## REPUBLIC OF TURKEY ISTANBUL GELISIM UNIVERSITY INSTITUTE OF GRADUATE STUDIES

Department of Business Administration

# THE IMPACT OF HUMAN AND STRUCTURAL CAPITAL ON FINANCIAL PERFORMANCE: AN EMPIRICAL STUDY ON BANK OF BAGDAD AND GULF BANK

**Master Thesis** 

Saad Saleh Abbood ABBOOD

Supervisor
Asst. Prof. Dr. Melda KEÇECİ

Istanbul – 2022



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#### **DECLARATION**

I hereby declare that in the preparation of this thesis, scientific ethical rules have been followed, the works of other persons have been referenced in accordance with the scientific norms if used, there is no falsification in the used data, any part of the thesis has not been submitted to this university or any other university as another thesis.

Saad Saleh Abbood ABBOOD

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The thesis study of Saad Saleh Abbood ABBOOD titled as The Impact of Human And Structural Capital on Financial Performance: An Empirical Study on Bank of Bagdad and Gulf Bank has been accepted as MASTER THESIS in the department of Department of Business Administration by out jury.

Signature

Director Asst. Prof. Dr. Melda KEÇECİ

(Supervisor)

Member Signature

Assoc. Prof. Dr. Ebru Beyza BAYARÇELİK

Signature

Member

Asst. Prof. Dr. Alpaslan KELLECİ

#### **APPROVAL**

I approve that the signatures above signatures belong to the aforementioned faculty members.

... / ... / 20..

Signature

Prof. Dr. İzzet GÜMÜŞ

Director of the Institute

**SUMMARY** 

The goal of this study is to examine the role of human and structural capital

in attaining bank financial performance, using the Bank of Bagdad and the Gulf

Commercial Bank in Bagdad, Iraq as research population. Human capital and

structural capital are characterized as the intellectual ability of the human resource in

an organization. Human capital and structural capital impact the areas of producing

ideas related to the strategic and creative development of systems, and approaches of

the organization, so the organization can accomplish its objectives and achieve

positive outcomes. In this study, the effect of human and structural capital on

financial performance is investigated using a questionnaire.

In this study, a survey method was chosen to examine the impact of human

capital and structural capital on financial performance, and questionnaires were sent

to experienced bank employees.

With the correlation and regression analyzes, the hypotheses that human

capital and structural capital have significant and positive effects on banks' financial

performance were supported.

Key Words: Financial Performance, Human Capital, Structure Capital

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#### ÖZET

Bu çalışmanın amacı, insan sermayesi ve yapısal sermayenin bankaların finansal performansı üzerindeki etkisini incelemektir. Araştırmanın örneklemini, Bağdat Merkez Bankası ve Bağdat'ta yer alan Körfez Ticaret Bankası oluşturmaktadır.

İnsan sermayesi ve yapısal sermaye, bir işletmedeki insan kaynağının entelektüel yeteneği olarak karakterize edilmektedir. İnsan sermayesi ve yapısal sermaye, sistemlerin stratejik ve yaratıcı gelişimi ile ilgili fikir üretme alanlarını ve kuruluşun yaklaşımlarını etkiler, böylece kuruluşun hedeflerine ulaşması ve olumlu sonuçlar elde etmesi sağlanır.

Bu çalışmada, insan sermayesi ve yapısal sermayenin finansal performans üzerindeki etkisini incelemek için anket yöntemi seçilmiş ve alanlarında tecrübeli banka çalışanlarına hazırlanan anketler gönderilmiştir. Yapılan korelasyon ve regresyon analizleri ile, insan sermayesi ve yapısal sermayenin bankalar üzerinde finansal performans üzerinde önemli ve olumlu etkileri olduğu hipotezleri desteklenmiştir.

Anahtar Kelimeler: Finansal Performans, İnsan Sermayesi, Yapısal Sermaye

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#### INTRODUCTION

The goal of this study is to examine the role of human and structural capital in attaining bank financial performance, using the Bank of Bagdad and the Gulf Commercial Bank in Bagdad, Iraq as case studies. In the modern period, corporate organizations have transitioned to an environment characterized by change and intense dynamics, making it harder for banks to keep control. Aside from banks, financial institutions, organizations, and businesses, the knowledge economy, globalization, current production or services, strong rivalry, and the information and communication technology revolution are all in full swing. Banks and financial institutions have been pushed to adopt new organizational structures that are more flexible and centered on information and intangible assets, or so-called intellectual capital, in the creation of value as a result of the limitations imposed by these events. While the phrase "human capital" is one of the administrative issues covered by modern administrative literature, which was first emphasized by academics in the early 1990s, the literature has covered a wide range of subjects that have altered the conventional perspective of capital and profitability. The traditional definition of capital has changed. Human resources, especially human capital, are the true capital of today's businesses, including banks (Hussain & Hoque, 2002).

As a result, the financial institution's returns are not solely based on investments in fixed and current assets because intellectual capital returns are now seen as more important. As a result, financial institutions realized that conducting business without making appropriate inputs was no longer sufficient, particularly in today's more competitive business environments and the everchanging environment of the foundation. The mental ability, cognitive level, and information held by a subset of the organization's resources who are highly knowledgeable, intellectually gifted, and have extensive experience and are capable of analysis are referred to as human capital. Furthermore, they develop creative and innovative ideas in order to uncover value, provide exceptional goods, and get a competitive edge in the market (Al-Tamimia, 2020).

Human resources are one of the most important resources for banks and financial institutions since they determine whether a business succeeds or fails to accomplish its goals. However, not all human resources are regarded as resources with economic worth in general. Human resources with the ability to conceive, create, invent, and develop goods and services are in charge of adding value to the organization's products and services in order to maintain its competitive position. In addition to producing value for firms, human capital and structural capital are the most important aspects in determining company success and sustaining competitive advantage in the current economic era. Human capital, as well as structural capital, refers to the accumulation of knowledge, experience, skills, excellent relationships, and technical capabilities that provide institutions with a competitive advantage (Edvinsson and Malone, 2012).

As a result, in a highly competitive market, companies strive to achieve competitive advantages by delivering value to customers or gaining a competitive edge in managing human resources' intellectual and mental abilities and maximizing their human potential. Commercial banks and businesses that want to succeed in the long run will rely on their past experiences, methods, and skills. It is also an instrument in the development world, with real power to make sure the expert survival and consistency and the ownership of human capital and physical capital is a competitive advantage throughout its understanding and can invest this knowledge to enhance its financial results is unique and inaccessible knowledge offers a unique contribution to help financial firms increase productivity (Rahim, Hanum, 2011).

Financial performance is also important in all economic systems and units since it helps stakeholders make choices and allows businesses to compare present performance to historical performance. Financial performance is a method of evaluating a company's performance based on a thorough examination of its objectives and goals, as well as its resource allocation and utilization to meet the goals and plans put out (Streib, 2015). Banks and other financial institutions are crucial parts in the growth of Iraq's economy and business because the banking industry is the vehicle through which the recent amendment its monetary and financial policies, and it is the vehicle through which the exact version of its monetary and financial policies is implemented. This function is expressed in the banking sector's multiple banking activities, direct and indirect lines of credit, and other banking services that help in the resuscitation of

economic, financial, and commercial operations, since the banking sector is a crucial indicator of the economy's health (Zalan, Mohammed & Hassan, 2020).

Human and structural capital are described as the intellectual capacity of a specific class of human resources represented by areas of expertise capable of producing ideas related to the strategic and creative design of processes, actions, procedures, and strategies to ensure that the organization achieves its goals and achieves positive outcomes, necessitating this research. This study is divided into five chapters, the first of which is a literature review in which the main concepts on financial performance, such as financial performance elements, concepts, and measuring, are clarified. The second chapter will introduce the concepts of human and structural capital and their relations with financial performance. The third chapter will introduce the methodology of the study. In the fourth chapter, the analysis and the result of the study will be presented (Xu, & Wang, 2019).

The final chapter is dedicated to the discussion and its theoretical and practical implications. The final chapter will contain the concluding remarks; the limitations of the chosen methodology are discussed, and recommendations for future research in the area of investigation are given.

#### **CHAPTER ONE**

#### FINANCIAL PERFORMANCE

#### 1.1. The Concept of Performance

The concept of performance has garnered a lot of attention in recent decades, and it's now prevalent in almost every area of people's and organizations' actions. Performance is a subjective view of reality, which explains the idea's and technology's many skeptics. The global financial crisis, which has forced constant development in the field of influences overall, is also responsible for the different research on the topic of global performance (Hermawan, Hariyanto, & Biduri, 2020).

Despite the fact that the word "business performance" is commonly used in academic literature, it is rarely defined. Due to the wide range of concepts used to describe performance, the presence of a misunderstanding of this phrase is getting increasingly challenging. As a result, terms such as efficiency, productivity, performance, economic capacity, profitability, and competitiveness are routinely employed to describe organizational performance (Wholey, 1996, 144).

Unambiguously defining the idea of performance has become extremely relevant from this perspective. In the mid-nineteenth century, the term "performance" was first employed to describe the outcomes of sports competitions. The idea of performance evolved in the twentieth century, resulting in a set of criteria aimed at capturing the whole meaning of what is seen through performance. Performance at the time was not related to specific goals. Because an organization's mission is difficult to define exactly and is getting increasingly numerous, performance is becoming increasingly difficult to assess as a relative statistic (Didier, 2002, 67).

#### 1.1.1. Scope of Performance and Financial Performance

The idea of "outcome," "achieved aim," and "quality," as explained in English and Romanian and other dictionaries, is more important than the economic reflections of "efficiency" and "effectiveness." A result gained by someone in an athletic contest; a noteworthy achievement in an area of activity;

the best result obtained by a technological system, a machine, a gadget, etc. According to the Romanian Dictionary, the term "performance" originated in the mechanical and sporting industries before developing into the best result achieved by a technical system, a machine, a gadget, or other devices. This means that only a few entities, those with the highest outputs, will be able to attain high performance. Performance is not tied to a certain outcome, but a one-of-a-kind one. First, the findings were significantly better than those obtained previously. First, the results were superior to those obtained by others, and third, the outcomes differed from the clearly stated goals, resulting in good acceptance. Because of its subjective nature, the concept of performance has taken on a variety of interpretations. In the literature, numerous publications or research define the definition of performance concerning environmental indicators (Acharya, 2009, 72).

According to Didier Noyé (2002), performance is defined as fulfilling the objectives that were given to you in the context of corporate future views. Performance, in his perspective, rather than a mere finding of an outcome, is the result of a comparison between the outputs and the objectives. This explanation is a little unclear because the outputs and the objectives of each sector differ greatly (Moh'd., Jamaludin, & Ibrahim ,2020).

Michel, Bates, and Holton (1995) describe performance as future-oriented, based on a causal model that relates components and production, and designed to express the unique qualities of each organization and individual. They consider a business to be successful if it attains the management coalition's objectives rather than whether it has already reached them. As a result, performance is influenced by both capacity and the future. Michel Lebas recognized the distinction between performance and being a preformat. (Michel Lebas, 2002). Typically, performance is assessed by a measurable outcome that is better than expected or projected based on prior performances. We can say that the term "performance" always has a positive meaning. Performance refers to prior results and may include both favorable and unfavorable ones (Van Caenegem, 2002).

Performance from the social view constructs a reality that exists only in humans' minds if it exists at all, rather than an objective reality that can be evaluated and judged. Components, products, consequences, and impact are all examples of performance, which may also be connected to the economy, efficiency, effectiveness, cost-effectiveness, or equity.

Performance, according to Whooley (1996), is subjective and interpretative, not least since it is related to cost lines, highlighting the concept's ambiguity. The performance of an organizational system, according to Rolstadas, Saunders, and Slywotzky (1998), is a multifaceted relationship including seven performance criteria that must be met: effectiveness, efficiency, quality, productivity, work quality, and profit-making ability. The accomplishment of the criteria stated above, which might be considered performance objectives, is directly connected to performance. According to Rolstadas, a clear meaning for the performance can't be exactly determined.

Performance is based on seven performance parameters that are difficult to describe. Faloye and Asiri, (2014) identified three performance governance goals or objectives based on the concept of performance (Sanchez, Elena, 2006).

First and foremost, each entity's performance should be assessed in the context of the environment in which it operates. For example, a company's performance should be measured in the marketplaces where it operates rather than in areas unrelated to its activities.

Second, performance is always linked to one or more objectives set by the entity whose performance is being assessed. As a result, internal objectives and targets, rather than those set by external groups, are used to assess a company's performance.

Finally, performance is an expression of the most significant and distinguishable features.

According to Folan's hypothesis, the environment, the objectives to be achieved, and the significant and recognizable factors all influence performance. Folan uses a range of definitions for the concept of performance since it must be assessed and measured from a variety of angles.

Performance should be measured in terms of action efficiency and efficacy. This quantification can be expressed in both qualitative and quantitative terms. Efficiency and effectiveness are intrinsically related to performance. According to Neely and other researchers, performance is something that a person leaves behind and exists outside of the specified purpose. Didier believes

that performance may be assessed at the individual or organizational level. It is regarded as an understanding of the achieved results (Smriti & Das, 2018).

We can discuss the definition's soundness on a micro level and its ambiguity on a macro level. According to Cheng, (1993), performance should be defined as the total of work impacts. Because this definition is the most closely related to the organization's strategic goals, customer happiness, and financial contributions. Performance must consider both inputs (labor) and outputs. Performance on this site is defined as the total of the effects of work. When all efforts are directed toward attaining the set goals and ensuring customer satisfaction, performance is accomplished. It is, however, difficult to adequately measure objectives and customer satisfaction (De Nicolo, and Neely, 2002, 67).

Radebaugh, and Gray (2002) provide a more complete definition of performance, which encompasses both behavior and outcomes. The performer's actions are what transform the performance of an abstract notion into tangible action. Behavioral outputs are outputs in and of themselves, not merely instruments for achieving certain ends.

They are the product of the physical and mental effort put in to complete tasks, and they may be assessed independently of the outcomes. As a result, the author defines performance in terms of behavior and outcomes. According to Mcleaney, & Atrill (2005), this is the mixed model of performance control, which includes goal formulation and analysis as well as skill levels and achievements. Radebaugh and Gray's definition (Radebaugh, and Gray, 2002) is ambiguous because it does not specify what type of outcome is meant or what exactly is meant by behavior; this is especially true because the definition refers to behavior emanating from the performer, which conjures up images of only certain types of behavior.

Enterprise performance is what helps to improve the cost-value pair, not only what helps to lower the cost or raise the value. The first step in translating the cost-value pair into tangible, pilotable pieces is to define how the company produces and will create value in broad terms. It is thus a question of defining "value" in light of future changes. Defining a strategy is the first step in designing the value of tomorrow. As a result, the first step is to transform the cost-value pair into strategic goals (Rolstadas, Saunders, 1997, 322).

Performance in the workplace refers to any item that seeks the achievement of major goals. The improvement of the cost-value pair, which leads to the generation of value, is characterized as performance for the enterprise. After all, factors, including equity, have been paid. A business is efficient if it can create economic value-added or positive value (Vidyarthi, ,2019).

According to Michel L., Bates R., and Holton E. (1995), performance is a multidimensional abstract notion whose assessment is dependent on several circumstances. Both enterprise and organizational performance can be used to describe an activity, a department, management, or a performer. It is critical, according to the researchers, to determine whether the measuring goal is to examine the effects of performance or the performing behavior. The disadvantage of this concept is that it lacks a grading system that may be used in a downward direction. Bates' broad definition of performance highlights its uncertain character, whose assessment is dependent on a range of circumstances (Vitalis, 2018).

Annick and Rolstadas (1997) fail to describe the notion of performance in a single way; therefore, they define it in three different ways:

Second, the performance was a success. Performance is not an item in and of itself. It differs depending on how businesses or performers are seen as successful.

Results are the outcome of an action. Only value is contained in this meaning. In the context of a process or activity, performance measurement is defined as an assessment of accomplished outcomes.

Action is what performance is all about. In this sense, performance is a method rather than a result that occurs at a specific point in time. This word is used in all areas of management (management control, general politics, human resources management). The performer is the one who succeeds in achieving their objectives. As a result, the goal or goal determines performance. When goals are varied, performance is multidimensional; performance is a subset of action; performance is subjective since it is the result of an operation, which by its subjective character implies approximating a reality to a desire (Annick, Rolstadas 1997, 348).

Annick and Rolstadas (1997) describe the performance as inextricably relationshiped to objectives as it seen in figure 1.1 below, which makes a coherent definition of the term problematic. As a result, attaining any objective or purpose demands a certain level of accomplishment. It's worth noting that the concept of performance can't be adequately defined because the objectives aren't classified by default. Performance, according to Bourguignon, can only be attained when certain goals are met (Xu, & Liu, 2020)

Budgetary process

Performance

resources

results

Figure 1 .1. Performance process

**Source:** (Annick and Rolstadas, 1997)

Chai, (2009) endorses the concept of including not just financial factors in the definition of public sector success but those also related to achieving environmental and social equality goals. This supports the necessity for a shift from the 3E (efficiency, effectiveness, and economic outcome) system to a 5E-type system (economics, efficiency, effectiveness, environment, and perceived equity).

According to Bartoli and Blatrix (2015), the idea of performance should be realized through aspects such as assessment, piloting, efficiency, effectiveness, and quality. There may be differences in approach to the notion of organizational performance from one author to the next, as well as from one country to the next, which is why we value the study's relevance and application in the practical interpretation and comprehension of the concept (Bartoli and Blatrix, 2015, 421).

Financial performance primarily represents business sector results that demonstrate the sector's overall financial health over time. It shows how well a company uses its resources to maximize shareholder value and profits. In the fields of finance and statistical inference, financial ratios are the most commonly used performance assessment. Financial ratios are the most common performance unit of measure used in the fields of finance and statistical inference.

A set of financial and non-financial performance measures is referred to as performance metrics (Ghalayini & Noble, 1996,88). Non-financial performance assessments that focus on long-term business success components including customer happiness, internal business processes, innovation, and learning that can lead to enhanced organizational performance are promoted by consultants and academics (Seo, & Kim, 2020).

Several studies have looked at the non-financial performance measuring methodologies used in the industrial sector. However, little is known about this issue in the financial industry, particularly in developing countries. Both financial and non-financial performance indicators are affected by institutional variables (coercive and normative pressure). Constraint is the most potent institutional mechanism influencing banks to employ performance metrics (Hussain, & Hoque, 2002, 171). The central bank's regulations and recommendations also influence the bank's performance. In the study, normative constraints from formal education and professional groups appear to be important institutional effects (DiMaggio & Powell, 1991, 109).

#### 1.2. Financial Performance Elements

#### 1.2.1. The profit zones

Market share used to be the most accurate indicator of profit and success. It represents the fundamental principles of the strategy. Google, Kodak, United Airlines, Ford, and a plethora of other firms did a fantastic job of gaining market share but lacked the profitability that came with it. Many of these firms have changed their strategic thinking regarding market share and profitability in

recent years, implementing substantial changes in their business models and finding success that had previously eluded them. The profitability of each business must be understood in the context of its surroundings. Even though Disney and Coca-Cola generate money in quite different ways, they are both part of a tiny set of firms that have become virtually customer-centric and profit-centric (Wholey, 1996).

Every five years, they change their business model, and they expect this to continue. Coca-Cola's strategy in the early 1980s was mostly that of a syrup manufacturer, with advertising distributed through franchise bottlers. Coke's profits were focused on two areas: vending machines and fountains, both of which the bottlers had access to but over which the business had little or no control.

Coke's corporate strategy in the United States had evolved into that of a "value chain manager" by the mid-1980s, with the firm gaining control of its bottlers, investing more in the fountain and vending machines, and eventually revamping the whole business model on a global scale. The Disney Company was in financial trouble in the mid-1980s because it was the industry's value creator (of materials and characters), while others recovered the bulk of that value. Disney began engaging in the system's retail component right away. As a result, Disney was able to create a completely integrated system, as well as numerous additional auxiliary businesses, as a result of this shift, allowing it to optimize the value and profitability of each piece of material produced (Pea, 2002).

General Electric (GE) is believed to have found a solution to the question of how manufacturers can make more money than anybody else. Because becoming the market share leader was the most profitable option in the early 1980s, GE's business strategy was built on the concept of being number one or going out. This was no longer the case by the mid-1980s, when GE's clients began to emphasize getting the best deal. The company's business model shifted to focus on not just gaining the largest market share but also increasing productivity (Mertins, Will, and Meyer, 2009).

#### **1.2.2** Causes factors

Even though some experts, consultants, and promoters claim that a single element is a key to increased performance, Capon, Farley, and Hoenig, (1990) have shown that no factor works alone. Many significant features from many research techniques tend to come together to yield outcomes that are better than average. They discovered that variances in financial performance could be explained by differences in the environment, plan, and organization, which may be broken down into structure, climate, and culture. "Environment" refers to a company's blend of market, transactional, and contextual factors, according to Capon (1990, 137), hence "environment" in their work refers to more than "green environment." The findings of a meta-analysis of existing empirical studies on financial performance, as well as Capon's empirical study, corroborate this conclusion (1990). The environment and strategy components had the largest influence, according to the meta-analysis, with strategy having the most consistent impacts. While environment and strategy have the strongest relationships, empirical research has shown that there are several other important interactions for businesses, such as structure (Capon, N., Farley, J. U., & Hoenig, S. 1990, 146).

Capon et al. (1996, 185) discovered the following causal elements that stand out in terms of their consistency in impacting multiple performance metrics, regardless of the analytic technique used:

- competing in markets that are highly consolidated and have a large market share (environment);
- Competing in areas that are increasing (the environment);
- Considerable investment in research and development, particularly in emerging markets (Strategy), new goods and services,
- A high degree of engagement in international markets (strategy);
- A low debt-to-income ratio (strategy); and
- An entrepreneurial environment (business) that encourages growth and innovation.

In an experiment using them as a predictive performance tool for a single business, their efficacy in affecting financial performance was demonstrated.

The real and virtual worlds are very closely related at Eastman Kodak, for example. The predicted results were obtained over 13 years. (Capon, 1996, 179).

#### 1.3. Financial Performance (Statements and Decisions)

Financial management is a broad term that refers to all financial choices made by a company's many departments. The purchase, administration, and financing of resources that create cash flows and impact the firm's wealth are all part of corporate financial management choices. The goal is to get the greatest long-term results possible with the company's limited resources. Decisions are made with thoughtfulness in this method. Decisions, plans, and policies must all be followed at the same time. As a result, the judgments are based on precedents from the past. Finally, the goal is to make certain that all financial objectives are met at all times. Furthermore, corporate financial management is built on two pillars: economic ideas and an accountant-developed accounting information system (Mcleaney & Atrill, 2005).

#### 1.3.1. The Concept of Financial Decisions in Financial Management

Several of these initiatives are now in the works, and financial decisions are frequently made as part of organizational reform efforts. Like other organizational reform projects, the value-based management approach covers a wide range of theoretical viewpoints and practices. Rappaport (1986) introduced the shareholder value-added model, while Stern Stewart produced the economic value-added model (Zhang, Duc, Mutuc, & Tsai, 2021).

Each of these techniques may be regarded as an example of an organizational reform initiative, all targeted at improving organizational performance. The various frameworks do not have to be viewed as competing methods; rather, their distinct foci are frequently found to complement one another (Majeed, al-Husayni, 2020).

According to Kaplan and Norton (2001b), According to Ittner & Larcker (1998), private companies and non-profit organizations may not have the same organizational goals as large corporations, and hence may not use the idea of "going concern," function as a distinct entity, have profitability constraints, or

have conflicting interests. The major goal of the aforementioned organizational reform efforts is usually expressed in monetary terms.

According to Ittner and Larcker (1998), there is no evidence that cash flows are superior to accrual-based accounting as a foundation for making financial choices in companies. The use of organizational reform initiatives to influence company financial decisions is still possible. These activities also parallel prior models that used accrual-based accounting values, such as the Profit Impact of Marketing Strategies model (Helfert, 1994, 146).

The Rappaport approach (1986) may provide a foundation for managerial decisions. There are five levels to the model. The cash flow from operations and the cost of capital are divided into two valuation components for the corporate goal. Three value drivers are responsible for generating cash flow. Market-related choices usually concern how specific markets will change and how this would affect the firm's ability to create profits. The goal of management is to predict how long it will take for investments to generate returns that are higher than the cost of capital. It's only a matter of figuring out how long that value will grow. Product mix, price, marketing, promotion, distribution, and customer service standards are all operational choices (Karami & Vafaei, 2011).

Sales growth, operational profit margins, and income tax rates are all affected by these decisions. Both long-term and short-term investments are considered while making investment decisions. Working capital and fixed capital investments provide investment choices such as raising inventory levels and expanding capacity.

Long-term financing decisions are frequently connected to financial decisions, especially in big publicly traded companies. It's normal to be concerned about establishing the proper balance of debt and equity, among other items, when it comes to a certain company risk. The cost of capital is determined by the mix of financing instruments employed and the level of risk assumed by the firm. The value-based strategy, according to Ittner and Larcker (1998), should be appealing to use in both private and non-profit organizations. The present treatise does not explicitly state that it employs a value-based management style. However, there are certain similarities between the content of this book and the way it is organized, such as the decision-making process and theoretical concepts and frameworks (Lodewyckx & Lotter 2007).

The following section delves deeper into some of the distinguishing characteristics of the small and non-profit businesses that served as the study's research subjects; the discussion is organized around organizational structure and, as a result, agency theory, corporate governance, and a corporate goal. Organizational structure and features that distinguish small and medium-sized enterprises from non-profits are the basis of the study. In Sweden, like in most other countries, businesses can be created in many forms, including sole proprietorships, partnerships, corporations, and mutuals. Each organizational structure comes with its own set of advantages and disadvantages. The focus of this book is on limited-liability businesses (Muwardi, Saide, & Herzavina, 2020).

Private, small, and mostly self-governed companies were chosen. Profit-making businesses, as well as public housing firms that can be characterized as operating on a not-for-profit basis to some extent, are scrutinized. Non-profit organizations come in a variety of shapes and sizes, as previously noted. When evaluating whether a firm is a non-profit or a business, three factors are often used. First, whether the objective is to earn a profit or not, may be a factor. In this theory, public housing enterprises are classified as a sort of non-profit organization since the law prohibits them from generating a profit (Malhotra, 2003).

The next sections cover agency expenditures; corporate governance; corporate goals; and financial statement objectives; as well as the organizational structure of these two types of businesses. Organizational structure has a role in agency issues, which may be expensive. Agency expenses arise when ownership and management are divided, and the managers do not run the firm according to the owners' expectations. The impact of agency problems is usually mitigated by dividing the corporate decision-making structure into two major functions: management and control and implementing, ratifying, and monitoring the firm's activities via an initiation, ratification, implementation, and monitoring process (Matei, 2006).

The separation of ownership and management is particularly obvious in big publicly traded limited liability firms with a high number of shareholders. Small businesses are usually private and privately held, which lowers agency issues because the gap between ownership and management is frequently minor, if not non-existent. Profit and residual claims aren't a problem in nonprofit

organizations like primary health care (PHCs), so the separation of ownership and management isn't as crucial. The importance of corporate governance and organizational structure should not be overlooked. When ownership and management are separated, a board of directors can assist in reducing some of the potential agency issues (Mouritsen, Thorsgaard, & Bukh, 2005).

As a result, the board of directors becomes an integral element of a corporation's governance structure. The shareholders appoint the directors to guide and monitor the management's activities. In tiny businesses, when there is little or no separation between shareholders and management, the varied responsibilities become less clear and less beneficial. primary health care board members are elected politicians who reflect the political spectrum of the community in which the primary health care is located.

The accounting system filters and interprets financial management decisions, and the outcomes are reflected in financial statements. In turn, financial statements, at least in part, serve as a foundation for financial choices. Depending on the reporting institution, accounting theory and procedures change from country to country and even within a country. The cornerstone of financial reporting is accounting. Financial difficulties can be studied only with accounting data, without taking into consideration variances in such data from one research to the next, which might skew the results (Sumathy and Shaneeb ,2021).

Accounting and company taxes have the potential to have a significant influence on financial accounting and, as a result, financial choices. Taxation has a big influence on small business owners and their control on both a personal and corporate level (Sanchez, Elena, and Castrillo, 2009).

#### 1.3.2. Financial Performance Reporting

"The primary objective of financial statements is to offer information on which to make economic decisions," according to the first purpose of financial statements in the True Blood report. The goal establishes a direct relationship between accounting data and decision-making, or the process of distributing resources efficiently. Financial statements, in other words, filter and interpret a company's actions into information that consumers may use to make decisions. Financial statements are used to determine earning potential and obligations.

Financial statements are intended to provide users with accurate and fair representations of a company's financial performance and financial position. This is particularly important in the case of a large, publicly-traded company. Limited-access shareholders rely on the financial statements of the firm, which may have been reviewed by outsiders. To promote comparability with other firms, the data should also be transparent. The objective of financial statements in smaller, more tightly held firms is to stress prudence, income assessment, and the computation of distributable income (Stewart, 1990).

Non-profit financial statements place a strong emphasis on managerial accountability as well as the value of services provided to stakeholders and society at large. The effectiveness of the cost structure and the firm's governance are two important factors. As a result, it's important to consider the impact of financial statements on the people who read them. The style and content of financial statements are influenced by context, qualitative aspects, financial statement objectives, accounting postulates, theoretical accounting ideas, accounting regulations, and accounting processes.

The basic financial statements, according to the American Institute of CPAs (AICPA) Auditing Standards literature, consist of notes to financial statements and parenthetical disclosures. Additional data is included on the third level, which is directly impacted by FASB standards. Although more data is beneficial, it is not standardized. The bulk of the data available for this book is financial statements, which consist of income statements and balance sheets with a few features unique to each firm in line with second and third level information. In addition to the firm-specific information, there are some aggregate remarks. Accounting practice in Sweden reflects the country's economic, cultural, and social environment as a result of the context. In several ways, Sweden's accounting practice and application of accounting theory differ from that of other countries (Zhou & Fink, 2003).

#### 1.4. Financial Accounting

The quality of financial statements is a critical factor to examine. Quality is influenced to some extent by the audit requirements for the individual unit and the filed reports. On a global scale, smaller firms generally have fewer reporting obligations.

These concerns are investigated by Radebaugh and Sidney J. Gray (2002), who draw similarities between the United States and other nations. Nilsson (2002) offers a more up-to-date and in-depth look at accounting practises and policymakers in Sweden and across the world.

Many aspects of accounting are addressed by Fiordelisi, F., and Molyneux (2006) across the world. The prior study focused on policymakers' institutional and political components.

### 1.5. Financial Results Ratios for Evaluating Organizational Performance

In quantitative research, ratios are yardsticks or indices used to compare two or more items. They can be used to analyze event trends or track the recurrence of activities across time. Data in the financial statements and income statements, as per financial reporting, would be difficult to comprehend if they were not analyzed. Financial ratios are analytical tools for measuring the performance of businesses using financial accounts that have been prepared, and they provide a clear solution in this respect. As a result, ratio analysis is the most practical technique to evaluate or make sense of a company's previous financial data (Faloye and Asiri, 2014).

Part of the procedure includes calculating a ratio by evaluating two data sets and determining whether the ratio indicates a company's business strength or weakness. Earnings per share (EPS), dividend per share (DPS), dividend cover, price-earnings (P, E) ratio, market to book, and dividend yield are some of the investing metrics that assist equity investors and others in evaluating the value and quality of an ordinary share investment. Based on a financial examination of financial statements, investors select eligible firms to invest in. Financial ratios are a quick and straightforward approach to assessing a company's financial health. They're used in in-depth financial analysis since they may reveal areas of strong and weak performance, as well as significant changes that demand more study (Mcleaney & Atrill, 2005).

When they are used to examine the performance of the organization, financial ratios highlight significant aspects that impact a company's capacity to continue operating as a going concern. As a result, the body of information currently includes financial ratios in the areas of profit, liquidity, long-term

solvency, and stability, as well as activity. Long-term solvency and stability ratios are used to assess a company's long-term liquidity and solvency. Liquidity ratios assess a company's ability to meet short-term or current commitments, and profitability ratios evaluate a firm's potential to earn profit in the short- and long-term regarding sales and investment; profitability ratios assess a company's ability to earn revenue in the short- and long-term regarding sales and investment. Activity ratios, on the other hand, are measures of asset and resource management efficiency. Shareholders, management, employees, creditors, the government, and business purchasers may all benefit from knowing these key financial measures. The use of financial ratios in assessing organizational performance benefits users of financial statements considerably (Malikova & Brabec, 2012).

They help determine a company's short-and long-term profitability, provide a gauge of capacity to meet commitments as they become due, and assess resource usage efficiency (Barker & Schulte, 2017).

Financial ratios also make comparing numbers and analyzing trends over time easier. Barker (2017) identifies many drawbacks: It's difficult to come up with a good comparison basis, especially when industry averages aren't available; differences in accounting rules and procedures make comparisons meaningless; and price level changes due to inflation make ratio interpretation wrong. Financial ratios are generated based on historical financial data that may or may not correctly forecast future outcomes. And the results are relative numbers with decimal places but no absolute precision. In any event, financial ratios are thought to be the most accurate performance indicators (Fatima & Shehzad, 2014).

## CHAPTER TWO HUMAN AND STRUCTURE CAPITAL

#### 2.1. The Concept of Human Capital

Human capital (HC) refers to a company's individual employees as well as their related skills, aptitude, knowledge, and know-how. It is a key component of intellectual capital. It is essentially "the essence of the organization," and it is made up of three components: competence, attitude, and intellectual agility. Rehman et al. (2011) define human capital as an employee's skills and creativity that can be improved by investing more in their training programs. Employee experience and expertise that increases an organization's efficiency is referred to as human capital. To increase Value Added (VA) efficiency, more efficient personnel represent a more efficient organization. Competence, on the other hand, involves skills and education, and attitude refers to how individuals behave at work (Bontis et al., 2000).

Intellectual agility allows you to break bad habits and come up with creative solutions to difficulties. Employees are the most valuable assets in a learning organization, yet they are not owned by the company. Knowledge, credentials, and talents, as well as the fact that organizations cannot own or restrict such employees from going home at night, are characterized as "human capital." As a result, there is still a lot of debate about whether employees' expertise belongs to the corporation or not. In another school of thought, Bontis et al. (2000) said that the departure of certain employees in a corporation may be beneficial since replacement employees may bring fresh viewpoints to the organization. As a consequence, it contradicts the effect of corporate memory loss, which might pose a danger to the organization (Agndal, 2004).

#### 2.1.1. Definition of "human capital"

Many attempts have been made by scholars to define human capital. This notion is interpreted differently by different authors. Despite the fact that definitions differ, numerous definitions have provided a common understanding of human capital. The underlying principles in these definitions include the idea that human capital emphasizes people's skills and knowledge rather than a

company's physical assets. Muhammad is a Muslim who was born in 2009. Human capital definitions by various authors are summarized in Table 1.

**Table .1:** Definitions of human capital

Scholar	Definition of human capital
Edvinsson and Malone (1997)	Employees' capacity to address problems in the organization based on their knowledge, expertise, new ideas, and problem-solving abilities.
Becker, Huselid and Ulrich (2002)	An organization's workforce's productive efforts
Fincham and Roslender (2003)	
	It is the only asset that has a monetary worth.
Chen, Zhu and Zie (2004)	Without human capital, no value can be created.
Ting and Lean (2009)	Innovation, capability, creativity, know- how, and prior experience, collaboration capacity, employee flexibility, uncertainty tolerance, motivation, contentment, learning capacity, loyalty, and formal training and education are all examples of human capital.
Baron (2011)	It is made up of an organization's personnel' knowledge, skills, development capacities, and innovativeness.
Micah, Ofurum and Ihendinihu (2012)	People's efforts, skills, abilities, and knowledge that are, or might be, devoted to the creation of commodities or the provision of valuable services

#### 2.1.2. The Concept of Human Capital Efficiency (HCE)

The Value-Added Intellectual Coefficient (VAICTM) of Ante Pulic is an analytical tool for determining the effectiveness of a company's intellectual capital. It was designed to make it simple for management, shareholders, and other interested parties to track and assess the efficiency of the company's total resources, as well as each individual resource component. The method offers a new viewpoint on how accounting-based figures are used to analyze and manage a company's value-generating efficiency. Human capital efficiency is one of the value-added intellectual coefficient components (HCE). "Human capital efficiency" is a metric that assesses how valuable an organization's human resources are (Kermally, 2002).

In the literature, the advantages of using the value-added intellectual coefficient approach have been thoroughly discussed (Chan, 2009; Chen et al., 2005; Firer and Williams, 2003; Goh, 2005). The fact that this research is

available adds to the credibility of the technique. According to these experts, the value contributed intellectual coefficient produces quantifiable, objective, and quantitative evaluations without the need for subjective grading or the allocation of scores or scales. It makes it easier to calculate and analyze a large sample size, which might be in the millions of data points accumulated over time (Nonaka, 2004).

Furthermore, the computation of the main indices and coefficients is done using extremely simple and straightforward approaches that are simple to understand, particularly for management and business experts who are used to traditional accounting data. These characteristics enable management to assess the efficiency with which the company's resources generate value. The higher the coefficient, the better management utilizes the company's value-generating potential. Despite the fact that there are numerous measurement methodologies, Pulic's value-added intellectual coefficient, which is classified under the ROA group method, is the most appropriate way to assess intellectual capital efficiency and relate it to the company's value. Companies and their stakeholders will benefit from the implementation of these monetary intellectual capital measuring methodologies. This is due to the fact that it provides a solid foundation for evaluating the intellectual capital of various businesses (Karami & Vafaei, 2011).

#### 2.1.3 Theory of human capital

Human capital theory may be traced back to the subject of macroeconomic development theory. As an example, Becker (1993) wrote Human Capital: A Conceptual and Empirical Analysis with Special Reference to Education. Capitals, as per Becker, include expenses such as education, computer training, and medical care. Lessons on the importance of timeliness and honesty are also beneficial. In the actual sense, they enhance a person's health, raise their profits, or grow their enjoyment of reading over time. As a result, declaring that expenditure on education, retraining, and medical care, among other items, are investments is perfectly compatible with the traditional definition of capital. These aren't just expenses; they're investments with quantifiable returns (Sanchez, 2006).

As per Classical Economic Theory, human capital is considered as a product that may be traded in terms of wealth creation and sale. The exploitation of labour by capital is a central theme in this classic theory. Human capital, on the other hand, refers to the knowledge, competence, and skills that people get via education and training, as opposed to the traditional concept of labor. Becker (1993), highlighting the social and economic relevance of human capital theory, claimed that an investment in a person is the most valuable of all capital. Becker distinguishes between human capital that is distinctive to an organization and human capital that is generic. Organization-specific human capital is knowledge earned via education and training in information management, accounting processes, or other expertise relevant to a particular organization (Van Caenegem, 2002).

#### 2.1.4 Characteristics of human capital orientation

High-skilled labour is cognizant and aware of the necessity for continual learning in today's corporate environment, and employees aspire to learn more in order to adapt to market rivalry, product improvements, and increasingly complex technology (Andriessen, 2004).

According to Stewart (1999), certain personnel should surely be seen as valuable assets, while others should be viewed as costs. This situation might apply to the entire organization or to certain departments. As a result, while examining professional and organizational abilities, Sveiby (1998) divides people into four categories: professionals, managers, leaders, and support staff. Nonetheless, two sorts of businesses may be separated depending on how they treat their staff. One of them, according to Kochan and Dyer (2017), is a low-road strategy company, while the other is a high-road strategy organization (Carson, 2004).

Competitive advantage in the low-road approach is derived from the fact that entities prefer to minimize expenses (mainly those relationships with people), resulting in cheaper product and service pricing than the competition. Businesses that take the second strategy (high-road strategy) aim to invest in their employees to improve their gratification, dedication, and abilities, which should lead to increased effectiveness, reduced employee turnover, and/or higher-quality goods and services, and thus a quality-based competitive

advantage. Work teams are used in high-road enterprises to increase adaptability, productivity, and creativity, as well as more innovative and complete answers to challenges (Beers, 2005). Furthermore, the marketing plan is fairer and more transparent since employees are encouraged to participate in the firm's decision-making process, both individually and collectively (Castro and Salazar, 2006).

As a result, employee work satisfaction and engagement rise, which may have a favorable impact on overall business performance. The low-road approach is the polar opposite of the high-road approach. Other words used to differentiate between two opposing strategies include Roos, Bainbridge, and Jacobsen's (2001) distinction between two sorts of businesses: process-oriented and people-centered businesses. Such a division changes how employees are treated and how long they stay with the company. Hence, employees in process-oriented enterprises performed unskilled work, so significant labour turnover was immaterial (Chua, 2002).

Employees are the primary generators of value in people-centered organizations, especially in today's knowledge-based sectors, so keeping them on board is critical. Employee retention in people-focused businesses should be low (because talent is scarce and hiring costs are high), and it could be high in procedure business owners. Following theoretical analyses of human capital and its relevance, it was determined that following a human capital-focused strategy is one of the approaches for achieving long-term competitive advantage. Additionally, while entities with the greatest levels of human capital awareness can be described in a range of methods, the literature offers a common framework for human capital-focused businesses (Edvinsson, 2001).

## 2.1.5. Theoretical deliberations on human capital orientation and organizational performance

When it comes to human capital alignment and its relationship to organizational performance, there are many significant aspects to consider, such as investment in human capital, high skills, team performance, job satisfaction, work engagement, organizational citizenship behavior, and employee involvement, because human capital direction is a complicated subject that can be analyzed using a variety of factors. Conceptual concerns about the relationship between human capital spending and firm success have a number of

relevant implications. Knowledge is the most precious resource a business has, and its management is crucial to its success. As a result, investments in human capital may increase employee productivity and financial returns (Boujelbene, Affes, 2013).

Similarly, Durrani and Forbes (2003) reinforce these assertions by suggesting that human capital and information and technology investment flows are inextricably tied to company success. Investing in people also results in improved personal performance, increased productivity of an organization, economic growth, and other societal benefits (Lynham & Cunningham, 2006). As people's human capital improves, they discover more productive ways of executing activities, resulting in a rise in an entity's total efficiency. According to Black and Lynch (1996), the average educational level of a firm is positively related to its business efficiency. Moreover, as Appelbaum et al. (2000) remind us, excellent staff skills are a requirement for employee empowerment and the advantages of deferring the company, which is aided by a good strategy for growing employee team performance. As per Maynard, Rapp, and Gilson (2008), effective team performance is based on the coordination of team members' actions. Competitors struggle to replicate the synergistic benefits of collaboration (Leitner, 2004).

Furthermore, teams give a long-term competitive edge over individuals (Barney & Wright, 1998). Human capital direction may boost employee motivation for work; as a consequence, they are more concerned with job performance and have a better knowledge of the company's objective. Employees that are satisfied are more inclined to take on additional work, support the business's goals, and participate successfully in the organization. Employee attitude and task performance are connected to workplace satisfaction (Mertins, Will, and Meyer, 2009). According to Chang, and Birkett 2004), employee dedication is an enormously significant characteristic that allows a business to work efficiently and adds to its success. If the organization wants to continue to grow and flourish, its human resources must be involved. As per Randall (1987), dedication to an organization refers to how active and associated an individual is with that organization. According to Luthans, McCaul, and Dodd (1985), organizational commitment consists of three main components: first, a person's strong belief in and acknowledgement of the company's success;

second, an individual's eagerness to exert major effort on behalf of the corporation; and third, an individual's defined eagerness to remain a member. Employee commitment to the company is inversely related to their desire to leave (Loi, Ngo, and Foley,2006).

As a result, dedicated personnel have reduced turnover rates (Allen & Meyer, 1990), which saves money on recruitment and training. According to much research, work satisfaction and organizational citizenship are inversely associated with the desire to leave. Smith, Organ, and Near (1983) created the phrase "organizational citizenship behavior," which they defined as a type of nonorganizational formal norms and behavior that could not be assessed by a formal rewards and recognition system. Citizenship behavior, according to Podsakoff and MacKenzie (1997), is a three-dimensional concept that comprises "helping," "civic virtue," and "sportsmanship." Organizational citizenship, according to Organ, Podsakoff, and Mackenzie (2005), increases successful organization functioning due to a higher level of commitment (Tsai & Wu, 2010; Huang, You, & Tsai, 2012).

Employee involvement is critical for survival in a world of increasing competitiveness and fast change because ideas may come from anybody, at any level, anywhere, at any time (Madjar, 2005). As a result, staff should be encouraged to participate (Marques, 2007; Neagoe & Klein, 2009). •• More "concrete" benefits such as expenditure reductions, revenue growth, and/or intangible benefits such as improved morale are the most typical aims for boosting employee engagement (Du Plessis, Marx, & Wilson, 2008). The majority of "tangible" advantages result in an improvement in profitability that can be measured.

- additional "intangible" benefits, such as a better working atmosphere, employee safety, public relations, or knowledge sharing, they have a negative influence on profitability in the long run (Islam, 2007).
- improving, developing new ideas and increasing innovations in order to improve workplace performance and increase employee loyalty and accountability (Mouritsen, 2005).

The above theoretical assumptions about the connection between human capital and organizational performance support the position taken by Shane and Venkatraman (2000), who assert that working to improve human capital first

improves employees' capacity to perform their daily tasks of exploring and exploiting investment opportunities (due to a variety of above-mentioned factors). This has a favorable impact on financial success. Employee happiness is also one of the acknowledged measuring indicators of a company's human capital approach (Zhou, 2003).

#### 2.1.6 Examine empirical studies

Several empirical studies have shown that human capital and human resource management practices have an influence on performance (Ashton, 2005). Some studies concentrate on the workforce (Carmeli & Tishler, 2004), while others delve deeper into human resource management techniques to improve human capital production and use. Strategic human resource initiatives have a favorable impact on organizational performance through influencing employee behavior. In a study conducted by Edmans (2009), he revealed that employee happiness is positively connected to shareholder returns (long-run stock returns) in a sample of the 100 Best Companies to Work for in America list from 1984 to 2005, which is consistent with human equity business theories (Sánchez, Marn, and Morales, 2015).

According to a study conducted by Seleim, Ashour, and Bontis (2007) on 38 Egyptian software companies, high dimensions of human capital, defined as highly qualified developers with distinct features such as intelligence, creativity, initiation, and aspiration, have the greatest impact on organizational performance (due to a lack of reliable data measured by export intensity). In software organizations, such a view of human capital might lead to innovative and sophisticated software products and services that appeal to a lucrative local and worldwide consumer base. Seleim et al. (2007)'s findings back up prior theoretical concerns made by Lepak and Snell (1999), Sveiby (2007), and Stewart (1999) that not all employees have the same strategic knowledge and abilities (Boujelbene, 2013).

Similarly, Bryl and Truskolaski (2015) found that human capital is the most significant component in the production of high market value, positive ROA, and even positive ROE in a sample of Polish listed IT businesses. Yu, Ng, Wong, Chu, and Chan (2010) studied 151 Hong Kong listed companies and discovered the contrary. Human capital efficacy has been found to be a negative

and hugely important predictor of market value, suggesting that the greater the company's personnel expenses, the lower the market price. Investors place a lower value on human capital-oriented businesses and see employee costs as such, contradicting current human capital theories. As a result, a company's financial performance may be measured by its stock exchange value, profitability, and growth (Vitalis, 2018).

#### 2.1.7. Human capital and business performance

In his research, Effectiveness of Intellectual Capital: A Research of the Indian Information Technology Sector, Choudhury (2010) discovered that in today's knowledge economy, human capital is now becoming more significant and positively related to organizational performance. Human Resource Management has become a critical component in increasing employee productivity, and people have risen in significance as a result. While money communicates and computers usually outperform people, they are incapable of thinking or innovating. Through human resource management approaches, employees are transformed into a resource for development and a source of competitiveness. Humans, not machines, come up with new product and service ideas, improve procedures, and support organizations in shifting their emphasis to produce new sources of value since we are in the middle of a knowledge boom (Xu & Wang, 2019).

In addition to a physical employee, there is now a knowledge employee. Choudhury (2010) has finally shown that human capital has a significant impact on performance, combining anecdotal evidence that brilliant individuals are critical in inventing and delivering excellent goods and services that generate high consumer demand. In a prior study, Salman et al. (2012) discovered that human capital had a positive influence on organization performance in Nigerian manufacturing businesses. The shift from a production-based economy to a knowledge-based economy is inescapable all over the world, notably in Nigeria. As a result, firms are encouraged to adopt a human capital-based industrialization approach in order to drive economic growth. It's also been proven that successful businesses invest in their employees to improve their overall working skills and atmosphere. In their research on Malaysian financial sectors, Muhammad and Ismail (2009) discovered that human capital had a

beneficial impact on organization performance (ROA). Human capital, which is not recorded in the financial records, is the organization's continual renewing supply of creativity and innovation (Smriti & Das, 2018).

Furthermore, as the globalization period progresses, businesses are increasingly exposed to global competition. As a result, in order to establish and maintain a competitive advantage, an organization's knowledge and skills, as well as its employees, must be viewed as a crucial strategic resource. Both studies' findings are in line with Choudhury's research (2010). Further research by Rehman et al. (2011), who used the value-added intellectual coefficient to prove that one of the significant components to strengthening intellectual capital performance is human capital efficiency, in which investing more in employees' skills and abilities would increase their human efficiency. Human capital was also discovered to be one of the most essential components for gauging intellectual capital, with a strong correlation to financial success. Choudhury (2010) found that in today's information economy, human capital is becoming increasingly important and positively associated with organizational performance. People have become increasingly crucial and significant in having the expertise to succeed in the current competitive market as an organization made up largely of humans. People leaving an organization, according to Bontis et al. (2000), cause a loss of corporate memory, which generates a problem for the organization. Though the turnover of personnel introduces a fresh new idea into the organization, it does so from diverse angles. As a result, it demonstrates the relationship between a company's human capital and its success. To meet increasing customer demand in the contemporary globalization period, businesses must strengthen their human capital in order to produce superior products and services.

#### 2.2. Structural Capital

#### 2.2.1. The concept of structural capital

On the other hand, structural capital (SC) refers to the learning and knowledge that is applied in day-to-day tasks (Baah and Taiwah, 2011). According to Bontis et al. (2000), structural capital refers to all non-human storehouses of information in organizations, such as databases, organizational charts, process manuals, strategies, routines, and anything else that has a higher

value to the organization than its tangible worth. It is derived from processes and organizational value, representing the company's external and internal priorities, as well as future renewal and development value. A strong structural capital fosters an environment in which people are encouraged to try new things, learn, and fail, according to Wang (2012). address issues and produce value for the entire systems and procedures. It is the functioning of an organization's mechanisms and structure to aid and support employees, as well as the intelligent pursuit of personal best performance and enterprise-wide performance. Structural capital, according to Zeghal and Maaloul (2010), refers to the knowledge that stays with the organization after the employees leave for the night. Production processes, information technology, customer relations, and research and development are all included in this IC component.

#### 2.2.2 Structural Capital Definition

A detailed survey of the literature was conducted in order to obtain perspective on the idea of structural capital. It was discovered that there was very little literature on this subject.

**Table 2:** Definitions of Structural Capital

Scholars	Definitions of Structural Capital
Bontis, (1996)	"Those technology, procedures, and processes that enable the organization to function are, in essence, the factors that determine the organization's operating mode."
Kogut& Zander 1996	"Elements that belong to the organization (1996) and that help its formation as an entity by offering coherence and superior coordination principles,"
Euroforum, (1998)	"Knowledge that can be replicated and shared becomes somewhat obvious as a result."
Camison, Palacios, & Devece, (2000)	"Knowledge that an organization has absorbed and that persists in its structure, practices, or culture even after people have left."
Carson, Ranzijn, Winefield, & Marsden, (2004)	"Processes and procedures resulting from employee intellectual input," says the author.
Ordonez de Pablos 2004	"Knowledge that stays in the organization after employees returns home and is thereby held by the company."  Organizational routines, tactics, process

	manuals, and databases all play a role in SC in this way."
Alama, (2007)	"Intangibles that determine a company's operating style."

One of the two components of intellectual capital (IC), the other being human capital, is structural capital. In a knowledge-based economy, IC evaluates an organization's total intangible worth (Ogbo & Ituma, 2013). Structural capital (SC) is defined by Kleynhans and Sekhobela (2015) as "the measure of intangible structures built by organizations that enable human capital to function successfully." Rather than focusing just on physical structures and equipment, equal emphasis should be paid to intangible structures (structural capital) (Tarigan & Widjaja, 2019). This is especially true, according to Xu and Wang (2019), because of their significant impact on the organization's financial success.

External and internal capital are the two basic types of substructures that make up structural capital. External capital, also known as relational or client capital, refers to a company's relationships with other companies. External capital (EC) is defined by Kim, Yoo, and Lee (2010) as the knowledge entrenched in an organization's marketing channels and customer connections established over time through its commercial activities. Customer loyalty, order volumes, and market share are all examples of relational capital. All human and structural resources associated with external interactions, such as ties with customers, suppliers, and other stakeholders, are included in external capital. This encompasses, for example, consumer views; supplier relationships; financial institution relationships; government relations; research and development; and partner relationships (Pea, 2002).

Veeramani and Chandrasekaran (2017) claim that external capital is an external element since its ownership is not fully passed to the institution, unlike human capital. As a result, it revolves around the organization's external income. Relational or external intangible capital is the value-adding relationships that a company creates over time with suppliers, consumers, partners, rivals, and government agencies. El-Bannany (2012) claims that the utility of external capital and its potential to create value are derived from the favourable interaction between the enterprise and external stakeholders. When these factors

are considered together, it may be concluded that there exist external intangible structures that support human capital's ability to thrive and operate effectively. Customer loyalty, contentment, supplier confidence, and strong relationships with financial institutions are examples of intangible structures. All of these have been discovered to allow the system to work effectively, necessitating the necessity to account for greater value generation and a competitive advantage (Maditinos, 2009).

Internal capital, often known as organizational capital, refers to an entity's organizational skills. It consists of organizational structures, rules, management philosophy, routines, culture, and networks that are all structured to meet market demands. Using explicitly and implicitly, formally and informally, information and also formal and informal expertise to enhance organizational processes is a successful method. Internal capital, as per Beattie and Thomson (2007), is the knowledge that stays within the company at the end of the working day, as well as internal intangible infrastructure like processes and systems that help employees enhance their skills. Internal capital, according to El-Bannany (2012), is knowledge that is ingrained in a firm's procedures, processes, culture, data system, database, connections, and leadership. Internal capital may be described as the internal processes that drive company progress in this context.

Internal capital in a company might take the form of innovation capital or process capital. The term "innovation capital" refers to innovative ideas generated by employees of a company that enable them to transform clients' wants into lucrative products. Intellectual property, such as patents, trademarks, and copyrights, as well as other intangible assets, fall under this category. Process capital, on the other hand, refers to the use of techniques, procedures, and programs to improve the delivery of products and services. Corporate culture, process management, information systems, networking, standards, and systems are all examples of process capital (Lim, Chan & Dallimore, 2010).

In general, there are numerous methods for measuring intellectual capital holistically. Balanced Score Card (BSC), Skandia's Navigator, Torbin's-Q, and value-added intellectual coefficient are a few examples (VAIC). Despite its flaws, many academics believe that the value-added intellectual coefficient's advantages greatly exceed its disadvantages. In conclusion, Nimtrakoon (2015)

asserts that VAIC is an objective, standardized, consistent, and verifiable analytical instrument that is simple to compute and comprehend because the data is based on audited financial accounts.

The VAIC model's three key components are Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE) (Pulic, 2008). This study, on the other hand, concentrates on structural capital efficiency, which has been broken down into internal and external capital efficiency (ECE) in this case (ECY). The value created by a company's structural capital input, expressed as a structural capital to value added ratio, is known as structural capital efficiency (Anyanwu, Ezu, Osadume, & Ananwude, 2017). Internal capital efficiency is related to intangible organizational structures that allow human capital to function efficiently (Suherman, 2017), but external capital efficiency is ingrained in an organization's intangible structures arising from its relationships with other organizations. The majority of these connections were made based on human capital's previous performance (El-Bannany, 2012; Hidaya & Adityawarman, 2017).

These intangible assets might be properly utilized to achieve long-term financial success. Financial performance is a metric for determining how well a company's invested money is being used to generate revenue. Financial performance studies based on accounting information are restricted, according to Ofurum and Aliyu (2018), because financial performance is easily accessible and compared. The financial statements and other reports of a company can provide information for evaluating financial performance. Profitability ratios, among which return on assets (ROA) was chosen for the study, are indicators for measuring an organization's financial success. The return on assets (ROA) assesses how effectively a company's available assets are used to generate profits. It clearly shows a company's profitability in relation to its overall assets (Nedelcu, Banacu, & Frasineanu, 2014).

Resource-Based Theory is the study's anchor theory (RBT). Resource-based theory discusses the study's core challenges in terms of possible investment and efficient resource use in order to achieve the intended outcome. Resource-based theory's central thesis is that a business is defined by a set of resources that are unique to its existence and serve as the foundation for long-term competitive advantage. To further clarify this, Edom, Inah, and Adanma

(2015) divided an organization's resources into physical and human assets. While physical assets include plants, technical equipment, land, and buildings, human resources comprise employees' experience, knowledge, skills, and social relationships. RBT proponents argue that effective utilization of intangible assets may lead to a competitive advantage and improved financial performance (Lazzolino & Laise, 2013).

Existing research on structural capital efficiency and financial performance exists. These studies, it appears, did not look at structural capital efficiency in isolation but rather as a component of value-added intellectual coefficient as a whole. For example, Rosita and Zainuddin (2020) studied the Indonesian banking market from 2012 to 2016 and discovered that structural capital efficiency had a considerable impact on return on assets. In addition, Khalique and Iqbal (2019) concluded that structural capital was inconsequential in influencing the financial success of this instance when they conducted a study with 210 respondents in the banking industry of Sialkot, Pakistan.

However, a few studies give some data pertaining to the topic from the standpoint of research where structural capital efficiency is split into internal and external capital. Among these studies are those by Andreeva and Garanina (2017), which focused on 240 Russian industrial enterprises in 2015. According to the findings, relational capital (external capital) had no impact on financial performance throughout that time period. From 2009 to 2013, Mbugua and Rotich (2014) studied ten Kenyan banks, finding that relational capital had a statistically significant influence on the return on assets. Anuonye (2016) utilized primary data from 150 respondents to investigate 18 Nigerian insurance businesses and discovered that relational capital had no meaningful impact on financial performance.

#### 2.2.3. Theoretical aspects of structural capital

Due to organizations' ambition to remain competitive in the market, research interest in structural capital has exploded in recent years. The structural capital strategy is related to the external environment's disruptive impacts and must be developed to promote the organization's market share growth. The fact that structural capital must react to market demand entails a high level of flexibility but does not allow for a broad definition. A large number of scholars

and organizations adopt this classification, dubbed the "structural capital approach," which is separated into internal and external capital (Schneider and Smakin, 2007).

One of the more realistic definitions is this one. Structural capital is formed from human capital and is made up of a mix of knowledge and intangible assets generated by organizational processes. It has elements of efficiency and information availability for codification into knowledge. These processes and structures are required for employees to be productive. Structural capital, according to Bontis et al. (2000), refers to all non-human knowledge deposits in businesses, such as information, organizational charts, processes, strategies, and practices, and it exists in any company whose market worth exceeds its financial value. As a result, strong structural capital organizations will cultivate a welcoming environment that encourages employees to experiment with new ideas, learn about them, and put them into practice. Connection capital refers to the value of a marketing relationship, which is critical for any business. Structural capital includes managerial relationships, organizational structure, and development. This capital has the potential to improve organizational efficiency by spreading information. It is vital to establish knowledge management at universities, as well as other enterprises in other fields (Kermally, 2002).

There are two types of structural capital: dynamic and static. The dynamic category includes organizational culture and environment, as well as the operation of communities of practice and creative networks. Procedures, regulations, and data fall under the static group (Carson et al., 2004). Pea (2002) defines structural capital, on the one hand, as the ability to derive organizational value from internal processes, equipment, and culture; and renewal and development plans, on the other. Human capital is embodied through structural capital, which includes empowerment and enabling infrastructure (Chatzkel, 2002). Competitive intelligence, equations, information systems, patents, regulations, and procedures, on the other hand, are derived from the firm's items or systems through time (Rahim et al., 2011). Internal processes, knowledge, and abilities are all inextricably related. Structural capital refers to the structures and procedures that employees create and utilize in order to be more productive,

effective, and imaginative (Boujelbene and Affes, 2013). In most cases, the organization's investments in information technology increase activity.

Despite the fact that software and human training increase the company's market value, they are not included in the financial statements. In order to obtain a competitive advantage and produce value, businesses have increased their expenditure on research and development in recent decades. As a consequence, this structural component translates the context of assisting the creation and impact due to leveraging knowledge. Unlike human capital, structural capital may be owned and traded (Edvinsson, 1997). Structural capital refers to the codified knowledge base that does not live in the minds of employees (Bontis and Fitz-Enz., 2002). It refers to the use of a highly effective strategy for gathering, testing, organizing, and integrating existing data, as well as filtering out the impure and preserving the pure before spreading it (Wu et al., 2012).

Finally, organizational capital is one of several forms of intangible assets that are designed to assist the development of other types of intellectual capital inside the company. If organizational culture, corporate background, and the liquid-liquid part of their planning were included in the structural capital, the source of information that becomes the item that drives the company into its vision, task, values, and objectives could also be understood as the information source. It becomes the object that drives the company into its vision, mission, values, and goals. It refers to the use of a highly effective approach for gathering, testing, organizing, and integrating existing data, as well as removing the impure and keeping the pure before distributing it throughout the transactional process (Wu et al., 2012).

If organizational culture, corporate history, and the intrinsic part of their planning are included in structural capital, the source of information that becomes the object that leads the organization into its vision, task, values, and objectives can also be understood as the source of information that becomes the item that drives the company into its vision, task, values, and goals. (OECD, 2008): During the transactional operation,

Possibility of financial gain

Physically, the materials are scarce.

An organization can exchange it and keep it.

#### 2.2.4. The role of structural capital in organizational performance

In today's fast-changing economic climate, it is vital to examine structural capital in order to improve a firm's business performance. The way a company invests in and improves its structural capital determines its long-term viability. The idea of structural capital has several implications for a business. Given the current market conditions, these consequences, if adequately discovered and managed, would improve the company in the long run. The creation of structural capital and asset extraction, which includes human and relational capital, are the major duties. Once again, the relationship between structural and organizational capital property is stressed. The idea of structural capital is important since it is always in the hands of the organization. This refers to the concept of manipulating and harvesting human capital via structural capital. Capital structure, on the other hand, can be used in the same way that relational capital can. This is due to the human nature of client relationships with external firms. Various scholars regard structural capital as an element of knowledge and an organization's asset worth. Manufacturing and research and development appear to be inextricably linked. As a result, when comparing the two positions, the focus is on interdependence: one role cannot function well without the other. Even while norms and organizational culture are critical to an organization's operations, structural capital is not always related to other assets like human capital and relational capital (Bose and Oh, 2004). Structural capital includes all of the structures that employees have access to in order to carry out and develop the entire business activity (Wuscher et al., 2014). SC is the company's only asset, and if it's well-managed, it may lead to higher shareholder value, long-term competitive advantage, and market share (Van Zyl, 2005). For a company to have strong structural capital, it must have a supportive culture that encourages employees to try new things and learn from their mistakes (Bontis, 1998).

Structural capital has the capacity to contribute to the growth of human capital by allowing information to be shared. Policies and organizational culture are examples of structural capital. If these policies foster environmentally friendly culture and knowledge, human and relational capital may be developed and exploited more efficiently. Individuals can use a variety of information and communication technologies to connect with other individuals or organizations

and exchange knowledge (Karami, 2002). Structural capital is a tool that may be used to help with this connection. As previously said, culture is equally vital. It is critical to foster a learning and sharing culture inside the company. This is a good example of how structural capital works. As a consequence, it is an intangible resource possessed by the company that aims to stimulate information flow while also cultivating a culture that helps enterprises thrive and grow in today's market (Malhotra, 2003).

In a study on intellectual capital and business success in Malaysian industry, Bontis et al. (2000) observed that the expansion of structural capital had a positive relationship with company success independent of industry.

The outcomes of the study imply that efforts to codify organizational knowledge and so increase structural capital provide a long-term competitive advantage. The effect is immediately shown in better corporate performance. (2009) conducted a prior study to consistently build on the findings of Bontis et al. (2000), and their empirical findings suggest that structural capital has a positive relationship with corporate performance in both service and non-service enterprises. Furthermore, the study discovered a positive and substantial relationship between structural capital and non-service firm success. They are, however, less important in the service business. These findings show that organizations would gain a competitive advantage if they pooled their efforts to unearth organizational knowledge. This competitive advantage will lead to enhanced business performance and higher company value. (Rahim, 2011).

According to Libo et al. (2009), human and structural capital are the driving forces behind capital's ability to create value, with physical capital having a minor role. Companies in the knowledge economy must pay attention to the structure of the driving force, such as upgrading organizational structure and management systems to enhance structural capital efficiency and produce value in order to increase capital efficiency. With this approach, companies may maintain their drive to create value within their businesses while reducing the risk of losing high-quality employees. In addition, structural capital, according to Muhammad and Ismail (2009), is the intellectual value that remains with the organization when employees leave. In this era of globalization, retaining employees is getting increasingly difficult. As a result, the value of structural capital that remains in the company is more essential than the value of

intellectual capital. In addition, their findings showed that structural capital had a positive influence on the company's success (Schneider, 2007).

Experts then looked at the relationship between structural capital and firm success. It is defined by Zeghal and Maaloul (2010) as "information that remains with the company after employees have gone home during the night." This area includes manufacturing processes, information systems, customer relations, R & D, and other IC components. Because structural capital is produced from processes and organizational value, reflecting the company's external and internal focuses, as well as renewal and development value for the future, it is one of the primary aspects that determine a company's performance (Bontis et al., 2000). Organizations are largely made up of people, and if the structure does not offer a good working environment, firm performance may suffer. Furthermore, organizations must improve their organizational structure and unleash their knowledge in order to maintain a competitive advantage (Van, 2005).

# 2.2.5. Conceptual background and issues in commercial Iraqi banks' financial analysis

#### **Definition of Commercial Bank**

The financial industry is considered the lifeblood of the contemporary economy. It is one of the financial system's most vital foundations, contributing significantly to the economy's growth. In the banking business, banks are one of the oldest financial intermediaries. They play a crucial role in mobilizing deposits and lending to the country's diverse economic sectors. The financial system's power and efficacy, which is based on strong and functioning banking institutions, are critical to all countries' economic success. The bank is where currency is exchanged (selling cash in cash). Banks are one of the largest and oldest financial intermediaries. Their primary role is to accept and reuse credit, purchase, and other financial transaction deposits for individual, project, and government savings (Mouritsen, 2005).

It is regarded as a credit organization that does not specialize in supporting a particular organization, accepts deposits, and strives to earn money with the least amount of risk by providing banking services to its consumers. Iraq has no banking regulations. According to the legislation, the bank presents

itself as an individual having a banking permission or license in 2004. Commercial banks accept a variety of deposits and offer a variety of investment opportunities. Short-term transactions include credit cards, deposits, and savings.

Commercial banks provide banking services to all clients, i.e., banks that are not designated to serve certain groups of people or are not part of another industry. Small, medium-sized, and long-term loans are issued by commercial banks, giving borrowers a variety of options. A variety of industrial, farming, market, and service activities will be funded by commercial banks. Commercial banks can also provide a variety of other services, including electronic services, workability tests, and financial counseling, in addition to standard banking services (Hamada, Jacob, & Ahmed, 2012).

Commercial banks have always sprung up as a result of the expansion of goldsmiths' businesses. Joys (money-exchangers) have for a long time invested the money of merchants, businesspeople, and anybody else who didn't want to lose or be robbed of their money. Jewelers and artisans placed their cash in safes and issued depositors' receipts for the money they had put in (fund deposit). The depositor sends the goldsmith or the deposit receipt to the goldsmith, who accepts the deposit. Citizens recognized income as a type of business and kept gold and silver in goldsmiths' boxes. They also realized the truth and lent money and gold to those who needed it (lending). It was provided to the buyer as a gold-receipt smith's loan (rather than gold or money) after the individuals who were trustworthy in those receipts were traded for gold at any moment, as evidenced by their gold experience. Corporate banks, according to Smith, are not middlemen between lenders (savers) and borrowers (investors), but rather banks with specific capabilities in cash supply management through bank lending (Zalan, Mohammed, Hassan, 2020).

#### 2.2.6. Different Types of Commercial Banks

Commercial banks may be divided into a few distinct types, including:

 Individual banks: Relatively tiny banks run by one or more managers, frequently limited to a single location, invest their money in high-liquidity assets such as shares, discounted reserves, and cash-convertible assets over a short period of time.

- 2. Banks with branches have a number of branches scattered over several areas, all of which are regulated by a single board and each of which is managed by a director under the board's authority, all of which are handled from a single head office. Along with the headquarters, the branches trade primary and secondary funds, lend, acquire, and perform other banking procedures.
- 3. Group banks: A collection of holding company-owned banks makes up a group bank. These banks might be branches or separate legal organizations. Every bank is kept, even though the holding companies, board of directors, and managing directors are preserved. One of the key advantages of community banks is the similarity of their banking services across different locations.
- 4. Banks in chains: As the size and value of commercial banks' activities grew, so did the size and value of chain banks. These banks are part of a network of branches that are administratively autonomous but are governed by a central hub. They are owned by a single person or a group of people, not a holding company.
  - 5-E-Banks: Electronic banks, often known as 21st Century banks, are terminals that provide financial services on tablets. These units are classified as outlets or branches (as long as they are located a distance from the bank building), and the services they provide are diverse, and they operate without a workforce 24 hours a day.
- 6. Islamic banks: Islamic banks are trust-based financial entities that follow Islamic principles in order to collect and direct legally agreed-upon interests for the public good. Non-profit banks are sometimes known as banking institutions with a responsibility to avoid (riba-based) banks as a forbidden transaction.

# The Role and Importance of Measuring the Performance of Commercial Banks

Foreign investors run cooperative banks, commercial banks, and capitalformed organizations in Iraq. As a result, Iraq must focus on the benefits of this business and work to develop the banking sector. Consumers can choose from a variety of financial and non-financial items offered by banks.

Corporate loans, home loans, investments, and deposits are all types of loans. Health insurance, property insurance, and auto insurance are all types of

insurance. They begin by earning a return on deposits, which encourages savers to make greater commitments. The return is guaranteed, so there are no risks. Savings accounts serve as safe havens for creditors when the economy is in trouble. As a result, the overall value of savings accounts has climbed significantly. It does not stop with the banks. It is given to the economic participants who require it. Private credit is offered at various prices, depending on the level of insecurity of the consumer. The bank has a number of different maturities of loans. Bank payment accounts' initial charges are solely used as a source of revenue and credit. Clients request a variety of supplemental services from the savings, which are paid for by commissions.

The major function is to offer payment methods such as credit cards, checks, and cash transfers, all of which generate revenue for the bank. Accounting services are provided by the majority of commercial banks. Commercial banks, on the other hand, have expanded their specialization areas in recent years and rarely restrict retail banking activities. Investment banks are also known as commercial or corporate banks. They are merged with both financial institutions (Majeed et al., 2020).

Financial markets, finances, financial institutions, legislation and regulations, and financial instruments are the five basic components of each country's financial system. Building businesses, merchants, insurers, trade banks, credit unions, stock exchange agencies, insurance companies, and property management corporations are among the many financial institution groupings. Commercial banks are important players in the financial system. The supply of money in the economy, like that of the other banks, is regulated. The supply of circulating cash is the responsibility of banks. Through a bank, an economic actor is primarily associated with those in need of resources (e.g., depositors or investors), such as enterprises wishing to expand or individuals seeking a loan (Al-Tamimia, 2020).

Economists, monetary regulators, and policymakers recognize that banks rely on more than just the regulatory framework, quantity, and competitiveness of operational banks to achieve their objectives and fulfil their responsibilities.

Many studies have found that financial intermediation performance affects economic growth, while others have found that banking inefficiencies may lead to crises that have a detrimental influence on the overall economy. Both

parties benefit from evaluating net earnings and monitoring the bank's financial stability (depositors, bank managers, and regulators).

The importance of banking performance cannot be overstated since it has a tremendous influence on both the micro and macroeconomic levels. The financial system, constituted of banks, must also work appropriately in order to distribute and conduct its intermediary economic resources. The bank's success enables macroeconomic policies to be implemented, resulting in economic stability, welfare, and long-term growth. As a result, in recent decades, the efficiency assessment of financial organizations, particularly commercial banks, has been viewed with significant worry (Hamada, Jacob, & Ahmed, 2012).

Based on the studies that have been focused on the relation between human and structure capital with financial performance of the companies in the literature for example the study of Mahanavami, Wiksuana, Purbawangsa and Anom, (2019) stated that human capital and structural capital have a significant positive impact on the financial performance of Rural Banks and the structural capital has the ability to fully mediate the influence of human capital on the financial performance of Rural Banks in Bali., also the study of Sedeaq Nassar,(2019) referred to the importance of human capital and structural capital in the value creation and financial performance of the organization. Furthermore, the findings of the study of Abiodun Popoola (2019) provides significant evidence indicating that structural and human capital is very important in increasing the profitability of organizations as measured by their return on assets. Based on the results of these studies these hypotheses could be raised:

H1: There is a positive and significant impact of human capital on financial performance.

H2: There is a positive and significant impact of structural capital on the financial performance.

# CHAPTER THREE ANALYSIS AND METHODOLOGY

#### 3.1. Population And Sample of The Study

The study's population consists of employees from the Bank of Bagdad and the Gulf Commercial Bank in Bagdad who work in the departments of management, accounting, finance, banking, and economics and have sufficient knowledge of human and structural capital and financial performance. Random sampling method is used in the course of this study.

There are 450 employees in this sector. The survey was sent to 450 employees, and 200 of them returned it.

#### 3.2. Measurement Instruments

As previously stated, the items and questions for the questionnaire or survey were gathered from published research and studies. Human capital was measured by a 10-item scale (exp. the bank keeps highly experienced managers and employees with extensive experience, and the staff's knowledge, abilities, and competence are sufficient to meet defined goals and objectives) and structural capital was measured by a 12-item scale (exp. employees are an important component of banking services, according to bank management, and without them, the bank would be unable to achieve its goals) both of which were adopted from the master's thesis by Saber (2019). The questionnaire was prepared by adapting the questions from Wali (2007) and Santoso (2011), and the reliability (.782) and validity analysis were conducted by the researcher. Bank financial performance, was measured by a 10-item scale (like, the bank has a better return on equity than the past three years and the bank has created a positive change in return on investment than the previous three years), adopted from the master's thesis by Hasan (2017). The questionnaire is self-prepared by Hasan (2017) and the reliability (.901) and validity analyses were also conducted by the researcher.

Scales were measured using the 5-point Likert scale, where 1 = absolutely I disagree and 5 = absolutely I agree.

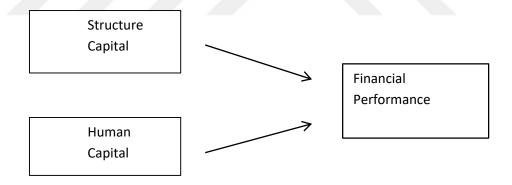
#### 3.3. Methodology For Data Collection and Analysis

A total of 200 surveys were sent to bank employees in Bagdad, with 20 of them being discarded due to incorrect replies. As a result, the number of responses that could be analyzed was restricted to 180.

To investigate the influence of human and structural capital on financial performance, those factors were rated on a 5-point Likert scale. In addition to the independent and dependent variables, a 5-point Likert scale was used to explain the features of the sample as well as the individual in question to the questions. The reliability analyses were carried out, and descriptive analysis was performed to determine the sample's characteristics as well as the respondents to the questionnaires. In addition, correlation and linear regression analyses were employed to evaluate the study hypotheses.

#### 3.4. Model of The Study

The independent variable (financial success) and the dependent variables (human capital and structural capital) were established based on the literature.



#### 3.5. Analyses Findings

**Table 3.** Demographic summary of survey responses

Variable	Classification	Frequency	Percent %
Gender	Male	109	60.6
	Female	71	39.4
	total	180	100
Education level	less than College	53	29.4
	College	38	21.1
	Bachelor's degrees	71	39.5
	postgraduate degrees	18	10
	total	180	100
Age	18-24	15	8.3
	25-34	60	33.3
	35-44	49	27,2
	45-54	34	19
	55-65	22	12.2
	total	180	100
Experience	Less than 5 years	74	41.1
	5- less than 10 years	9	5.0
	10 - less than 15 years	56	31.1
	16-20	41	22.8
	Total	180	100.0
Materials	Married	92	51.1
	Widowed	18	10.0
	Divorced	10	5.6
	Never Married	60	33.3
	Total	180	100.0
Department	Management	85	47.2
	Accounting	62	34.4
	Finance and banking	33	18.4
	Total	180	100.0

From the results of the respondents in the table 3 we can notice that the percent of the female in the sample is 45.5% and male 39.4%, and the male percent are about 60.6% and this result indicates contrary to the expected that there is a less depending on the female in the banking sector in Iraq comparing with the male percentage, from the other side we can see that approximately 29% from the respondents have less than the college degree and more than 39.5% have Bachelor's degree, from the results in the table also we can notice that the percent of the employees that have less than 5 years' experience is about 41% and this a high percent which give the negative signs about the usage of and maintaining on the qualified employees. Furthermore, we can see that about half

of the respondents in the sample of study are from the managerial sectors in the studied banks.

Table 4. Mean, std. deviation, skewness and kurtosis analyses

Human Capital	Mean	Std. Deviation	Skewness	Kurtosis
The bank retains managers and employees of highly skilled and accumulated experience	2.4167	1.25460	320.	-1.242-
Bank management systematically and continuously develops the skills and abilities of the employees through the multi-purpose training programs	2.2833	1.25193	658.	-690
The bank's employees are widely considered the best in the industry	2.5389	1.29616	287.	-1.120-
Bank management is seeking to adopt administrative empowerment, concepts, and methods-based management confidence to maintain the best employees in terms of banking services	3.2056	1.34413	-479	-1.058-
The knowledge, skills, and competencies of the staff are sufficient to achieve established goals and objectives	2.6833	1.19811	141.	-985
Bank management senses employees that they can manage themselves and responsible for their financial performance	2.7889	1.30315	230.	-1.067-
Bank management encourages a spirit of competition among employees at the bank.	2.7611	1.22982	083.	-1.147-
The bank's goals and objectives are fully understood by the employees, and they are focused on achieving those goals and objectives	2.6722	1.34883	160.	-1.298-
The employees provide the bank with a competitive advantage over competitors	2.9944	1.41223	-074	-1.366-
Leadership skills are sufficient to achieve established goals and objectives	2.7944	1.42874	240.	-1.340-
Structural capital				

2.7611	1.22982	.083	1.147-
2.5389	1.27004	.557	735-
2.3444	1.30029	.647	749-
2.6444	1.20345	.093	-1.125-
3.0500	1.34237	.062	-1.192-
2.8611	1.22253	.009	-1.061-
2.8944	1.27063	031-	-1.130-
3.0722	1.20070	003-	919-
2.8611	1.30647	089-	-1.096-
3.1500	1.33067	135-	-1.194-
3.0333	1.35737	020-	-1.164-
2.8944	1.21672	.261	878-
2.8389	1.25589	.155	-1.096-
	2.5389  2.3444  2.6444  3.0500  2.8611  3.0722  2.8611  3.1500	2.5389 1.27004  2.3444 1.30029  2.6444 1.20345  3.0500 1.34237  2.8611 1.22253  3.0722 1.20070  2.8611 1.30647  3.1500 1.33067  3.0333 1.35737	2.5389       1.27004       .557         2.3444       1.30029       .647         2.6444       1.20345       .093         3.0500       1.34237       .062         2.8611       1.22253       .009         2.8944       1.27063      031-         3.0722       1.20070      003-         2.8611       1.30647      089-         3.1500       1.33067      135-         3.0333       1.35737      020-         2.8944       1.21672       .261

Bank has had upright improvement on return	3.0389	1.22526	001-	953-
on assets in the last three years				
Double have a better motoring and a service and and	2 0022	1 26711	1.47	1 100
Bank has a better return on equity compared	2.8833	1.36711	.147	-1.198-
to the previous three years				
The bank has made a positive change in return	2.9000	1.28637	.141	-1.073-
on the owner equity compared to the previous				
three years				
The rate of return on the bank's owner equity	2.8000	1.25248	.057	-1.116-
exceeds the competitive banks.				
The bank has made a positive change in return	2.9167	1.28104	.238	-1.068-
on investment compared to the previous three				
years				
The return on investment exceeds the	2.8722	1.33300	.094	-1.167-
competitive banks				
Bank has made a positive change in the profit	3.1444	1.33756	168-	-1.186-
margin of operations compared to the		1.667.66	.100	11100
previous three years				
Banks' Profit margin from operations exceed	2.9500	1.35480	.092	-1.206-
the competitive banks				

The mean, standard deviation, skewness, and kurtosis analyses are shown in table 4. The normal values for skewness and kurtosis are between -3 and +3, and all of the question items' values are between -3 and +3, indicating that the data is normal and acceptable for analysis.

 Table 5: Factor loading and Variance Explained analyzes

Factor's Name	Variables	Factor Loading	Eigen- value	Variance Explained	KMO	Cronbach's Reliability Coefficients
Human Capital	The bank retains managers and employees of highly skilled and accumulated experience  Bank management systematically and continuously develops the skills and abilities of the	.525	1.695	52.222	.720	.753
	employees through the multi- purpose training programs					

	The bank's employees are widely considered the best in the industry	.742				
	Bank management is seeking to adopt administrative empowerment, concepts, and methods-based management confidence to maintain the best employees in terms of banking services	.933				
	The knowledge, skills, and competencies of the staff are sufficient to achieve established goals and objectives	.502				
	Bank management senses employees that they can manage themselves and responsible for their financial performance	.505				
	Bank management encourages a spirit of competition among employees at the bank.	.584				
	The bank's goals and objectives are fully understood by the employees, and they are focused on achieving those goals and objectives	.662				
	The employees provide the bank with a competitive advantage over competitors	.671				
	Leadership skills are sufficient to achieve established goals and objectives	.669				
	The bank applies most of its knowledge and information in processes, structures, and systems.	.628				
Structural capital SC	The bank's knowledge is reserved in repositories such as manuals/ documentation, and databases	.775	1.299	55.665	.704	.699
	The applied bank management systems support to retain, attract expertise and knowledge	.692				
	The management philosophy of the bank supports the	.621				

	achievement of established					
	goals and objectives.					
	Internal relations at the bank provide favorable conditions for the work of the employees as a team.	.638				
	Organize work departments in the bank assistances to provide better service to bank clients	.586				
	The bank set of guidelines and written notes and publications that explain the functioning of the managers and employees.	.646				
	The bank management confirms that employees are an essential part of the banking services, and without them, the bank could not achieve its objectives	.648				
	The bank communicates effectively from the top-down and the bottom-up	.540				
	The bank has a system to collect necessary data and information for the financial performance assessment process.	.545				
	The bank has access to general business management and specialized tools (such as facilities, information technology, and equipment) needed to achieve established goals and objectives.	.835				
	Bank has had worthy improvement on return on equity in the last three years	.654				
	Bank has a better return on equity than the industry.	.617				
Financial Performance FP	Bank has had upright improvement on return on assets in the last three years	.673	1.091	58.524	.763	.775
	Bank has a better return on equity compared to the previous three years	.655				
	The bank has made a positive change in return on the owner	.491				

equity compared to the previous three years			
The rate of return on the bank's owner equity exceeds the competitive banks.	.313		
The bank has made a positive change in return on investment compared to the previous three years	.585		
The return on investment exceeds the competitive banks	.672		
Bank has made a positive change in the profit margin of operations compared to the previous three years	.627		
Banks' Profit margin from operations exceed the competitive banks	.565		

Analysis of Factor Validity SPSS was used to do an exploratory factor analysis on the 31 items. Exploratory factor analysis detects inappropriate items and explores the presence of a relationship between constructs by searching for correlations between items and factors when dimensionality is controlled to improve the reliability of a scale. All of the factor loading values in our study are greater than 0.5, which is sufficient for the analysis.

The eigenvalues for each factor in the data were calculated in the first step. The Kaiser-Meyer Olkin Measure, which is larger than 0.5 for all parameters, backed up the sample. In this study, three components had eigenvalues larger than one, indicating that each component accounted for more than half of the fluctuation, as shown in table 5. Cronbach's Reliability Coefficients for all variables are about 70% and higher, based on the results of our investigation.

**Table 6:** Correlation analyzes

	Human	Structure	Financial
	capital	capital	performance
Human capital	1		
Structure capital	.623(**)	1	
Financial performance	.736(**)	.623(**)	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

a Listwise N=180

The correlation value between two variables has to be less than 0.80, by looking at the results in Table 6, it can be seen that the correlation between human capital and financial performance is about .653(\*\*) and acceptable, and the correlation value between structure capital and financial performance is about .736(\*\*) and is acceptable. In other words, the correlation between human and structure capital with financial performance is significant at the 0.01 level.

**Table 7:** Regression Analyze Results

Dependent	Independent	β	t	P value	$R^2$	F
Variables	Variables					
Financial performance	(Constant)		232	.000	.671	243.699
	Human capital	.477	10.13	.000		
	Structure capital	.134	3.347	.000		

With respect to the effects of human and structure capital on the financial performance in the bank of Bagdad and gulf commercial bank in Bagdad (p < 0,05), H1 and H2 respectively, the results support all hypothesis. Thus, the higher quality of human and structure capital the higher financial performance is likely to be. Furthermore, from the obtained results in the table 7 we can notice that there are a significant and positive relationship between human and structure capital and the financial performance.

That is to say, there is a highly trained and accumulated experience workforce, and Bank management consistently and continually improves employees' skills and talents through multi-purpose training courses on one hand and on the other, the bank's management philosophy encourages the attainment of defined goals and objectives, and the bank's expertise is stored in manuals, documents, and databases.

# CHAPTER FOUR CONCLUSION

#### 4.1. Discussion

The purpose of this study was to look at the relationship between human and structural capital as well as the financial performance of Iraqi banks, particularly the Bank of Bagdad and the Gulf Commercial Bank in Bagdad.

The study's chosen banks represent the banking sector in Iraq, and their employees are well-versed in human and structural capital, as well as financial performance. The influence of human and structural capital on financial performance is investigated using a questionnaire in this study.

The findings of this thesis support the notion that human and structural capital are becoming more widely acknowledged as critical strategic assets for bank financial success. The findings suggest that banks may benefit from investing in more human and structural capital since the value added was able to boost the profitability of the banks. To meet the bank's objectives, it is critical to invest in human resources. To put it another way, research has improved our knowledge of how human and structural capital contribute to the value of a company. It looked at the findings of previous studies that looked into the relationship between human and structural capital and financial success.

This research also presents one of the first empirical studies in Iraqi banks on major topics related to human and structural capital and how they affect financial performance. This research backs up the idea that the main driving forces in today's business environment have shifted from the planning of tangible assets to the exploitation of intangible assets exhibited in employees' knowledge and expertise, the leveraging of organizational effectiveness through the formalization of implicit and explicit understanding, and the accessibility of a specific medium to include a platform to share through interpersonal interaction and networking. The findings clearly show that banks must be able to manage the interacting behaviors of their intangible resources in order to achieve financial success through dynamic capabilities.

Furthermore, structural capital in the form of information technology encourages communication among social network members and provides problem-solving tools; in other words, structural capital allows. These results are similar to the study of Nuryaman (2015) which found that there is an influence of intellectual capital on the financial performance and firm value of the organization and the similar to the findings of the study of Juan Alejandro Gallegos, Carlos, Juan, Rocío and Marcos (2021) which found a significant positive relationship between intellectual capital and its dimensions like human and structure capital with financial performance

#### 4.2. Managerial Implications

The thesis established that the human and structural capital have a positive effect on the financial performance of the private commercial banks in Baghdad, Iraq. The study, therefore, recommends that managers/owners of the private commercial banks in Baghdad make utilization in effective way of human and structural capital as a key priority to develop the financial performance of the bank. They should therefore not only formulate the human and structural capital with financial performance strategies, but also constantly monitor and evaluate their efficiency. This will act to improve the low implementation levels of the human resources and structure capital to achieve the bank goals. The study also recommends that before the adoption of any particular human resources and structure capital strategy, the managers/owners of the private banks to first determine the suitability of that particular financial management practice based on the human and structure capital. This will ensure that the financial performance put in place are able to meet and surpass their set objectives and targets.

#### 4.3. Recommendation

The most significant variable is capital employed, indicating that the utilization of physical and financial resources must be effective and efficient. Banks should invest more in structural capital by becoming more inventive with high technology and supporting infrastructure.

Finally, this research concentrated solely on human and structural capital in Baghdad's bank and Gulf Commercial Bank. Future research might include additional financial institutions or non-financial industries, expand the time range of the study, and incorporate control variables such as company size,

because some academics suggest that knowledge generation, dissemination, and storage are intrinsically evolutionary in nature.

#### 4.4. Limitations

The results of this study, although attempting to explore the influence of human and structural capital on financial performance in the context of Iraqi banks, can only be described as exploratory at best. When it comes to answering research questions for this study thesis, there are still a few roadblocks to overcome. Studies on human and structural capital, for example, have mostly focused on financial services. Many drastic shifts in information technology may have occurred, including planned mergers, deregulations, and quick changes in financial services. As a result, applying this sample to the connection between human and structural capital and financial performance may be a cautious test.

This thesis also didn't consider the effect of demographic factors to understand if any of the variables under study were influenced by demographics.

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## **APPENDIX**

# **QUESTIONNAIR**

## **Section A:**

## **Demographical information**

1.	Age (Please Tick your a	ge group)	
21-30 year		51-60 years	$\square_4$
31-40 years	$\square_2$	61 and more	$\square_5$
41-50 years	$\square_3$		
2.	Gender (Please Tick you	ır gender)	
	Male $\square_1$	Female $\Box$	
3.	What is your highest qua	lification? (Please Tick	in one box)
Bachelors state)	$\square_1$ Master $\square_2$	PhD□3 O	ther 4 (Please
4.	Years of experience (Ple	ase Tick in one box)	
Less than 5 years	s 🗖 1 5-10 🗖 2 11-1	5 <b>□</b> <sub>3</sub> 6-20 <b>□</b> 4 1	More than 20 years
5.	Scientific specialization	(Please Tick in one box	)
Management $\Box$	1 Accounting $\square_2$ Financ	e and banking $\square_3$	Economic $\square_4$

## **Section B:**

# (Please choose as appropriate)

	STATEMENT	SCAL	Æ			
	HUMAN CAPITAL	Absolutely I disagree	I disagree	I am undecided	I agree	Absolutely I agree
$\neg$		(1)	(2)	(3)	(4)	(5)
1.	The bank retains managers and employees of highly skilled and accumulated experience					
2	Bank management systematically and continuously develops the skills and abilities of the employees through the multipurpose training programs					
3	The bank's employees are widely considered the best in the industry					
4	Bank management is seeking to adopt administrative empowerment, concepts, and methods-based management confidence to maintain the best employees in terms of banking services					
5	The knowledge, skills, and competencies of the staff are sufficient to achieve established goals and objectives					
6	Bank management senses employees that they can manage themselves and responsible for their financial performance					
7	Bank management encourages a spirit of competition among employees at the bank.					
8	The bank's goals and objectives are fully understood by the employees, and they are focused on achieving those goals and objectives					
9	The employees provide the bank with a competitive advantage over competitors					

10	Leadership skills are sufficient to achieve established goals and objectives				
	Structural capital				
11	The bank applies most of its knowledge and processes, structures, and systems.	l inform	ation in		
12	The bank's knowledge is reserved in repositories such as manuals/documentation, and databases				
13	The applied bank management systems support to retain, attract expertise and knowledge				
14	The management philosophy of the bank supports the achievement of established goals and objectives.				
15	Internal relations at the bank provide favorable conditions for the work of the employees as a team.				
16	Organize work departments in the bank assistances to provide better service to bank clients				
17	The bank set of guidelines and written notes and publications that explain the functioning of the managers and employees.				
18	The bank management confirms that employees are an essential part of the banking services, and without them, the bank could not achieve its objectives				
19	The bank communicates effectively from the top-down and the bottom-up				
20	The bank has a system to collect necessary data and information for the financial performance assessment process.				
21	The bank has access to general business management and specialized tools (such as facilities, information technology, and equipment) needed to achieve established goals and objectives.				
	Financial Performance				
22	Bank has had worthy improvement on return on equity in the last three years				
23	Bank has a better return on equity than the industry.				
24	Bank has had upright improvement on return on assets in the last three years				

25	Bank has a better return on equity compared to the previous three years			
26	The bank has made a positive change in return on the owner equity compared to the previous three years			
27	The rate of return on the bank's owner equity exceeds the competitive banks.			
28	The bank has made a positive change in return on investment compared to the previous three years			
29	The return on investment exceeds the competitive banks			
30	Bank has made a positive change in the profit margin of operations compared to the previous three years			
31	Banks' Profit margin from operations exceed the competitive banks			