previously mentioned, a meticulous data collection process is instrumental in determining the

appropriate state-level tax rates for banks. In a cross-national context, it is notably more challenging to ascertain the exact tax rates that apply to banks, especially when contrasted with the corporate tax rates applicable to non-financial entities. Thirdly, when it comes to determining the income tax rates for commercial banks situated in Kurdistan, Iraq, the process is comparatively more straightforward compared to banks operating in a foreign nation. This ease of determination arises from the ability to identify the specific states in which banks conduct their primary activities, such as handling deposits, using the bank regulatory filings available from Iraq, as previously outlined. This crucial information aids me in accurately determining the relevant tax rates. In cross-country settings, banks are more likely to engage in significant cross-border operations, and regrettably, we are not aware of any data sources that would allow researchers to dissect and categorize bank operations by individual nations, thus hindering the ability to pinpoint the appropriate tax rate. Fourthly, in contrast to firm-level effective tax rates, which are likely to be influenced by banking productivity, I aim to investigate statutory tax rates that are potentially exogenous to any specific bank, which is advantageous. And finally, the Kurdistan context in Iraq grants me access to comprehensive regulatory disclosures, allowing me to simultaneously evaluate various aspects of profitability that might not be feasible in a more comprehensive global context. This includes many facets of leverage, for instance, and the ability to account for several bank-specific factors in my analysis.

### **3.2.1. A summary of the identification strategy**

My method of identification impact of taxation on the profitability banks in Iraqi Kurdistan. This staggered nature of tax rate adjustments provides me with a significant set of counterfactual scenarios, helping me examine how bank production would have evolved in the absence of these tax rate alterations, as noted by (Heider, F., & Ljungqvist, A, 2015). Importantly, the individual banks in my sample can reasonably be considered as being unaffected by these tax rate variations,

thus strengthening the validity of my analysis. Most of the sample comprises smaller, single-state commercial banks in Kurdistan, Iraq

3. Figure is a short insight of the bank system is Iraq.

<table border="1" style="margin: auto;"> <tr> <td colspan="2" style="text-align: center;"> <b>BANKING SYETEM</b> (83 banks)         </td> </tr> </table>							<b>BANKING SYETEM</b> (83 banks)	
<b>BANKING SYETEM</b> (83 banks)								
Government banks (7 Banks)			Private banks (76 Banks)					
Specialized banks. (7 banks)	Commercial banks (3 banks)	Islamic banks (1 bank)	Local Commercial banks (25 banks)	Local Islamic banks (29 banks)	Branches of foreign Islamic banks (2 banks)	Branches of foreign banks (16 banks)		

**3. Figure. The demographics of the banking sector in Iraq in 2023**

Source: Department of Statistics and Research, Central Bank of Iraq, 2023

**3.3.Sampling**

The sample would likely consist of financial data from the Cihan Bank of Kurdistan / Iraq over a specific period (2009 – 2021) ensuring that the data is representative and relevant to the research questions.

Cihan Bank is one of the largest and most prominent financial institutions in the region (4 Figure). Its significant market presence and extensive network of branches make it a representative and reliable source of data for understanding broader trends within the Kurdistan banking sector. The bank's comprehensive range of services and its widespread customer base provide a robust dataset that reflects the sector's performance and challenges accurately and relevant to the research questions is known for its stability and reliability. Unlike some other banks in the region that have faced political issues or have smaller, less established operations, Cihan Bank has maintained a reputation for consistent and trustworthy service. This reliability is crucial for ensuring that the data collected is credible and can be confidently used for analyst Cihan bank one of the largest

banks with several branches are registered and approved by the central bank of Iraq, which means that annual reports and financial statements are reliable. Banks in Kurdistan must follow the central bank of Iraq instructions because is a part of the federal Iraq system,



**4. Figure. Study Location and Contexts. Iraqi Kurdistan**  
Source: own editing

**3.3.1 Secondary data sources**

The assessment of this research hinges on prior studies that have explored the relationship between taxation and its impact on bank profit. To gather relevant data, I will conduct searches using open-access search engines like Google, aiming to acquire openly available papers and articles. In

addition to scholarly articles and research papers, I will delve into the influence of taxes on the profitability of bank, and I will leverage financial statements and reports from various sources, including the Central Bank of Iraq, the Iraq Stock Exchange, and, notably, Additionally, Cihan Bank for Islamic Investment and Finance, with a presence in both Kurdistan and Iraq, operates through a network of 12 branches

### **3.3.2. Research nature**

The research approach for this study would likely involve quantitative analysis, as it aims to examine the relationships between corporate income tax and various financial performance indicators such as return on assets, profit before tax, lending, liquidity, and leverage. This typically involves collecting numerical data related to these variables and using statistical methods to analyze the data. Given the specific research questions and hypotheses provided, the nature of the research appears to be explanatory or causal. The study aims to determine whether there is a significant relationship between corporate income tax and the specified financial indicators. By testing these relationships, the researchers seek to understand the impact of corporate income tax on the profitability and financial performance of the Bank of Kurdistan.

Therefore, the research approach is likely quantitative, employing statistical analysis to test hypotheses and determine the existence and significance of relationships between corporate income tax and various financial metrics. The nature of the research is explanatory or causal, as it seeks to explain or establish causal relationships between variables.

The aim of this study is to investigate the implications of the taxation on the banks productivity in Kurdistan (Iraq). A realistic conceptual framework has also been used to accomplish the study's aim. This framework explains how the data was collected and analyzed to derive anything useful from the results. A quantitative research methodology will be used to determine the impact of the taxation on banks productivity in Kurdistan (Iraq). This section of the report now explains how the study's findings were gathered and how the sample component of the research process was chosen.

### **3.4. Research paradigm**

The research paradigm refers to the philosophical and theoretical framework that guides the researcher's approach to studying a particular phenomenon. There are different research paradigms, with two of the most common being positivism and interpretivism.

Based on the information about the research questions and hypotheses, as well as the quantitative nature of the analysis, the research paradigm for this study appears to align more closely with positivism. Positivism emphasizes the use of empirical observation and measurable phenomena, and it seeks to establish causal relationships through systematic observation and experimentation. In this paradigm, the researcher aims to generate objective knowledge that is independent of individual perspectives or interpretations.

Positivism typically involves the use of quantitative data and statistical analysis to test hypotheses and establish empirical relationships. The research questions are framed to test specific hypotheses about the relationships between variables, which aligns with the positivist approach to hypothesis testing. **Emphasis on Generalizability** Positivist research often seeks to generalize findings to more comprehensive populations or contexts based on the study's empirical data.

The study paradigm has been used to analyse the studies that have been conducted as well as their possible influence on people. The three styles of analysis are realism, positivism, and interpretivism, according to this classification. This is the cornerstone of learning. Realism promotes the idea of reality and evidence, regardless of one's view of the scientific methodology. Positivism is concerned with empirical data obtained by evaluation, calculation, and examination, as well as surveying, interviewing, and/or polling. The interpretative technique is a method of critical analysis of the positive process that allows analyzing prior published research or papers and assessing the established model, literature, or research. To assess the taxation impacts on bank profitability in Kurdistan, the present study employs the same research approach. This is the quantitative strategy employed in the study.

### **3.5. Research approach**

The research approach is focused on using quantitative methods to empirically analyze the relationships between corporate income tax and various financial metrics to understand the interplay between taxation and profitability within the context of the Banks of Kurdistan. The study involves the collection and analysis of numerical data related to corporate income tax, return on assets, profit before tax, lending, liquidity, and leverage.

Inductive methods and deductive research are terms used to describe both qualitative and quantitative approaches. To develop a far more detailed understanding of the project, the inductive approach begins by examining the concepts and findings thus explaining all approaches in detail. Inductive technique is a quantitative investigation that involves conducting or analyzing surveys, interviews, focus groups, or polls. In other words, inductive analysis or quantitative data does not rely on current hypotheses, but instead gathers and evaluates new data for information purposes or formulation instead of contemporary science investigation. In this approach, the researcher creates hypotheses, that can then be confirmed correct or incorrect through measurements. To further confirm the findings, the evidence gained and collected was compared to statistics provided or produced by certain investigators. As a result, the researcher will be able to explain selecting a new sample size and reaching a new conclusion.

### **3.6. Research purpose**

Through collecting the data, the research will analyze the interplay and impact of taxation on banks profitability in Kurdistan (Iraq). by exploring these relationships, the study aims to provide insights into how taxation influences the financial performance of the Banks of Kurdistan Iraq. This research can have implications for policymakers, bank management, investors, and other stakeholders interested in understanding the interplay between taxation policies and financial outcomes in the banking sector. Ultimately, the purpose is to contribute to the existing body of knowledge in the field of finance and taxation.

### **3.6.1. Methods and tools for data analysis**

Correlation analysis would likely be used to examine the relationships between corporate income tax and the financial performance indicators (return on assets, profit before tax, lending, liquidity, and leverage). The analysis would involve testing the hypotheses to determine whether there is a statistically significant relationship between corporate income tax and each of the financial performance indicators. For the analysis of my data, I will employ correlational study, test bivariate and the results will be meticulously computed and documented using SPSS version 26. I am committed to ensuring the utmost precision and consistency in my study. The data sourced from my review of prior research will undergo thorough and expert processing, and each component will be subject to independent assessment via statistical techniques. This approach will facilitate the examination of relationships between the results obtained. Additionally, I will utilize charts and graphs to visually represent the data, enhancing the clarity and comprehensibility of the findings.



## 4. RESULTS AND DISCUSSIONS

Chapter 4 presents the results and discussions of the study's empirical analysis on the effect of taxes in the context of Iraq's Kurdistan on bank profitability. This chapter provides an in-depth analysis of the correlation model's findings and their implications. The aim of this chapter is to investigate whether the taxation policies implemented by the Kurdistan government interplay the profitability of banks operating in the region. Furthermore, this chapter aims to discuss the key factors that contribute to banks' profitability and assess their significance. The results and discussions presented in this chapter will enable stakeholders, policymakers, and practitioners to make informed decisions about the taxation policies and regulatory frameworks in the banking industry in Kurdistan, Iraq. This analysis would look at how CIT affects the banks' net income after taxes, operational costs, investment capabilities, and overall financial health.

### 4.1. Descriptive statistics

**3. Table. Descriptive statistics**

		Return		Profit before		Leverage		Leverage
		CIT	OnAssets	tax	Lending	Liquidity	DTE	DTA
N	Valid	13	13	13	13	13	13	13
	Missing	0	0	0	0	0	0	0
Mean		3.0000	7.0000	7.5385	6.8462	6.3846	5.7692	7.0000
Std. Deviation		.81650	3.89444	4.03351	4.05886	3.66375	3.13990	3.89444
Minimum		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		4.00	13.00	13.00	13.00	13.00	11.00	13.00

Source: own calculation

The Corporate Income Tax ranges from 1.00 to 4.00, with an average (mean) value of 3.00. The standard deviation is relatively small at 0.81650, indicating that the values are classified. Relatively closely around the mean (3 Table). The way the data points in the cluster of datasets

around the mean indicates that most of the companies may operate in a comparable tax environment, with very few outliers having tax rates that are noticeably higher or lower than the average. This might point to a comparatively stable tax system or tax policies unique to a given industry.

The Return on Assets ranges from 1.00 to 13.00, with an average value of 7.00. However, the standard deviation is quite high at 3.89444, indicating significant variability in the data points. The large variability in ROA shows that the companies in the dataset use their assets to create profits to various degrees of efficiency. Understanding the factors that contribute to this variability may make it easier to explain changes in operational effectiveness, industry dynamics, or market positioning.

Profit before tax also ranges from 1.00 to 13.00, with an average value of 7.5385. Like Return on Assets, the standard deviation is relatively high at 4.03351, suggesting considerable variability in the information. The variation in profit before taxes, like that of ROA, reveals variations in the financial performance of various businesses. Examining the variables that affect profit margins such as sources of income, cost structures, and market dynamics—may reveal areas for competitive advantage or development.

Lending ranges from 1.00 to 13.00, with an average value of 6.8462. The standard deviation is again high at 4.05886, indicating significant variability. There appears to be considerable variation in the lending practices of enterprises, indicating differing levels of dependence on outside funding sources. Determining the causes of these variations—such as inclinations for capital structures, availability of credit markets, or strategic goals—may help with risk management and capital allocation choices.

Liquidity ranges from 1.00 to 13.00, with an average value of 6.3846. The standard deviation, while still indicating variability, is relatively lower compared to the previous variables at 3.66375. Although there is significant diversity in liquidity levels, a degree of consistency among organizations is indicated by the comparatively lower standard deviation when compared to other

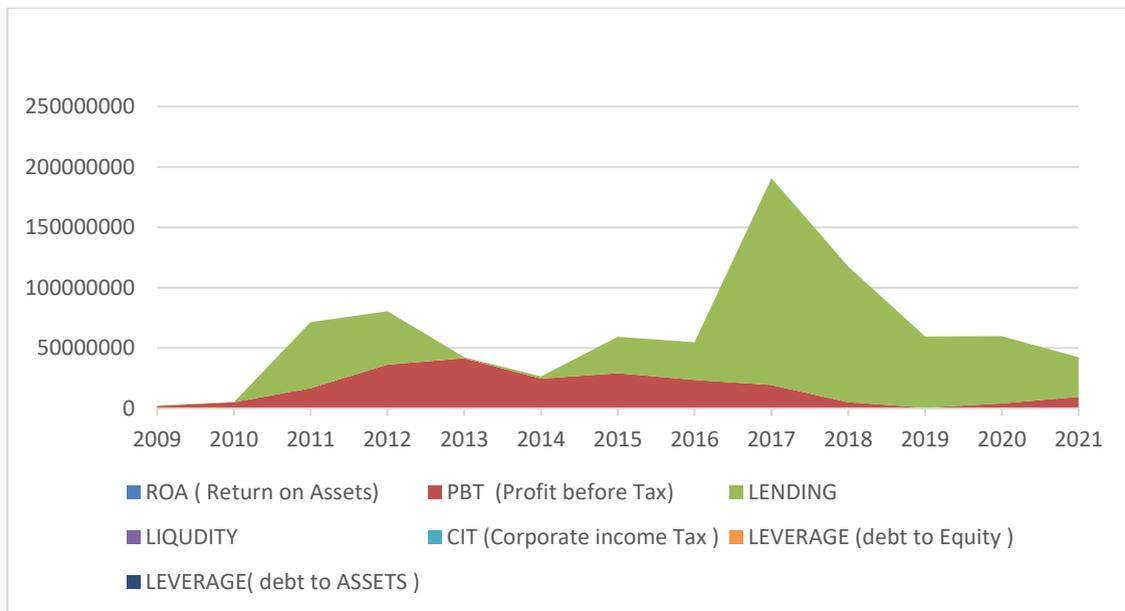
variables. It may be possible to evaluate financial resilience and flexibility by having a thorough understanding of the liquidity determinants, such as cash flow dynamics, working capital management, or investment strategies.

Debt-to-Equity extends from 1.00 to 11.00, with an average value of 5.7692. The standard deviation is moderate at 3.13990, suggesting moderate variability. The debt-to-equity ratios' moderate fluctuation indicates that different enterprises have different amounts of leverage. Determining the effects of leverage on cost of capital, risk exposure, and financial stability could help with strategic planning and capital structure decisions.

Debt-to-Asset also extends from 1.00 to 13.00, with an average value of 7.0000. The standard deviation is the same as Return on Assets, indicating similar variability.

Overall, these statistics provide a summary of the central tendency, variability, and range of each variable in your dataset. Additionally, they give insights into the distribution and dispersion of data points. The wide range of debt-to-asset ratios highlights how different organizations' financing approaches and risk appetites differ from one another. Determining the effect of debt levels on profitability, solvency, and financial adaptability may help in making decisions about investments and debt management. All things considered, a complete understanding of the financial environment represented in the dataset can be obtained by studying these descriptive statistics in conjunction with industry benchmarks and qualitative insights. This study can help stakeholders detect trends, anomalies, and potentially dangerous or promising locations. Decision-making and strategic planning can then be influenced by this knowledge.

In exploring the interplay between corporate income tax (CIT) and various financial metrics within a banking context, a series of Pearson product-moment correlation coefficients analyses were conducted.



**5. Figure. Overall ROA, PBT, Lending, Liquidity, CIT , leverage (debt to Equity ratio) and CIT leverage (debt to assets ratio)**

Source: own calculation

The 5. Figure provided represents the overall variables and years. ROA, PBT, Lending, Liquidity, CIT, leverage (debt to Equity ratio) and CIT leverage (debt to assets ratio) for a bank over the years 2009 to 2021.

**4.2. The Relationship between CIT and Lending**

**4. Table. The Relationship between CIT and Lending**

		CIT	Lending
CIT	Pearson Correlation	1	.754**
	Sig. (2-tailed)		.003
	N	13	13
Lending	Pearson Correlation	.754**	1
	Sig. (2-tailed)	.003	
	N	13	13

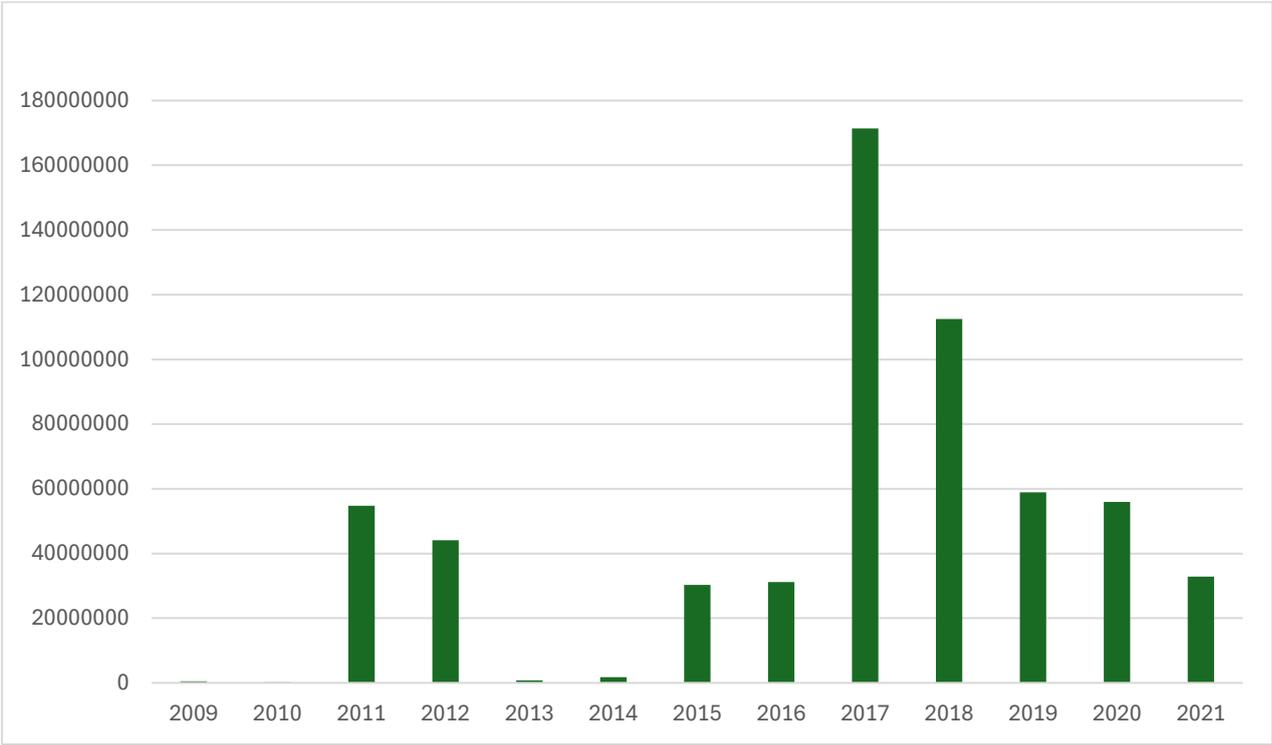
\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: own calculation

In pursuing the answer of the first research question, a further correlational analysis was conducted which aimed at exploring the impact of CIT on lending activities (4 Table). A strong positive correlation was identified,  $r = .754$ ,  $n = 13$ ,  $p = .003$ . This indicates that banks tend to increase their lending as CIT increases, suggesting a strategic response to maintain or enhance revenue streams. The correlation coefficient measures the strength and direction of the linear relationship between two variables. For CIT and Lending, the correlation coefficient is 0.754. This indicates a strong positive correlation between CIT and Lending. The significance level indicates the probability of observing such a correlation coefficient if there were no true correlation in the population. In this case, the significance level for both CIT and Lending is 0.003, which is less than 0.01.

This means that the correlation observed is statistically significant at the 0.01 level (2-tailed) The sample size for both CIT and Lending is 13. The correlation coefficient of 0.754 suggests a strong positive linear relationship between CIT and Lending. This means that as CIT increases, Lending also tends to increase, and vice versa. The statistically significant p-value (0.003) indicates that

this correlation is unlikely to be due to random chance alone. Therefore, we can have more confidence that there is a true relationship between CIT and Lending in the population from which this sample was drawn. Overall, based on this analysis, there appears to be a significant positive relationship between Corporate Income Tax and Lending. However, it is important to note that correlation does not imply causation, so further analysis would be needed to determine the underlying factors driving this relationship.



**6. Figure. Lending amounts from 2009 to 2021**

Source: own calculation

The 6. Figure shows periods of both growth and decline, reflecting high volatility in lending over these years.

### 4.3. The Relationship between CIT and leverage

5. Table. The Relationship between CIT and leverage

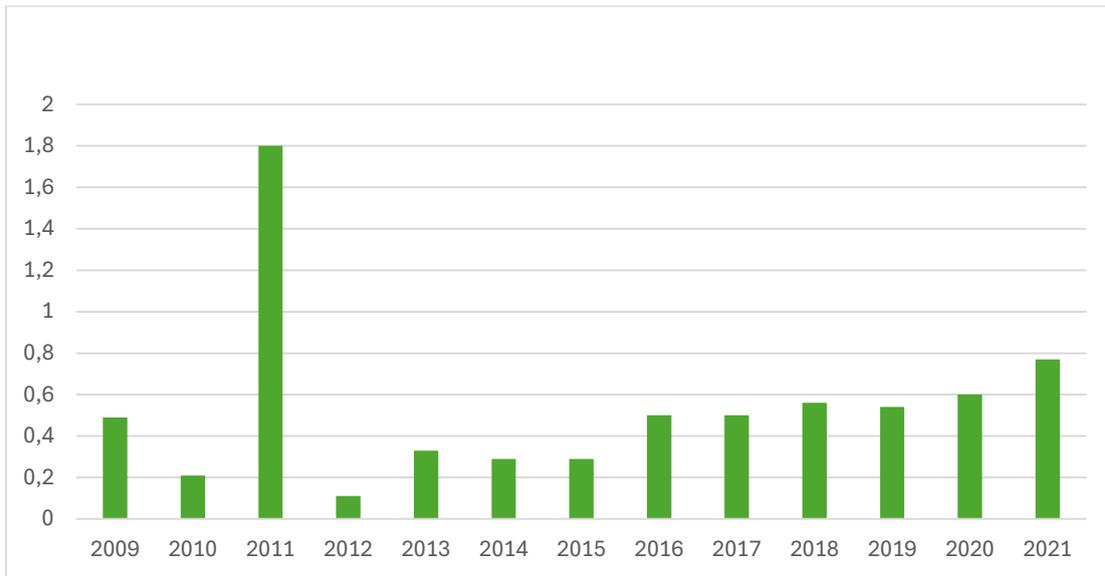
		CIT	DTE	DTA
CIT	Pearson Correlation	1	.845**	.839**
	Sig. (2-tailed)		.000	.000
	N	13	13	13
DTE	Pearson Correlation	.845**	1	.995**
	Sig. (2-tailed)	.000		.000
	N	13	13	13
DTA	Pearson Correlation	.839**	.995**	1
	Sig. (2-tailed)	.000	.000	
	N	13	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: own calculation

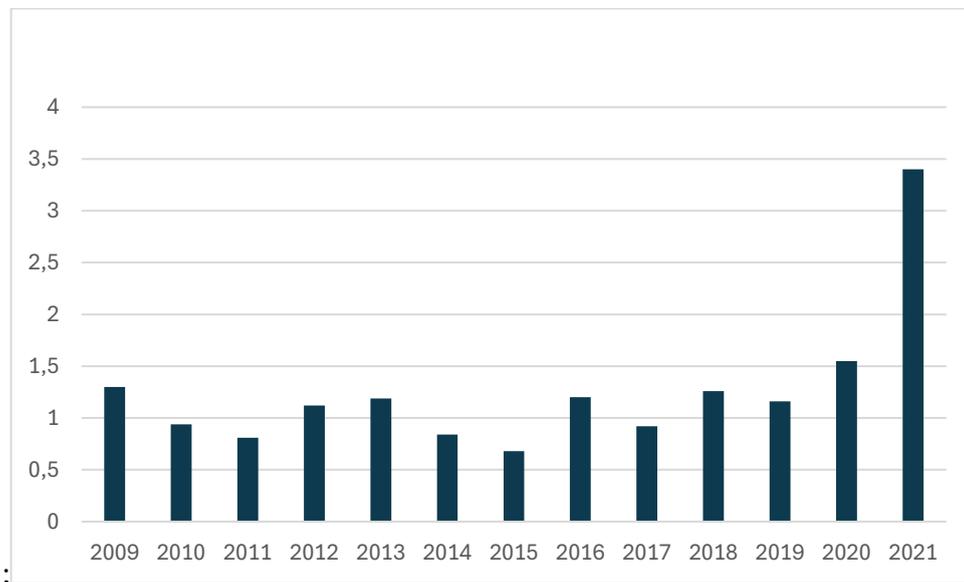
The relationship between corporate income tax (CIT) and leverage, analyzed through two separate variables—debt to equity and debt to assets—utilized the Pearson product-moment correlation coefficient ( 5 Table). For debt to equity, there was a strong, positive correlation with CIT,  $r = .845$ ,  $n = 13$ ,  $p < .0005$ , indicating higher corporate income tax levels are associated with increased debt to equity ratios. Similarly, for debt to assets, a strong, positive correlation with CIT was observed,  $r = .839$ ,  $n = 13$ ,  $p < .0005$ , suggesting higher corporate income tax levels correlate with increased debt to assets ratios. Both leverage measurements exhibit strong positive associations with CIT, highlighting the sensitivity of leverage ratios to changes in corporate income tax, albeit with slightly different magnitudes in their correlations. There is a strong positive correlation between CIT and DTE. This suggests that as Corporate Income Tax increases (or decreases), Leverage also tends to increase (or decrease) accordingly.

There is a strong positive correlation between CIT and DTA. This indicates that as Corporate Income Tax increases (or decreases), Leverage also tends to increase (or decrease) correspondingly as well.



**7. Figure. Leverage (debt to equity ratio) for a bank from 2009 to 2021**  
 Source: own calculation

The 7. Figure provided shows the leverage (debt to equity ratio) for the banks from 2009 to 2021. The leverage ratio data from 2009 to 2021 shows initial volatility followed by stabilization. This suggests that the bank has managed its debt levels more conservatively in recent years



**8. Figure. Leverage (debt to assets ratio) for a bank from 2009 to 2021**  
 Source: own calculation

The 8. Figure provided represents the leverage (debt to assets ratio) for a bank over the years 2009 to 2021.

#### 4.4. The Relationship between CIT and Liquidity

**6. Table. The Relationship between CIT and Liquidity**

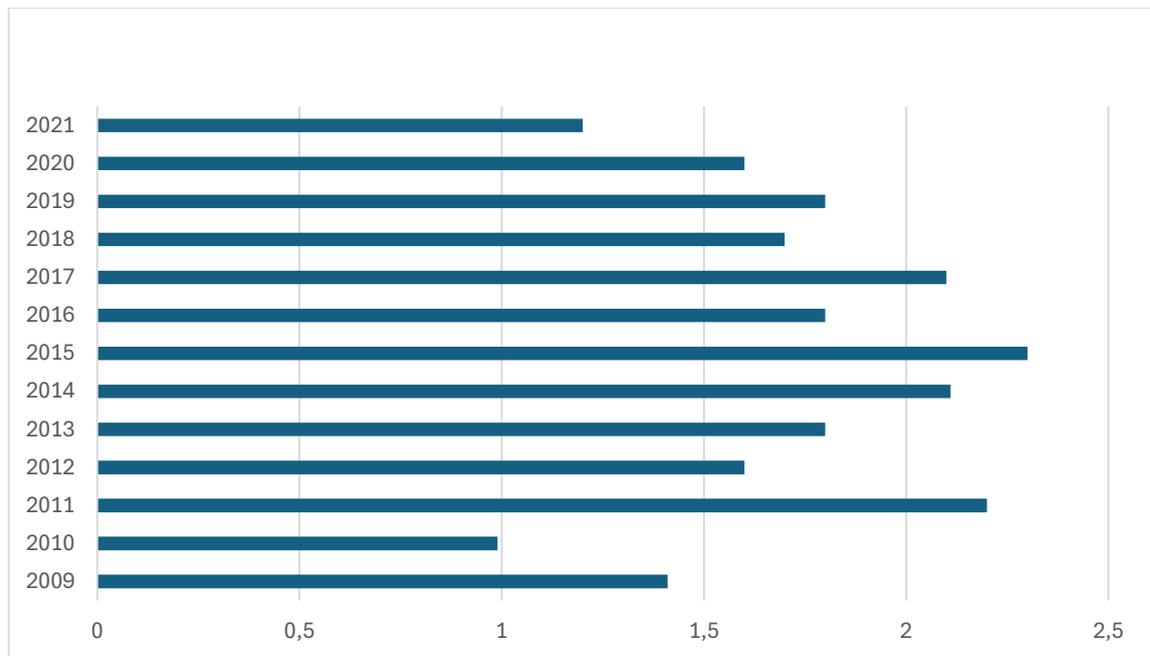
		CIT	Liquidity
CIT	Pearson Correlation	1	.669*
	Sig. (2-tailed)		.012
	N	13	13
Liquidity	Pearson Correlation	.669*	1
	Sig. (2-tailed)	.012	
	N	13	13

\*. Correlation is significant at the 0.05 level (2-tailed).

Source: own calculation

Furthermore, analysis of the relationship between CIT and liquidity (6. Table) revealed a moderate positive correlation,  $r = .669$ ,  $n = 13$ ,  $p = .012$ . This suggests that higher CIT levels contribute to increased liquidity, providing insights into how taxation influences banks' operational flexibility. The correlation coefficient between CIT and liquidity is 0.669. this indicates a positive correlation between CIT and liquidity. Significance level: the p-value associated with the correlation coefficient is 0.012. Since this p-value is less than the conventional significance level of 0.05, we conclude that the correlation between CIT and liquidity is statistically significant.

The positive correlation coefficient (0.669) suggests that there is a tendency for CIT and liquidity to move together in the same direction. in simpler terms, as CIT increases (or decreases), liquidity tends to increase (or decrease) as well. The statistically significant p-value indicates that this observed correlation is unlikely to have occurred by chance alone, suggesting a meaningful relationship between CIT and liquidity in this dataset. A sample size of 13 observations, indicating the number of data points used to calculate the correlation coefficient. Significance level note: the asterisk next to the correlation coefficient and significance level indicates that the correlation is significant at the 0.05 level (2-tailed). This means that the probability of observing such a strong correlation (or stronger) between CIT and liquidity, assuming no true relationship exists in the population, is less than 5%. based on this analysis, there appears to be a statistically significant positive correlation between CIT and liquidity in the dataset. So further analysis would be needed to determine the underlying factors driving this relationship.



**9.Figure. Liquidity ratios for a bank from 2009 to 2021**

Source: own calculation

The 9. Figure provided consists of annual liquidity ratios for a bank from 2009 to 2021.

#### 4.5. The Relationship between CIT and Return on assets

7. Table: The Relationship between CIT and Return on assets

		CIT	ROA
CIT	Pearson Correlation	1	.839**
	Sig. (2-tailed)		.000
	N	13	13
ROA	Pearson Correlation	.839**	1
	Sig. (2-tailed)	.000	
	N	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: own calculation

To answer the four-research question, the analysis commenced with the examination of the relationship between Corporate Income Tax (CIT) and Return on Assets (ROA), utilizing the Pearson product-moment correlation coefficient. A significant, strong positive correlation was found,  $r = .839$ ,  $n = 13$ ,  $p < .0005$ , suggesting that higher levels of CIT are associated with higher levels of ROA.

The Pearson correlation coefficient measures the strength and direction of the linear relationship between two variables, ranging from -1 to 1. In this case, the correlation coefficient between CIT and ROA is 0.839. The significance level indicates the probability of observing such a strong correlation in a sample if there were no true relationship in the population. Here, the significance level is very low, with a value of 0.000, meaning the correlation is statistically significant. With a correlation coefficient of 0.839 and a significance level of 0.000, we can interpret this as a strong positive correlation between CIT and ROA. In simpler terms, as CIT increases, ROA tends to increase as well, and vice versa. This suggests that there may be a relationship between the amount of cash income tax paid and the return on assets generated by a company. Strength of correlation coefficient of 0.839 indicates a very strong positive relationship between CIT and ROA. This implies that changes in CIT are highly associated with changes in ROA. While a strong correlation suggests a relationship between the two variables, it does not imply causation. In other words, paying cash income tax does not necessarily cause a higher or lower return on assets. Other factors could be influencing both CIT and ROA simultaneously.

Overall, this analysis suggests that there is a significant and strong positive relationship between cash income tax and return on assets. Further research and analysis would be needed to understand the underlying factors driving this relationship and whether it holds true across different contexts or industries.

Regarding the last research question, further investigation into the relationship between CIT and Profit Before Tax (PBT) also revealed a significant positive correlation,  $r = .708$ ,  $n = 13$ ,  $p = .007$ . This demonstrates the notion that increased CIT levels are linked with heightened profitability before taxation.

**Correlation Coefficient:** The Pearson correlation coefficient measures the strength and direction of the linear relationship between two variables. In this case, both the correlation coefficient when CIT is the independent variable (0.708) and when PBT is the independent variable (0.708) are quite high.

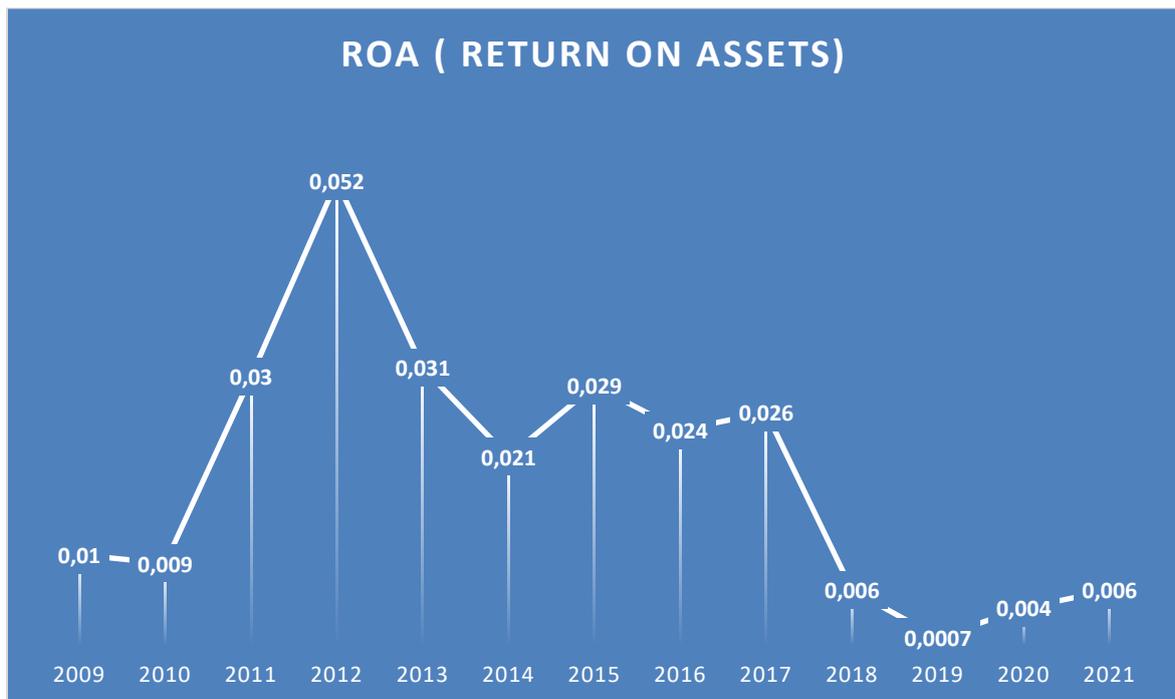
**Significance Level:** The significance level (Sig.) indicates the probability of observing such a strong

correlation by chance alone. A significance level of 0.007 suggests that there is only a 0.7% chance of observing this correlation if there were no true relationship between CIT and PBT in the population.

**Direction of Relationship:** Since both correlation coefficients are positive, it indicates a positive linear relationship between CIT and PBT. This means that as CIT increases, PBT tends to increase as well, and vice versa.

**Strength of Relationship:** The correlation coefficient of 0.708 suggests a strong positive linear relationship between CIT and PBT. This means that changes in CIT are likely to be accompanied by corresponding changes in PBT, and the relationship between the two variables is consistent.

In summary, based on this analysis, there appears to be a significant and strong positive linear relationship between Corporate Income Tax (CIT) and Profit Before Tax (PBT). This implies that changes in CIT are associated with corresponding changes in PBT for the observed data.



**10. Figure. Return on Assets (ROA) from 2009 to 2021**

Source: own calculation

The 10. Figure displays the Return on Assets (ROA) for a bank from the years 2009 to 2021. ROA is a financial metric that shows the percentage of profit a company earns.

#### 4.6. The Relationship between CIT and PBT

#### 8. Table. The Relationship between CIT and PBT

		CIT	PBT
CIT	Pearson Correlation	1	.708**
	Sig. (2-tailed)		.007
	N	13	13
PBT	Pearson Correlation	.708**	1
	Sig. (2-tailed)	.007	
	N	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

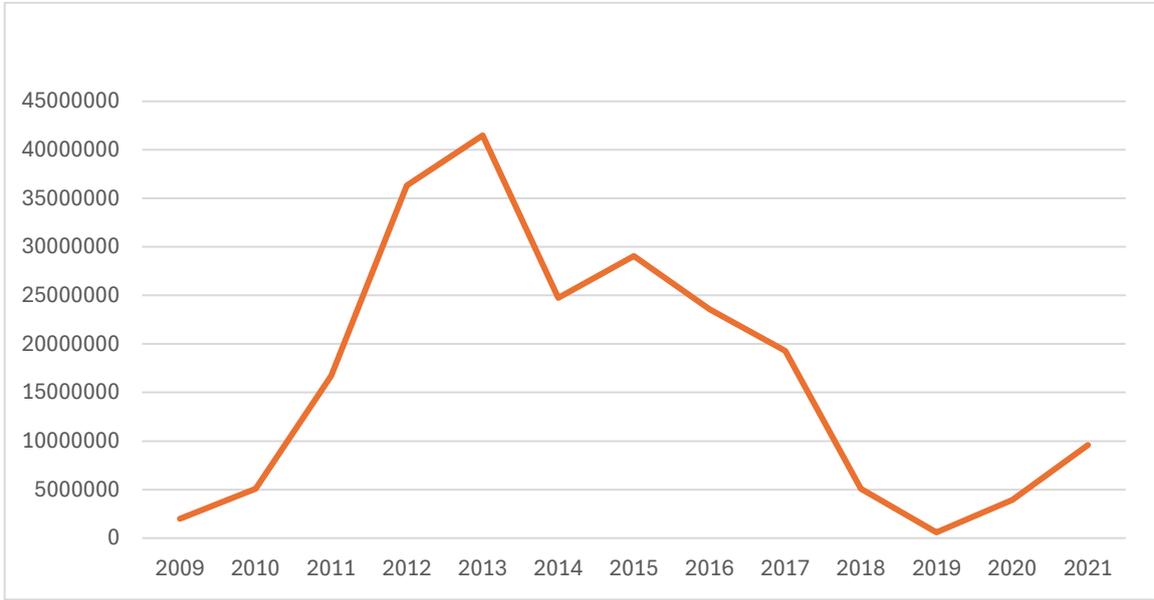
Source: own calculation

Regarding the last research question, further investigation into the relationship between CIT and Profit Before Tax (PBT) also revealed a significant positive correlation (8. Table),  $r = .708$ ,  $n = 13$ ,  $p = .007$ . This demonstrates the notion that increased CIT levels are linked with heightened

profitability before taxation.

Both the correlation coefficient when CIT is the independent variable (0.708) and when profit before tax is the independent variable (0.708) are quite high.

The significance level indicates the probability of observing such a strong correlation by chance alone. A significance level of 0.007 suggests that there is only a 0.7% chance of observing this correlation if there were no true relationship between CIT and PBT in the population. Direction of Relationship: Since both correlation coefficients are positive, it indicates a positive linear relationship between CIT and PBT. This means that as CIT increases, PBT tends to increase as well, and the opposite. The correlation coefficient of 0.708 suggests a strong positive linear relationship between CIT and PBT. This means that changes in CIT are likely to be accompanied by corresponding changes in PBT, and the relationship between the two variables is consistent. Based on this analysis, there appears to be a significant and strong positive linear relationship between Corporate Income Tax (CIT) and Profit Before Tax (PBT). This implies that changes in CIT are associated with corresponding changes in profit before tax for the observed data.



**11. Figure. Profit Before Tax (PBT) for a bank from the year 2009 to 2021**  
Source: own calculation

The 11. Figure shows the Profit Before Tax (PBT) for a bank from the year 2009 to 2021

## 4.7. Correlations

### 9. Table: Correlations

Source: own calculation

		Return on Assets	Profit before tax	Lending	Liquidity	DTE	DTA
CIT	Pearson Correlation	.839**	.708**	.754**	.669*	.845**	.839**
	Sig. (2-tailed)	.000	.007	.003	.012	.000	.000
	N	13	13	13	13	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Source: own calculation

## 4.8. Discussion

In this dissertation, several financial measures, such as corporate income tax, return on assets, profit before taxes, lending, liquidity, debt-to-equity, and debt-to-asset ratios, are analyzed inside a dataset. By highlighting each metric's range, central tendency, and variability, it sheds light on the dataset's financial situation. Interestingly, some measurements show little variability and very constant averages, while others show notable variations, suggesting different financial practices between organizations. Gaining an understanding of these measures can help with risk assessment, industry trends, and decision-making on debt management, investments, and strategic planning. In the end, this thorough examination emphasizes how crucial it is to use both quantitative and qualitative insights to successfully navigate the financial environment.

The analysis shows a significant and strong positive correlation between CIT and Return on assets. This means that as Corporate Income Tax increases, Return on Assets tends to increase as well. The strong statistical significance suggests that this relationship is unlikely to be a result of random chance. However, it is important to remember that correlation does not imply causation. Other factors beyond CIT may influence return on assets. Like CIT and ROA, there is a significant positive correlation between CIT and PBT. As CIT levels rise, Profit Before Tax tends to increase.

As with ROA, caution should be exercised in inferring causation from correlation alone. The analysis suggests a strong positive correlation between CIT and Lending, indicating that as CIT increases, banks tend to increase their lending activities.

The statistically significant p-value supports the existence of a true relationship, but causal relationship cannot be assumed. Other factors like economic conditions and regulatory policies may also influence both CIT and lending activities. There is a statistically significant positive correlation between corporate income tax and liquidity, suggesting that as corporate income tax levels vary, liquidity tends to change accordingly.

Both debt to equity and debt to assets show strong positive correlations with corporate income tax, indicating that changes in CIT are associated with changes in leverage ratios.

The very high correlation coefficients and significant p-values support the strength of these relationships.

The correlational analyses, the relationships between Corporate Income Tax (CIT) and two financial metrics, Return on Assets (ROA) and Profit Before Tax (PBT), within a banking context were examined. The analyses were conducted using Pearson product-moment correlation coefficients, providing insights into the strength, significance, and directionality of these relationships. For the first research question, the correlation analysis revealed a significant and strong positive relationship between CIT and ROA ( $r = .839$ ,  $n = 13$ ,  $p < .0005$ ). This indicates that higher levels of CIT are associated with higher levels of ROA. The statistical significance ( $p < .0005$ ) suggests that this relationship is unlikely to have occurred by random chance, further supporting the robustness of the findings. It is important to note that correlation does not imply that while a strong statistical relationship exists between CIT and ROA, other factors may influence this relationship. The sample size for both CIT and ROA were 13, indicating enough observations for each variable. The analysis indicates a strong positive linear relationship between CIT and ROA, suggesting that changes in corporate income tax are closely associated with changes in return on assets. Regarding, the correlation analysis also revealed a significant positive

relationship between CIT and PBT ( $r = .708$ ,  $n = 13$ ,  $p = .007$ ). This indicates that increased CIT levels are linked with heightened profitability before taxation. The statistical significance ( $p = .007$ ) supports the notion that this relationship is unlikely to be due to random chance. The sample size for both CIT and PBT was 13, indicating an adequate number of observations for each variable. The positive sign of the correlation coefficient (0.708) indicates a positive relationship between CIT and PBT, meaning that as CIT increases, PBT tends to increase as well, and conversely. In conclusion, both correlational analyses suggest significant and positive associations between Corporate Income Tax and the financial metrics of Return on Assets and Profit Before Tax within the context of the banking data. These findings contribute to understanding the interplay between CIT and financial performance metrics within the banking sector, highlighting potential implications for financial decision-making and strategic planning. However, further research is necessary to explore the underlying mechanisms driving these relationships and to assess their generalizability across different contexts. This indicates a strong positive correlation between Corporate Income Tax (CIT) and Lending activities. The value of 0.754 suggests that as CIT increases, Lending also tends to increase, and conversely. The positive sign indicates that when one variable increases, the other tends to increase as well. The significance level, or p-value, indicates the probability of observing such a correlation coefficient if there were no true correlation in the population. In this case, the p-value of 0.003 is less than 0.01, which is typically used as a threshold for statistical significance. This means that the observed correlation is unlikely to be due to random chance alone. The sample size represents the number of observations in the dataset used for the analysis. In this case, the sample size for both CIT and Lending is 13. The strong positive correlation suggests that as CIT increases, banks tend to increase their lending activities. This can be interpreted as a strategic response by banks to maintain or enhance their revenue streams in the face of changes in CIT. The statistically significant p-value indicates that there is confidence in the existence of a true relationship between CIT and Lending in the population from which this sample was drawn. It is important to note that correlation does not imply causation. While the analysis

shows a strong positive relationship between CIT and Lending, it does not necessarily mean that changes in CIT directly cause changes in lending activities, or the opposite. There could be other factors at play that influence both CIT and lending activities, such as economic conditions, regulatory policies, market demand for loans, etc. Further analysis would be needed to explore these potential causal factors and better understand the underlying mechanisms driving the relationship between CIT and Lending. In summary, the analysis suggests a significant positive relationship between CIT and Lending, but it is crucial to exercise caution in inferring causality and to explore additional factors that may be influencing this relationship. The positive correlation coefficient suggests that there is a tendency for CIT and liquidity to move together in the same direction. As CIT levels increase or decrease, liquidity tends to increase or decrease as well. This provides valuable insights into how taxation influences banks' operational flexibility. It is crucial to note that correlation does not imply causation. While the analysis reveals a statistically significant positive correlation between CIT and liquidity, further investigation is necessary to determine the underlying factors driving this relationship. Other variables or external factors not accounted for in the current analysis could be influencing both CIT and liquidity simultaneously. Factors such as economic conditions, regulatory changes, interest rates, and industry-specific dynamics could confound the relationship between CIT and liquidity. Accounting for these variables in future analyses could provide a more comprehensive understanding of the relationship. While the analysis demonstrates a statistically significant positive correlation between CIT and liquidity, further research is needed to explore the underlying mechanisms and potential confounding factors influencing this relationship. A strong positive correlation between Corporate Income Tax (CIT) and leverage in the banking industry, suggesting that changes in CIT tend to coincide with changes in leverage. However, it also points out a seemingly redundant correlation between leverage and itself, which may indicate data issues or a lack of clarity in the analysis. While these findings offer valuable insights, further research is needed to fully understand the underlying mechanisms and potential confounding variables influencing these relationships.

#### 4.9. SUMMARY OF HYPOTHESES:

H1: There is a significant relationship between corporate income tax and lending. - This hypothesis is accepted, as there is a significant strong positive correlation between corporate income tax (CIT) and lending ( $r = .754$ ,  $p = .003$ ).

H2: There is a significant relationship between corporate income tax and leverage in Kurdistan / Iraq.

This hypothesis is accepted, as there are significant strong positive correlations between corporate income tax (CIT) and both debt to equity ( $r = .845$ ,  $p < .0005$ ) and debt to assets ( $r = .839$ ,  $p < .0005$ ).

H3: There is a significant relationship between corporate taxes and bank liquidity choice in Kurdistan / Iraq

This hypothesis accepted, as there is a significant moderate positive correlation between corporate income tax (CIT) and liquidity ( $r = .669$ ,  $p = .012$ ).

H4: There is a significant relationship between corporate income tax and return on assets in Kurdistan / Iraq.

This hypothesis is accepted, as there is a significant, strong positive correlation between corporate income tax (CIT) and return on assets (ROA) ( $r = .839$ ,  $p < .0005$ ).

H5: There is a significant relationship between corporate income tax and profit before tax in Kurdistan / Iraq.

This hypothesis is accepted, as there is a significant positive correlation between corporate income tax (CIT) and profit before tax (PBT) ( $r = .708$ ,  $p = .007$ )

Overall, based on the analysis provided, all the hypotheses regarding the relationships between CIT and various financial indicators are accepted.



## **5. CONCLUSION AND RECCOMENDATIONS**

This part aims to provide a summary of the key findings from the study, as well as highlight the limitations and future research directions. The previous chapters have discussed the impact of taxation on the profitability of banks in Kurdistan, Iraq. The results have shed light on the significant role of tax on the performance of banks in the region. Additionally, the previous chapter has also highlighted the practical and managerial implications of the study. This chapter will begin by summarizing the main findings of the study, followed by a discussion of the limitations of the research. While the results of this study provide insights into the impact of taxation on bank profitability, there are certain limitations that should be acknowledged. Finally, the chapter will conclude by identifying possible avenues for future research in this field. The objective of this section is to provide a comprehensive understanding of the study's contributions to the literature, as well as to suggest potential research directions for future studies in the field of banking and taxation.

### **5.1 Conclusions**

In this study, I conducted a thorough analysis to explore the intricate relationship between Corporate Income Tax (CIT) and various financial indicators within the banking sector. My findings reveal compelling insights into how CIT impacts lending activities, leverage ratios, liquidity, return on assets (ROA), and profitability before taxation (PBT). Firstly, MY analysis uncovered a strong positive correlation between CIT and lending activities, suggesting that banks tend to increase their lending as CIT levels rise. Additionally, I observed significant positive correlations between CIT and leverage ratios, indicating that higher CIT levels are associated with increased debt to equity and debt to assets ratios.

Moreover, my investigation unveiled a moderate positive correlation between CIT and liquidity, implying that higher CIT levels contribute to enhanced operational flexibility within banks. Furthermore, I identified a robust positive correlation between CIT and both ROA and PBT,

suggesting that higher CIT levels are linked with increased profitability.

Overall, the analysis underscores the significant impact of CIT on various financial metrics within the banking sector. While the observed correlations provide valuable insights, it is crucial to note that correlation does not imply causation. Further research and analysis are warranted to elucidate the underlying mechanisms driving these relationships and to assess their generalizability across different contexts and industries.

By shedding light on the complex interplay between CIT and financial performance indicators, my study contributes to a deeper understanding of the implications of taxation policies on banking operations and profitability. This knowledge can inform policymakers, banking executives, and stakeholders in making informed decisions to optimize financial strategies and navigate regulatory landscapes effectively.

## **5.2 Research limitations**

While the correlational analyses conducted in this study offer valuable insights into the relationships between Corporate Income Tax (CIT) and various financial metrics within the banking context, it is important to acknowledge several limitations that may impact the generalizability and interpretation of the findings. The study's sample size was relatively small, with only 13 observations for each variable in some analyses. This limited sample size may restrict the generalizability of the findings to more comprehensive populations of banks or financial institutions. The correlational analyses conducted in this study were based on cross-sectional data, which provides a snapshot of relationships at a single point in time. As a result, causality cannot be inferred, and the direction of causality between CIT and financial metrics remains unclear. The study's limitations include a small sample size and reliance on cross-sectional data, restricting generalizability and preventing inference of causality between Corporate Income Tax (CIT) and financial metrics in the banking sector.

Findings are specific to banking and may not extend to other industries. Contextual factors like

economic conditions and regulatory environments were not considered, potentially influencing the observed correlations. The study overlooked broader aspects such as tax policies and macroeconomic factors, while its timeframe may have hindered capturing long-term trends. Future research should explore longitudinal data and broader contextual factors for a more comprehensive understanding.

The findings of this study are specific to the banking sector and may not be directly applicable to other industries or sectors. Additionally, the analysis does not account for contextual factors such as economic conditions, regulatory environments, or market dynamics, which could influence the relationships between CIT and financial metrics. While significant correlations were observed between CIT and various financial metrics, it is important to note that correlation does not imply causation. Other unobserved variables or external factors may be influencing both CIT and financial metrics simultaneously, and further research is needed to elucidate causal relationships. The study focused solely on examining the relationships between CIT and financial metrics within the banking sector. Other important aspects such as tax policies, regulatory frameworks, or macroeconomic factors were not considered in the analysis, limiting the scope of the findings. The study's timeframe may have limited the ability to capture long-term trends or changes in the relationships between CIT and financial metrics over time. Future research could benefit from longitudinal data analysis to provide a more comprehensive understanding of these dynamics.

### **5.3 Future Research Directions**

Future research should aim to address some of the limitations of this study, such as the limited sample size and the focus on only one region of Iraq. Based on the findings and limitations of the present study, several avenues for future research can be identified to further explore the relationships between Corporate Income Tax (CIT) and financial metrics within the banking sector: Conducting longitudinal studies over an extended period would allow researchers to track changes in CIT and financial metrics over time, providing insights into the dynamic nature of these

relationships and potential trends. Comparing the relationships between CIT and financial metrics across different countries and regulatory environments could provide valuable insights into the impact of tax policies on banking operations and financial performance in diverse contexts. Supplementing quantitative correlational analyses with qualitative research methods such as interviews or case studies could provide a deeper understanding of the mechanisms underlying the observed relationships and the influence of contextual factors. Investigating the impact of changes in tax policies or regulatory frameworks on CIT and financial metrics within the banking sector could help policymakers and industry stakeholders better understand the implications of tax reforms on financial performance and strategic decision-making.

Examining the macroeconomic factors that influence the relationships between CIT and financial metrics, such as interest rates, inflation, or economic growth, could provide a more comprehensive perspective on the interplay between taxation policies and banking operations. Comparing the relationships between CIT and financial metrics across different sectors, such as manufacturing, services, or technology, could highlight sector-specific dynamics and the varying impacts of tax policies on financial performance. Exploring the relationship between CIT and risk management practices within the banking sector could shed light on how taxation policies influence banks' risk-taking behavior and their ability to manage financial risks effectively.

Conducting sensitivity analyses to assess the robustness of the observed correlations to changes in model specifications or control variables could enhance the reliability and validity of the findings. Investigating the role of technological innovations, such as digital banking platforms or financial technologies (FinTech), in moderating the relationships between CIT and financial metrics could provide insights into the evolving landscape of banking operations. Considering the ethical and social implications of tax policies on banking operations and financial performance, including issues related to income inequality, corporate social responsibility, and sustainable development, could expand the scope of future research endeavors.

By addressing these future research directions, scholars and practitioners can deepen their

understanding of the complex interrelationships between taxation policies, banking operations, and financial performance, ultimately contributing to more informed policymaking and strategic decision-making within the banking sector.

#### **5.4 Managerial and Practical Implications**

Understanding the significant positive correlations between Corporate Income Tax (CIT) and various financial metrics can inform banks' tax planning and strategy development. Banks may consider adjusting their tax planning strategies in response to changes in CIT rates to optimize their financial performance metrics such as Return on Assets (ROA), Profit Before Tax (PBT), and liquidity. Banks can use the insights gained from the correlations between CIT and financial metrics to enhance their financial performance management practices. By monitoring CIT levels and their impact on key financial indicators, banks can better assess their overall financial health and make informed decisions to improve performance. The present study provides several practical and managerial implications for banking institutions and policymakers in the Kurdistan region of Iraq. The findings of this study reveal that the tax burden has a negative impact on the profitability of banks. Therefore, policymakers should consider implementing policies that aim to reduce the tax burden on banks. This could be achieved through the reduction of corporate tax rates, introducing tax exemptions, or providing tax credits. Moreover, the findings of this study highlight the importance of improving the asset quality of banks to enhance their profitability. Policymakers should encourage banks to adopt prudent lending practices and improve the creditworthiness of borrowers. This can be done through the introduction of credit rating systems, stricter lending guidelines, and regular monitoring of loan portfolios. Furthermore, the results of this study suggest that banks need to focus on improving their capital adequacy and liquidity levels to enhance their profitability. Banks should adopt risk-based capital adequacy standards and maintain sufficient capital and liquidity buffers to withstand adverse market conditions. Additionally, banks should adopt efficient asset-liability management practices to improve their liquidity levels.

The findings of this study also have practical implications for banks operating in the Kurdistan region. Banks should focus on improving their cost efficiency by adopting cost-cutting measures, such as reducing administrative expenses, improving operational efficiency, and rationalizing their branch network. This would help banks to reduce their operating costs and improve their profitability. Finally, the results of this study suggest that banks should adopt strategies to diversify their revenue streams. Banks should explore new business opportunities and diversify their loan portfolios by targeting different sectors and industries. Additionally, banks should focus on providing innovative and value-added products and services to their customers to improve their revenue streams.

## **6- NEW SCIENTIFIC RESULTS**

The findings presented provide several new scientific insights regarding the relationship between Corporate Income Tax (CIT) and various financial metrics such as lending activities, leverage, liquidity, Return on Assets (ROA), and Profit Before Tax (PBT). Here are the key scientific results:

### **1. Impact of Corporate Income Tax (CIT) on Lending activities:**

The research analysis reveals a strong positive correlation between corporate income tax and lending activities. As the corporate income tax increases, banks tend to increase their lending, indicating a strategic response to maintain or enhance revenue streams.

This suggests that taxation policies, specifically corporate income tax, can influence banking behavior and financial activities, shedding light on the interplay between fiscal policy and economic behavior within the banking sector.

### **2. Relationship Between Corporate Income Tax (CIT) and Leverage:**

The research identifies strong positive correlations between corporate income tax (CIT) and leverage metrics such as debt to equity and debt to assets ratios.

Higher CIT levels are associated with increased leverage, highlighting the sensitivity of leverage ratios to changes in corporate income tax.

This underscores the impact of tax policies on financial structures within corporations, indicating potential implications for risk management and financial decision-making.

### **3. Impact of Corporate Income Tax (CIT) on Liquidity:**

The study proved moderate positive correlation between corporate income tax (CIT) and liquidity is observed, suggesting that higher CIT levels contribute to increased liquidity.

This provides insights into how taxation policies affect banks' operational flexibility and liquidity management strategies, offering implications for regulatory policy and financial stability.

### **4. Correlation between Corporate Income Tax (CIT) and Return on Assets (ROA):**

The analysis reveals a significant, strong positive correlation between corporate income tax (CIT)

and ROA, indicating that higher CIT levels are associated with higher levels of ROA.

This suggests that the amount of cash income tax paid by companies may influence their profitability, highlighting the financial implications of tax policies on corporate performance.

**5.The relationship between Corporate Income Tax (CIT) and Profit before Tax (PBT) is examined:**

The study proved investigation demonstrates a significant positive correlation between corporate income tax (CIT) and Profit before tax (PBT), indicating that increased CIT levels are linked with heightened profitability before taxation.

This underscores the relationship between taxation and corporate profitability, providing insights into the financial effects of CIT on pre-tax earnings and corporate financial performance. Overall, these results contribute to the understanding of how CIT influences various aspects of financial behavior and performance within the banking sector and corporate entities. They emphasize the importance of tax policies in shaping economic decisions and outcomes, with implications for both financial institutions and policymakers.

## **7. SUMMARY**

The dissertation discusses the interplay relationship between taxation policies and bank profitability in the context of Kurdistan in Iraq. It emphasizes the significance of understanding how taxes impact bank operations and financial performance in a region experiencing notable economic growth. While previous studies have explored factors affecting bank profitability, there is a lack of research specifically addressing the effects of taxation in Iraqi Kurdistan. The study aims to fill this gap by analyzing tax policies, their influence on bank profitability, and potential strategies for mitigating negative impacts. Additionally, it explores how changes in corporate taxation affect various aspects of bank operations, including lending, leverage, liquidity, and return on assets. The research is crucial for informing policymakers, regulators, and banks in Kurdistan to make informed decisions and ensure the stability and growth of the banking sector. The research focuses on examining the impact of taxation on bank profitability in Iraq's Kurdistan, an area where this relationship has been underexplored in existing literature. The study identifies research gaps related to the specific effects of tax policies and rates on bank profitability in the region, as well as the unique challenges and opportunities presented by taxation in Kurdistan. It also aims to explore the interaction between taxation and other factors affecting bank profitability, such as liquidity management and customer satisfaction with electronic banking services. The problem statement emphasizes the significance of understanding how taxation affects bank profitability in Kurdistan, considering the region's economic diversification goals and the need for effective tax policies. Research objectives are defined to investigate various aspects of this relationship, including loan growth, liquidity choices, bank leverage, and return on assets in response to taxation. The study contributes to filling gaps in existing research by offering insights into the complex relationship between corporate taxes and bank operations, particularly in the context of Kurdistan's unique economic and regulatory environment. It aims to inform policymakers, regulators, and banking institutions in developing strategies to enhance the profitability and sustainability of banks in the region.

The research aims to investigate the impact of corporate taxes on the productivity of banks in Iraqi Kurdistan, focusing on various aspects such as loan growth, liquidity, leverage, and profitability. It seeks to determine correlations between tax rates and different banking operations. The study's contribution lies in providing empirical evidence and policy implications regarding the relationship between taxation policies and bank profitability in a region with unique economic circumstances. Methodologically, it may introduce innovative approaches for studying this relationship in the context of Iraqi Kurdistan's banking sector. The research findings are expected to have practical implications for banks, policymakers, and stakeholders in optimizing taxation policies to support banking sector growth and economic prosperity.

Interplay relationship between corporate taxes and various aspects of banking operations, including loan growth, leverage, liquidity, return on assets (ROA), and profit before tax. Drawing on contemporary research and theoretical perspectives, the study aims to develop hypotheses regarding the impact of corporate taxes on these key banking metrics within the context of Iraqi Kurdistan. The research synthesizes findings from existing literature on corporate taxation and its effects on business practices, emphasizing the importance of understanding how taxes influence decision-making processes in banks, particularly in regions with unique economic and regulatory environments. By examining prior studies and theoretical frameworks, the research identifies gaps in knowledge regarding the role of taxes in shaping bank operations and proposes hypotheses to address these gaps. Specifically, the study develops hypotheses related to the relationships between corporate income tax and various banking metrics, including lending, leverage, liquidity, return on assets, and profit before tax. These hypotheses are grounded in theoretical perspectives and empirical evidence from previous research, providing a foundation for further investigation into the impact of corporate taxes on banking operations in Iraqi Kurdistan. Overall, the theoretical framework and hypotheses development section of the research paper provide a comprehensive overview of the research objectives and questions, as well as the theoretical underpinnings and hypotheses guiding the study's investigation into the relationship between corporate taxes and bank

productivity in Iraqi Kurdistan.

The study adopts a quantitative approach to understand the impact of taxation on bank profitability in Kurdistan, Iraq. It will analyze financial data from the Bank of Kurdistan Iraq, focusing on corporate income tax and various financial performance indicators.

The research employs a quantitative research approach, likely using a specific sampling method to select a representative sample of banks or financial institutions, primarily from Kurdistan, Iraq. The sample characteristics include relevant financial data related to corporate income tax, return on assets, profit before tax, lending, liquidity, and leverage.

The study's identification strategy capitalizes on state-level bank income tax rate variations in Kurdistan, Iraq. It compares "treated" banks with varying tax rates to "untreated" banks with constant tax rates, using a comprehensive approach to address potential concerns related to state-level indicators and other confounding factors.

The sample consists of financial data from the Bank of Kurdistan Iraq over a specific period (2009–2021), focusing on single-state commercial banks to ensure relevance and strength of the findings.

The research utilizes prior studies and publicly available financial statements and reports from sources such as the Central Bank of Iraq, the Iraq Stock Exchange, and Cihan Bank for Islamic Investment and Finance.

The study aligns with the positivist research paradigm, emphasizing empirical observation, measurable phenomena, and establishing causal relationships through systematic observation and experimentation.

The research approach focuses on quantitative methods to empirically analyze the relationships between corporate income tax and various financial metrics to understand their interplay within the context of the Banks of Kurdistan.

The study aims to analyze the impact of taxation on bank profitability in Kurdistan, contributing to the existing body of knowledge in finance and taxation, with implications for policymakers, bank management, investors, and other stakeholders.

The study collects data through both qualitative methods (reviewing prior studies) and quantitative methods (analyzing financial reports and literature) to support its research hypotheses.

The analysis involves correlation analysis using SPSS version 26 to examine relationships between corporate income tax and financial performance indicators, with a focus on precision, consistency, and clarity in presenting findings through charts and graphs. A significant strong positive correlation ( $r = .754$ ,  $p = .003$ ) was found between CIT and Lending, indicating that as CIT increases, banks tend to increase their lending activities.

A significant, strong positive correlation ( $r = .839$ ,  $p < .0005$ ) was found between Corporate Income Tax (CIT) and Return on Assets (ROA), indicating that higher CIT levels are associated with higher ROA. A significant positive correlation ( $r = .708$ ,  $p = .007$ ) was found between CIT and Profit Before Tax (PBT), suggesting that increased CIT levels are linked with heightened profitability before taxation. A significant moderate positive correlation ( $r = .669$ ,  $p = .012$ ) was found between CIT and Liquidity, suggesting that as CIT levels increase or decrease, liquidity tends to increase or decrease as well. Strong positive correlations were found between CIT and both Debt to Equity ( $r = .845$ ,  $p < .0005$ ) and Debt to Assets ( $r = .839$ ,  $p < .0005$ ), indicating that as CIT increases or decreases, leverage also tends to increase or decrease accordingly. The study investigates the impact of Corporate Income Tax (CIT) on the profitability of banks in Kurdistan, Iraq. It highlights significant correlations between CIT and financial metrics like Return on Assets (ROA) and Profit Before Tax (PBT). However, it acknowledges limitations such as a small sample size and the inability to establish causation due to the cross-sectional nature of the data. Future research directions include longitudinal studies, comparisons across different countries and sectors, qualitative research methods, analysis of tax policy changes, examination of macroeconomic factors, and exploration of risk management practices and technological innovations in banking. Managerial and practical implications suggest that banks should adjust tax planning strategies, focus on improving asset quality, capital adequacy, and liquidity levels, adopt cost-cutting measures, and diversify revenue streams to enhance profitability. Overall, the

study contributes valuable insights into the interplay between CIT and financial performance metrics in the banking sector, highlighting the importance of considering taxation policies in financial decision-making. However, caution is advised in inferring causality, and future research should aim to elucidate the complex dynamics and potential causal mechanisms underlying this relationship. The study explores the impact of Corporate Income Tax (CIT) on different financial metrics within the banking sector and corporations. a summary of the findings:

**CIT and Lending Activities:** There's a strong positive correlation between CIT and lending activities, indicating that banks tend to increase lending as CIT rises, possibly to maintain or increase sources of income.

**CIT and Leverage:** Higher CIT levels are associated with increased leverage, as shown by metrics like debt to equity and debt to assets ratios. This highlights the sensitivity of leverage ratios to changes in corporate income tax, with implications for risk management.

**CIT and Liquidity:** Moderate positive correlation between CIT and liquidity suggests that higher CIT levels contribute to increased liquidity. This sheds light on how taxation policies affect banks' operational flexibility and liquidity management strategies.

**CIT and Return on Assets (ROA):** Higher CIT levels correlate with higher ROA, indicating that cash income tax paid by companies may influence their profitability. This underscores the financial implications of tax policies on corporate performance.

**CIT and Profit Before Tax (PBT):** There is a significant positive correlation between CIT and PBT, suggesting that increased CIT levels are linked with heightened profitability before taxation. This highlights the relationship between taxation and corporate profitability. Positive correlation between CIT and lending activities, leverage ratios, liquidity, return on assets (ROA), and profitability before taxation (PBT). Higher CIT levels are associated with increased lending, leverage, liquidity, ROA, and PBT.

**Research Limitations** Small sample size, cross-sectional data restrict generalizability and causality inference. Specific to the banking sector, not directly applicable to other industries.

Lack of consideration for contextual factors and long-term trends. Focus solely on CIT and financial metrics within the banking sector. Future Research Directions continuously studies to track changes over time. Comparison across countries and sectors for broader insights.

Qualitative methods to understand underlying mechanisms. Examination of tax policy changes on financial metrics. Analysis of macroeconomic factors' influence on CIT-financial metric relationships. Sensitivity analyses to ensure robustness. Exploration of technological innovations' impact on relationships. Consideration of ethical and social implications. Managerial and Practical Implications, Banks can adjust tax planning strategies based on CIT rates to optimize financial performance. Monitoring CIT levels can help banks assess financial health and make informed decisions. Policymakers should consider reducing the tax burden on banks to improve profitability. Banks should focus on improving asset quality, capital adequacy, and liquidity to enhance profitability. Cost-cutting measures, diversification of revenue streams, and innovation are recommended for banks to improve profitability.

## **APPENDICES:**

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## A2: DESCRIPTIVE STATICS

### *Statistics*

		Return		Profit before		Leverage		Leverage
		CIT	OnAssets	tax	Lending	Liquidity	DTE	DTA
N	Valid	13	13	13	13	13	13	13
	Missing	0	0	0	0	0	0	0
Mean		3.0000	7.0000	7.5385	6.8462	6.3846	5.7692	7.0000
Std. Deviation		.81650	3.89444	4.03351	4.05886	3.66375	3.13990	3.89444
Minimum		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximum		4.00	13.00	13.00	13.00	13.00	11.00	13.00

### A3: THE RELATIONSHIP BETWEEN CIT AND LENDING

		CIT	LENDING
CIT	PEARSON CORRELATION	1	.754**
	SIG. (2-TAILED)		.003
	N	13	13
LENDING	PEARSON CORRELATION	.754**	1
	SIG. (2-TAILED)	.003	
	N	13	13

\*\* . CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED).

#### A4: THE RELATIONSHIP BETWEEN CIT AND LEVERAGE

		CIT	DTE	DTA
CIT	PEARSON CORRELATION	1	.845**	.839**
	SIG. (2-TAILED)		.000	.000
	N	13	13	13
DTE	PEARSON CORRELATION	.845**	1	.995**
	SIG. (2-TAILED)	.000		.000
	N	13	13	13
DTA	PEARSON CORRELATION	.839**	.995**	1
	SIG. (2-TAILED)	.000	.000	
	N	13	13	13

\*\* . CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED).

## A5: THE RELATIONSHIP BETWEEN CIT AND LIQUIDITY

		CIT	LIQUIDITY
CIT	PEARSON CORRELATION	1	.669*
	SIG. (2-TAILED)		.012
	N	13	13
LIQUIDITY	PEARSON CORRELATION	.669*	1
	SIG. (2-TAILED)	.012	
	N	13	13

\*. CORRELATION IS SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED).

**A6: THE RELATIONSHIP BETWEEN CIT AND ROA**

		CIT	ROA
CIT	Pearson Correlation	1	.839**
	Sig. (2-tailed)		.000
	N	13	13
ROA	Pearson Correlation	.839**	1
	Sig. (2-tailed)	.000	
	N	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## A7: THE RELATIONSHIP BETWEEN CIT AND PBT

		CIT	PBT
CIT	Pearson Correlation	1	.708**
	Sig. (2-tailed)		.007
	N	13	13
PBT	Pearson Correlation	.708**	1
	Sig. (2-tailed)	.007	
	N	13	13

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## A8: CORRELATIONS

		PROFIT					
		RETURN	BEFORE				
		ON ASSETS	TAX	LENDINGLIQUIDITY	DTE	DTA	
CIT	PEARSON	.839**	.708**	.754**	.669*	.845**	.839**
	CORRELATION						
	SIG. (2-TAILED)	.000	.007	.003	.012	.000	.000
	N	13	13	13	13	13	13

\*\* . CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED).

\* . CORRELATION IS SIGNIFICANT AT THE 0.05 LEVEL (2-TAILED).