

# **Financial Development and Inclusion of UAE**

التنمية المالية والشمول في دولة الإمارات العربية المتحدة

**by**

**LATIFA ABDULLA MAHMOUD**

**Dissertation submitted in partial fulfilment**

**of the requirements for the degree of**

**MSc FINANCE**

**at**

**The British University in Dubai**

**May 2023**

## DECLARATION

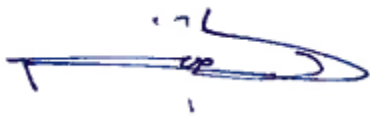
I warrant that the content of this research is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that a copy of my research will be deposited in the University Library for permanent retention.

I hereby agree that the contents of this dissertation for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make a digital copy available in the institutional repository.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my thesis for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

A handwritten signature in blue ink, consisting of a series of loops and a long horizontal stroke, positioned above a horizontal line.

Signature of the student

## **COPYRIGHT AND INFORMATION TO USERS**

The author whose copyright is declared on the title page of the work has granted to the British University in Dubai the right to lend his/her research work to users of its library and as an open source and to make partial or single copies for educational and research use.

The author has also granted permission to the University to keep or make a digital copy for similar use and for the purpose of preservation of the work digitally.

Multiple copying of this work for scholarly purposes may be granted by either the author, the Registrar or the Dean only.

Copying for financial gain shall only be allowed with the author's express permission.

Any use of this work in whole or in part shall respect the moral rights of the author to be acknowledged and to reflect in good faith and without detriment the meaning of the content, and the original authorship.

## ABSTRACT

This study explores the crucial area of financial inclusion and growth within the framework of the United Arab Emirates (UAE). Using a mixed-method approach, the study's primary goal is to evaluate the degree of financial-based development and inclusion in the United Arab Emirates. Global recognition exists for financial development as a stimulus for long-term economic growth. Globally, policymakers emphasise financial inclusion more as they recognise that more than 2.5 billion individuals cannot access essential banking services. This research, contextualised within the economic environment of the United Arab Emirates, thoroughly analyses the evolution, implications, difficulties, and mitigation strategies for financial growth and inclusion. Methodologically, an interpretivist approach focuses on quantitative analysis and inductive reasoning. Using random sample procedures, ten questionnaires on a 5-point Likert scale were given to managers and staff members of financial institutions. Data analysis, including frequency analysis, descriptive statistics, correlational research, and reliability testing, was made more accessible by SPSS software.

The robustness of the data is confirmed by the findings, which show a high-reliability score of 0.821. Descriptive statistics emphasise the diversity of financial inclusion difficulties by showcasing a range of response patterns. The intricate linkages between many facets of financial development and inclusion are highlighted through correlational analysis. The research concludes by synthesising its findings, providing policymakers with suggestions and outlining potential directions for further research. The financial environment of the United Arab Emirates is carefully studied, offering insightful information to academics, professionals, and policy proponents in the global financial sphere.

**Keywords:** Middle East and North Africa (MENA), Financial Inclusion, Financial-based Development, Challenges and Opportunities.

## خلاصة

تستكشف هذه الدراسة المجال الحاسم المتمثل في الشمول المالي والنمو في إطار دولة الإمارات العربية المتحدة. وباستخدام منهج مختلط، فإن الهدف الأساسي للدراسة هو تقييم درجة التنمية والشمول المالي في دولة الإمارات العربية المتحدة. هناك اعتراف عالمي بالتطور المالي باعتباره حافزاً للنمو الاقتصادي على المدى الطويل. وعلى الصعيد العالمي، يؤكد صناع السياسات على الشمول المالي بشكل أكبر لأنهم يدركون أن أكثر من 2.5 مليار فرد لا يستطيعون الوصول إلى الخدمات المصرفية الأساسية. يقدم هذا البحث، الذي يتم وضعه في سياق البيئة الاقتصادية لدولة الإمارات العربية المتحدة، تحليلاً شاملاً للتطور والآثار والصعوبات واستراتيجيات التخفيف للنمو المالي والشمول. من الناحية المنهجية، يركز النهج التفسيري على التحليل الكمي والتفكير الاستقرائي. وباستخدام إجراءات العينة العشوائية، تم توزيع عشرة استبيانات على مقياس ليكرت المكون من 5 نقاط على مديري وموظفي المؤسسات المالية. أصبح تحليل البيانات، بما في ذلك تحليل التكرار، والإحصاءات الوصفية، والبحوث الارتباطية، واختبار الموثوقية، أكثر سهولة من خلال برنامج SPSS.

تم تأكيد قوة البيانات من خلال النتائج، والتي تظهر درجة موثوقية عالية تبلغ 0.821. تؤكد الإحصاءات الوصفية على تنوع صعوبات الشمول المالي من خلال عرض مجموعة من أنماط الاستجابة. يتم تسليط الضوء على الروابط المعقدة بين العديد من جوانب التنمية المالية والشمول المالي من خلال التحليل الارتباطي. ويختتم البحث بتجميع النتائج التي توصل إليها، وتزويد صناع السياسات بالاقتراعات وتحديد الاتجاهات المحتملة لمزيد من البحث. تمت دراسة البيئة المالية لدولة الإمارات العربية المتحدة بعناية، مما يوفر معلومات ثابتة للأكاديميين والمهنيين ومؤيدي السياسات في المجال المالي العالمي.

## **DEDICATION**

This study is dedicated to the unwavering pursuit of knowledge and advancement. It honours everyone, aiming to break down barriers and promote financial empowerment to create a world where everyone has access to a fair financial system. May this commitment to developing societies where everyone has access to financial possibilities, regardless of their circumstances or background, be echoed by this dedication.

## **ACKNOWLEDGEMENTS**

I would like to sincerely thank the people and institutions, whose vital assistance made this research possible.

With deep gratitude, I acknowledge the survey respondents, whose perspectives shed light on this research.

Special thanks to the financial institutions and their dedicated employees for freely sharing their knowledge and time.

I am grateful for my family, friends, and mentors' support, Dr Abdulmounain Lahrech & Professor Husam Almalkawi. Their support and insight are evident in this research. I am grateful that you are the mainstay of our scholarly project.

## TABLE OF CONTENTS

<b>Chapter 1 : Introduction</b>	1
1.1 Background	1
1.2 Research Significance	6
1.3 Research Aim	7
1.4 Research Objectives	7
1.5 Research Questions	8
<b>Chapter 2 : Literature Review</b>	9
2.1 Financial Development and Financial Inclusion	9
2.2 Conceptual Framework	12
2.3 Middle East and North Africa (MENA)	15
2.4 Historical Context of Financial Development and Inclusion in UAE	17
2.5 UAE and Other Countries	20
2.6 Current Status of UAE	23
2.6.1 Progress	23
2.6.2 Challenges	24
2.7 Empirical Studies	24
2.8 Impact of COVID-19	27
2.9 UAE Sustainable Finance Framework	33
2.10 UAE Laws on Financial Development	34
2.11 Impact on Economic Growth	36
2.12 The Implication of Digital Technology	38
2.13 The Financial Security System in UAE	40
<b>Chapter 3 : Methodology</b>	45
3.1 Research Philosophy	45
3.1.1 Interpretivism	45
3.1.2 Positivism	46
3.1.3 Justification of Interpretivism Philosophy	46
3.2 Research Approach	47
3.2.1 Inductive Approach	47



3.2.2	Deductive Approach.....	48
3.2.3	Justification of Inductive Approach .....	48
3.3	Research Design .....	48
3.3.1	Qualitative Research Design .....	49
3.3.2	Quantitative Research Design .....	49
3.3.3	Mixed Research Design .....	50
3.3.4	Justification of Quantitative Research Design .....	50
3.4	Data Collection Process.....	50
3.4.1	Primary Data Collection Process.....	50
3.4.2	Secondary Data Collection Process.....	52
3.4.3	Justification of Primary Data Collection Process.....	52
3.5	Data Analysis.....	52
3.5.1	Justification of Data Analysis .....	53
3.6	Ethical Consideration .....	53
3.7	Limitations in Methodology .....	54
<b>Chapter 4</b>	<b>: Results and Discussion.....</b>	<b>55</b>
4.1	Quantitative Analysis .....	55
4.2	Reliability Analysis .....	55
4.3	Frequency Test .....	56
4.4	Descriptive statistics .....	71
4.5	Pearson correlational test.....	72
<b>Chapter 5</b>	<b>: Conclusion and Recommendation .....</b>	<b>75</b>
5.1	Recommendations .....	78
5.2	Future Studies .....	81
<b>References</b>	.....	<b>83</b>

## LIST OF TABLES

<b>Table 1:</b> Reliability Test For Testing The Validity Of Dataset .....	55
<b>Table 2:</b> Frequency test for Question 01 “Does The Government Of UAE Taking Certain Measures In Order To Stabilize Financial Development?” .....	56
<b>Table 3:</b> Frequency Test for Question 02- “Rather Financial Development Influence On Economic Growth In UAE” .....	57
<b>Table 4:</b> Frequency Test For Question 03- “Rather COVID-19 Outbreak Impact On Maintaining Financial Inclusion In UAE?” .....	59
<b>Table 5:</b> Frequency Test For Question 04- “Do Monitoring And Controlling A Significant Function In Financial Institutions In Order To Avoid Fraudulent Activities” .....	60
<b>Table 6:</b> Frequency test for Question 05- “Do Financial Institutions In UAE Contribute Towards GDP Growth Rate?” .....	62
<b>Table 7:</b> Frequency Test For Question 06- “Does Dubai International Financial Centre (DIFC) Performs A Crucial Role In Providing Financial Services To Business Clients?” .....	63
<b>Table 8:</b> Frequency Test For Question 07- “Rather Financial Services Regulatory Authority (FSRA) In Abu Dhabi Performs Supervisory Role For Managing Financial Activities” .....	65
<b>Table 9:</b> Frequency Test For Question 08- “Does A Financial Infrastructure Transformation Programme (FIT) Introduced In Order To Bring Digital Automation Within Financial Services?” .....	66
<b>Table 10:</b> Frequency Test For Question 09- “Do Central Banks In UAE Needs To Revise Banking Policies After Regular Intervals?” .....	68
<b>Table 11:</b> Frequency Test For Question 10 “Do Smaller Financial Institutions In UAE Come-Up With Various Challenges In-Terms Of Customer Handling During The Covid-19 Outbreak?” .....	69
<b>Table 12:</b> Descriptive Statistics Of Each Survey Question’s Mean Values And Standard Deviation .....	71
<b>Table 13:</b> Correlational Coefficient For Showing The Value Of Significance For Each Question .....	73

# **Chapter 1 : Introduction**

## **1.1 Background**

During the past two years, the global-based economy has witnessed a large amount of growth and development. The role of developing-based countries plays an important role in the accomplishment of economic-based goals. The liberalized flow related to capital and investment has become more frequent among world-based economies. However, the effectiveness related to foreign direct-based investment (FDI) and market-based capitalization may vary depending on the country (Mena, 2022). An ample amount of literature is presently related to the financial development role in optimizing the growth-based returns in the hosting-based countries from the FDI. The efficient financial-based systems make sure to relate to the smoothness of the capital-based inflows. Therefore, the emphasis is made on raising the inflows related to net-based capital alone doesn't provide help unless it is linked with the simultaneous development related to financial-based systems. Economic growth is considered a common role related to all nations (Zhang, 2021). Everyone is now living life in a better way in contrast to before as it surges in the national output based growth. The government in each country aims to reduce the poverty level and increase the level related to national-based income. To achieve the growth-related targets, it is important for the government to implement a variety of policies, for instance, encourage-based saving and investing for the increased level of national-based production.

Economic expansion is highly dependent on technological progress. There are contradictions in the formalization of the monetary area, and the editorial board argues that the Financial inclusion is one of the ways that ICT works with currency development. Consider

computerized currency implied use IT to really improve monetary considerations. Understanding its connection to financial inclusion has many implications for policy as it is a growing phenomenon. Economic models suggest that production and resource efficiency can be affected by economic freedom. There will be more economic freedom in countries with less regulation than in countries with more regulations. The more economic freedom a society has the more money it earns and the more it develops. Economic scholars have said that competition among firms, freedom of choice, provision of resources, trade and assurance of private liberties are essential for economic progress. In economically free societies, governments do not restrict liberties beyond what is necessary to protect and maintain democracy and to allow the free flow of labor, capital, and other resources.

According to the Index of Economic Freedom, private businesses in a total of 90 countries (or 50%) enjoy at least a reasonable degree of economic freedom to achieve greater wealth and success. Furthermore, financial development and growth is strongly influenced by economic freedom. Therefore, it makes perfect sense to study the impact of economic freedom on financial inclusion. However, there is no empirical evidence to suggest that financial inclusion and economic freedom are related. With regard to economic freedom, it is clear those strategies that aim to promote and promote financial access by improving the availability of credit information, enhancing competition, and removing barriers to entry. Through a reassessment of the role of financial institutions, efforts should focus on reducing the extent of state intervention in the financial system. In addition, governments should encourage reforms such as making bank accounts cheaper for the unbanked and reducing restrictions in the financial services sector. In addition to policies to increase banking penetration, policies should be introduced to improve the infrastructure to make it more available and used. To build financially

inclusive societies, it is also necessary to reduce income disparities, increase literacy rates, and improve communication infrastructure.

The essential role of financial-based development on economic-based growth is evidenced by many empirical and theoretical-based research. However, Cho (2019) is the one who won the debated relationship which exists between the growth level and the financial-based institution. After that, this topic gained a lot of attention from scholars. Until 1900, the nexus related to financial development-based growth was not clear as it was based on the policies related to financial-based liberalization. In many cases, this may be detrimentally related to economic-based growth. All the studies related to the role of financial-based development and the nexus of FDI-based growth are considered very positive. As per Chen (2022), FDI and capital-based formation palsy an essential role in the enhancement related to infrastructure, technology and industrial-based development. In contrast, Alam (2020) empirically investigated all these effects. However, an advanced kind of financial-based development plays an important role in optimizing the growth-based results from foreign direct-based investment (FDI). According to Tasci's (2020) findings, the relationship which exists between financial-based development and economic-based growth is based on the efficiency rate. Hence the growth of any country in terms of FDI is not dependent on the investment volume.

The financial-based development and economic-based growth are theoretically considered related. It can be said that having financial-based development performs several kinds of critical-based functions to increase the efficiency related to intermediation by decreasing the information and monitoring the cost rate. Having a well-developed financial-based system helps in promoting the investment level by finding the best opportunities related to business. The financial crises related to 2008 years posed severe kind of threats in terms of

economic-based growth (Tooze, 2020). The tremor related to such a threat is still wandering in many of the developed-based economies, especially in the regions of Europe. It is important to revisit the role related to the financial-based system to eliminate all the risks linked with it and to exploit the capital more efficiently. Many of the studies are present on the spillover-based effects related to FDI and the financial-based role related to growth. It is hard to find the literature related to the nexus of financial growth-based development, which includes the role of FDI. UAE has emerged as one of the greatest economies in the MENA-based regions. It is considered the centre of the world's mega-based events, property-based investments and other kinds of financial-based investments. The crises related to global-based finances in the year 2008 hit UAE strongly. This necessitated the factors and proposed the implications related to valuable policy in the regions of UAE. The results related to this research study are to open new doors on the nexus related to financial growth-based development and unveil all the directions related to future research-based decisions. In addition, this research study aims at exploring the level of financial-based development and inclusion related to the UAE.

The federal state of the United Arab Emirates (UAE) is located in the Middle East. It is certainly sentimental in the southeast of the Middle Eastern lands in West Asia on the Persian Gulf and it borders with Oman and Saudi Arabia. In addition, the federal government borders Iran, Kuwait, Qatar and Bahrain. Abu Dhabi, Ajman, Dubai, Furairah, Ras al-Khaimah, Sharjah and Umm al-Quwain are the states that make up the federal state of the United Arab Emirates. The United Arab Emirates became a federal state in 1971. Abu Dhabi is the political, economic and social administrative center of the federal state as well as its capital. Arabic is the official language of the federal government and Islam is its official religion. A constitutional monarchy rules the country, with Mohammed bin Rashid Al Makhtoum as prime minister and

Khalifa bin Zayed Al Nahayan as president. The UAE's GDP per capita is estimated to be comparable to the GDP per capita of the major Western European countries and the expansion of the economy is mainly driven by oil revenues and the expanding service sector.

Financial inclusion is the term which is used to describe the state where individuals and business have access related to useful and affordable financial-based products and services which meet their needs, are delivered in a sustainable-based way and contributes to the economic growth of the country. In fact, the definition made this clear that the access related to the transaction-based account is considered the first step in attaining a higher level of financial-based inclusion, as it facilitates the receiving and storage related to the cash (Riabi, 2019). All the theoretical and empirical economic-based literature evidenced the role which is played by many factors for instance the rate of interest in the saving behaviour of the borrowers. Such behaviours can be understood by the choices which are made in terms of inter-temporal-based consumptions, which are dependent on the preference of the individual. The financial-based inclusion is not just an end. Instead, it is considered as the mean to an end –when individuals possess a safe place related to keeping their money along with having access related to credit cards when needed.

A large number of studies have explored the issues related to financial-based inclusions. As per the evidence from the data of Global Findex, it is highlighted that lack of proper resources and high cost related to the financial-based services are considered as the two major hurdles in borrowing, which are noted by those having no bank account. According to

Latif (2019), income is considered the most significant factor for individuals who perceives a lack of money as a hurdle to being banked. The report of the Global Findex 2012,

only 18.9% of the individuals in the poor income-based quintile had the account, whereas this percentage got increased to 55% in the wealthiest-based quintile. As per Niankara (2020), it was seen that UAE nationals were more interested in borrowing and not in using credit-based cards as compared to non-national-based citizens. He also found that no relationship exists between the financial-based attitude of the individuals and the borrowing decision. However, a negative relationship existed between the financial-based attitude of the individuals and the likelihood related to using credit cards. In contrast, Dong (2020) highlighted that a strong relationship exists between the level related to university-based education and the likelihood related to saving and borrowing. He also found that a relationship also exists between financial-based inclusion and the education level of the individual. In contrast, Namkung (2019) proposed that a significant relationship occurs between the cost of maintaining a bank account and age.

## **1.2 Research Significance**

The essential role of financial-based development on economic-based growth is evidenced by many empirical and theoretical-based research. However, Mwangi (2021) are the one who won the debated relationship which exists between the growth level and the financial-based institution. After that, this topic gained a lot of attention from scholars. Until 1900, the nexus related to financial development-based growth was not clear as it was based on the policies related to financial-based liberalization. In many cases, this may be detrimentally related to economic-based growth. All the studies related to the role of financial-based development and the nexus of FDI-based growth are considered very positive. It can be said that having financial-based development performs several kinds of critical-based functions to increase the efficiency related to intermediation by decreasing the information and monitoring the cost rate. All the studies related to the role of financial-based development and the nexus of



FDI-based growth are considered very positive. As per Li (2021), FDI and capital-based formation play an essential role in the enhancement related to infrastructure, technology and industrial-based development. In contrast, Alam (2020) empirically investigated all these effects. However, an advanced kind of financial-based development plays an important role in optimizing the growth-based results from foreign direct-based investment (FDI). In addition, a large number of studies have explored the issues related to financial-based inclusions. As per the evidence from the data of Global Findex, it is highlighted that lack of proper resources and high cost related to the financial-based services are considered as the two major hurdles in borrowing, which are noted by those having no bank account. Having a well-developed financial-based system helps in promoting the investment level by finding the best opportunities related to business.

### **1.3 Research Aim**

The aim of this research study is to investigate the level of financial-based development and inclusion related to the UAE.

### **1.4 Research Objectives**

The following are the research objectives related to this research study:

- To explore the importance of financial inclusion in UAE
- To identify the rate of inclusion in the UAE along with the factors that influence the rate
- To analyze the positive and negative impacts of financial-based development and inclusion on the growth of the UAE
- To assess the challenges and opportunities facing the UAE's financial sector in promoting inclusion and how these can be addressed.

## **1.5 Research Questions**

Following is the research question for this research study:

- How the financial development and inclusion does affect the economic growth of the UAE?
- How the UAE has evolved its financial inclusion?
- What are the steps taken by government to promote the financial development in UAE?
- What are the pros and cons of financial development in UAE?
- What are the factors that lead to the financial development and inclusion of UAE?

## **Chapter 2 : Literature Review**

### **2.1 Financial Development and Financial Inclusion**

One study found that more advanced financial markets help the economy grow by making it easier to invest and save. Multiple bilateral contracts may be needed to mobilize between over-resourced dealers and capital-raising production units. Through intermediaries, thousands of investors entrust their assets to intermediaries to invest in hundreds of companies to save costs on many bilateral contracts. Indeed, assessing companies, regulators and market conditions before making investment decisions entails significant costs (Louche et al., 2019). Individual investors may not collect and generate data on potential investments. Investors will not want to invest in companies that do not have a lot of reliable information. Information-related costs can prevent capital from being used to its fullest value. By providing better corporate data, financial institutions will be able to identify more promising investments, drive growth, and allocate capital more efficiently.

Financial development is a broad term that encompasses a wide range of activities, from the establishment of financial institutions to the development of financial markets and provisions of financial services (Aalbers, 2019). Financial development is critical for promoting economic growth and reducing poverty. Financial inclusion on the other hand refers to the extent to which individuals and businesses have access to financial services products (Shofawati, 2019). Financial inclusion is particularly important for promoting economic growth and reducing poverty in developing countries. Access to financial services can help individuals and businesses to save, invest and borrow, which can help to promote entrepreneurship, job creation, and economic growth. Financial inclusion can also help to reduce poverty by providing access

to credit and insurance, which can help individuals to cope with unexpected shocks such as illness, crop failure or job loss.

Since endogenous growth theory was born, financial development has received much attention because it is an inevitable and inseparable part of the growth process. Since the early 2000s, a research finding that poverty is caused by financial exclusion has attracted much public and academic interest in the concept of financial inclusion, including the use of financial inclusion and formal financial services (Ozili, 2021). Financial inclusion was recognized as one of the nine main pillars of the global development agenda at the G20 summit in Korea in 2010 (Fazia and Trinugroho, 2022). Financial inclusion means that all members mature in society has access to a variety of financial services tailored to their needs and at a reasonable price. Having a deposit or checking account with a bank or other financial service provider is the first step towards full financial inclusion. This account is used to store or save money, make and receive payments, and store money. At some point in the future, financial inclusion will also include access to appropriate credit from formal financial institutions and the use of insurance products that help people reduce financial risk such as damage to land or crops due to fire (Vo et al, 2021).

In addition, access to accounts, but monetary considerations, increases investment funds among livestock farmers, leading to greater agricultural outcomes and household spending (Carranza and Niles, 2019). This is especially important for those living in the lowest-income rural households. In this way, monetary considerations alleviate misery and imbalance. The process of improving the quality, quantity and efficiency of financial intermediation services, which improve lives, promote opportunities and strengthen the economy, is called financial inclusion. Financial inclusion encourages local saving, which translates into more productive

investment in local businesses. Financial efficiency, defined as the extent to which the financial system performs its functions, is considered one of the most important aspects of financial development (Lv et al., 2021). Banking crises are thought to be less likely to affect efficient financial systems. Meanwhile, financial stability is considered as the ability of the financial system to withstand shocks without causing the collapse of financial markets, payment systems and institutions.

There are four main arguments in favor of the link between economic growth and financial development (Cheng et al., 2021). There are responsive, standalone, demand tracking and supply management models. The first argument, “supply first,” suggests that efficient resource allocation can be achieved by shifting scarce resources from units of excess to units of shortage, thereby accelerating economic expansion. The exchange of goods and services, the generation of tentative information about potential investments, the mobilization and pooling of savings, trade, diversification, and risk management are all component of financial development. Financial development also includes improvements in investment tracking and corporate governance practices. Savings and investment decisions, as well as economic expansion, can be influenced by any financial function. On the other hand, the second argument, demand tracking, assumes that financial development, such as growth-oriented finance, is triggered by economic expansion (Clark, 2022). In his view, the financial sector effectively responds to the demand for new financial instruments due to the expansion of the real economy. In other words, financial development entails economic expansion.

Feedback, also known as two-way loss, is the third argument against the growth-finance relationship. In this view, economic expansion and financial development go hand in hand. From this perspective, a more efficient financial sector can increase demand for new financial

services and stimulate economic growth by improving technological progress and introducing new products and new service. These changes promote economic expansion as financial intermediaries fill these needs. The fourth view holds that there is no link between economic growth and financial development (Ahmed et al., 2021). This independent argument holds that there is no random link between economic growth and financial development. The global economy has undergone rapid expansion and development over the past two decades. The achievement of the common global economic goals relies heavily on developing countries. The process of capital adjustment and speculation has been found to be relentless in global economies. However, the market capitalization and efficiency of FDI vary by country. Capital inflows are facilitated by an efficient financial system. Thus, focusing solely on increasing net capital flows may not be beneficial unless accompanied by a simultaneous development of the financial system. Both theoretical and empirical research demonstrates that financial development plays an important role in economic expansion. Due to its dependence on financial liberalization policies, the relationship between growth and financial development was not clear before the 1990s (Feijo et al., 2019). As a result, it can be detrimental to the process of economic growth in a number of cases. Incidentally, the focus on currency swing events and the relationship between FDI and development is extremely certain. In the improvement of infrastructure, technology and industrial development, FDI and capital formation play an important role.

## **2.2 Conceptual Framework**

The conceptual framework is the underlying structure that guides the development of a research project, and it provides a basis for understanding the research problem and the variables that are involved (Heitzman et al., 2019). In this study, the conceptual framework refers to the

conceptualization of the relationships between financial inclusion and development. The financial development refers to the growth of financial markets, institutions, and systems that enable the efficient allocation and mobilization of resources in an economy. This involves the development of financial infrastructure such as banks, stock markets, and the insurance companies, and the provision of financial services, such as credit, savings and insurance (Rongwei and Xiaoying, 2020). Financial inclusion, on the other hand as researched by (Dahiya and Kumar, 2020), refers to the access and use of financial services by all segments of population, including the poor, women and small businesses. The conceptual framework of financial development and inclusion recognizes the inter-linkages between these two concepts, with financial development providing the necessary infrastructure and services for financial inclusion to thrive. Financial inclusion in turn, provides a means of promoting financial development by increasing the demand of services and products.

The conceptual framework also recognizes that financial development and inclusion have significant impact on economic growth, poverty reduction and social welfare, and are therefore important drivers of development. It can be further elaborated by focusing at the key dimensions and indicators of each concept as mentioned in the study of (Canh and Thanh, 2020). The dimensions of financial development include the depth, breadth, efficiency, and stability of financial system, while the indicators include measures such as the size of financial institutions, the level of financial intermediation, the extent of financial innovation and the level of financial supervision. Secondly the dimensions of financial inclusion are consisted of the access, use, quality, and impact of financial services, while the indicators include measures such as percentage of the population with access to formal services, the level of financial literacy, the

usage of mobile banking and other innovative financial technologies and the impact of services on poverty reduction, inequality reduction and social welfare improvement (Tram et al., 2021).

The conceptual framework also recognizes the importance of addressing the barriers to financial development and inclusion, which can include such as inadequate infrastructure, high transaction costs, lack of trust in institutions and limited financial literacy. Addressing these barriers can help to promote the financials and maximize their impact on development outcomes.

In the UAE, financial development and inclusion have been identified as key priorities by the government in its efforts to diversify the economy and promote sustainable development. The UAE's financial sector is characterized by a high degree of concentration, with a few large banks dominating the market. However, the country has made significant progress in recent years in terms of financial regulation and supervision, financial innovation and the development of Islamic finance (Fejza-Ademi et al., 2022). One of the key dimensions of financial development in the UAE is depth, which refers to the size and importance of financial institutions in the country. In UAE there has been increasing trend towards the development of smaller banks and non-bank financial institutions (Khairunnessa et al., 2021). The breadth of financial services in the UAE has also expanded in recent years with the introduction of new financial products and services such as Islamic Finance, fintech and digital banking.

According to (Uddin et al., 2022), the efficiency is another important dimension of financial development in the UAE. The country has made significant progress in improving the efficiency of its financial sector, particularly in terms of reducing transaction costs and improving access to financial services of underserved populations. However, there are still



significant challenges in terms of availability of credit and access to financial services for SME's and other vulnerable groups in the UAE. Furthermore, suggested by (Karanfil and Omgba, 2023), the stability is also an essential dimension in UAE, particularly the country's reliance on oil exports and its vulnerability to external shocks. The UAE's financial sector has been relatively stable in recent years, but there are still concerns about the quality of financial regulation and supervision in the country.

Another study of (Delimatsis, 2021) explained the financial inclusion key dimensions of UAE. These include access, use, quality and impact. While the UAE has relatively high level of financial inclusion compared to other countries in the region, there are still significant challenges in terms of access to financial services for certain segments of population, particularly women, low-income groups and expatriate workers. The UAE has made significant progress in term of financial innovation and the development of new financial products and services, particularly in the area of Islamic finance (Alam and Ali, 2021). However, there are still challenges in terms of quality of financial services in the country, particularly with regard to financial literacy and consumer protection

## **2.3 Middle East and North Africa (MENA)**

Efficiency is a key factor in the link between economic expansion and financial development (Baloch et al., 2021). Thus, the growth of a country through FDI depends not only on the volume of investment. The 2008 financial crisis posed a serious threat to economic expansion. Its earthquakes are still being felt in a significant number of established economies, especially in Europe. It is imperative that the functioning of the financial system be re-examined in order to utilize capital efficiently and reduce risk. The United Arab Emirates has become one of the major economies in the region. It has served as a hub for major international events,

investments in real estate, tourism, oil and gas, and other financial endeavors. The 2008 global financial crisis had a significant impact on the UAE. This thinking requires this consideration and has important strategic implications for the UAE.

In particular, the MENA region lacks financial depth, has underdeveloped financial markets, has a bank-based rather than market-based financial market, lacks adequate collateral, and has few safety transactions and limited access to capital (Sinha and Shastri, 2021). This is especially true given the region's oil importance. In fact, the MENA region is increasingly prioritizing financial inclusion and has significant growth opportunities. Oil importers have been hit hardest by the turmoil in the MENA region, leading to increased risk aversion, slower credit growth and reduced liquidity, with support from outside External markets act as a buffer against this uncertainty and significant stock market volatility in some countries. However, most banks in the region have enough capital. Once again, bank-based monetary institutions dominate the MENA county monetary area, while state-owned banks are gaining the upper hand among oil carriers (Gatti et al., 2021). The relative inefficiencies of SOEs are related to reduced profitability in the banking sector and reduced bank credit. Credit to the private sector is generally weak compared to other emerging markets.

On the non-bank side, there is plenty of room for financial growth, especially given the significant increase in market capitalization. Reforms, encouraging listing on the stock exchange, openness to foreign investors have contributed to this. As a result, the stock market gained momentum. In general, the MENA region has a weak presence of a small protected area of non-bank currency platforms, limited personal value and speculative stock market investments, enjoying benefit from the reserve movement, with the possible exception of Morocco, where protection is mandatory and involves 24% of the adult population in Morocco

(Heremans and Berlage, 2020). MENA District has low cash inflows whereby Egypt and Morocco have minimal access to bank money and small businesses are more limited in their ability to support themselves through appropriate means. Compared with neighboring Turkey and other emerging markets, access to finance is seen as a significant constraint. Nearly half of the adult population of the main oil importing countries (Jordan, Morocco, Tunisia and Egypt) does not meet the financial obligations of the banking system, which allows informal credit.

With GDP projected to grow at an average annual rate of 6.3% over the next few years, largely driven by the region's emerging economies, Asia is considered the fastest growing region in the world economy rapidly for many decades. However, policymakers must address the lack of access to financial services to ensure that this growth is equitable and inclusive, even though Asia is well positioned for strong growth. It is believed that more than a million people do not have access to formal financial services such as bank accounts and employment, as well as meaningful opportunities to do paid work online or offline. Furthermore, according to (Cicchello et al., 2021), it is estimated that only 27% of adults in developing Asia have an account with a formal financial institution; incentive to consider the currency remains a fundamental test in the region. Indeed, Asia is one of the most diverse regions in the world, with an impressive diversity of cultures, ethnicities, languages and religions, in addition to significant differences in GDP per capita and population sizes across countries.

## **2.4 Historical Context of Financial Development and Inclusion in UAE**

The UAE's financial development can be traced back to the early 20<sup>th</sup> century when it was a British protectorate. The region was primarily dependent on pearl diving and trade, and the financial sector was largely underdeveloped. However, the discovery of oil in the late 1950s changed the economic landscape of the country significantly. After the UAE's independence

from Britain in 1971, the country's leadership focused on diversifying its economy away from dependence on oil exports. One of the key areas of focus was the development of the financial sector, which was seen as crucial to attracting foreign investment and supporting economic growth. The government established the Abu Dhabi Investment Authority in 1976, which is now one of the largest sovereign wealth funds globally, managing over \$700 billion in assets (Okechukwu and Nddi, 2020). The UAE's oil revenues have fueled significant investment in infrastructure, including the development of financial sector.

In the 1980s, the UAE government implemented several policies to encourage the growth of the financial sector (Alketbi et al., 2022). The government established free zones in Dubai and Abu Dhabi, which provided a tax free environment for foreign businesses to operate. These free zones attracted significant foreign investment, and many financial institutions established a presence in Dubai and Abu Dhabi. The Central Bank of the UAE was established in 1980 to regulate and supervise the country's banking system. The central bank's primary objective was to ensure the stability, and support economic growth. In 1985, the UAE enacted the Banking Law, which governs the operations of banks and other financial institutions in the country (Aladiana et al., 2021). The law aimed to create a robust and stable banking system that could support the country's economic growth. The law required banks to maintain minimum capital requirements, implement risk management systems, and comply with international accounting standards.

Despite the UAE's significant economic growth, financial inclusion has been a persistent challenge. Historically, the country's financial sector has been dominated by a few large banks, which has limited access to financial services for many individuals and small businesses. In the early 2000s, the UAE government recognized the importance of financial inclusion and began

implementing policies and initiatives to promote it (Zarrouk et al., 2021). The financial sector of UAE has continued to grow in recent years, and the country is now home to some of the world's largest banks. Dubai in particular, has emerged as a leading financial center in the region, attracting significant foreign investment. According to (Yeung and Al-Barashdi, 2022), the Dubai International Financial Centre (DIFC) was established in 2004 as a financial free zone, offering businesses and individuals an attractive regulatory and legal framework to operate within. The DIFC has been instrumental in establishing Dubai as a leading financial center, attracting a significant amount of foreign investment into the country. The Dubai International Financial Exchange (DIFX) was established in 2005 to attract the international listings and provide a platform for trading equities, bonds and other financial products (Nurmohmed, 2020). The DIFX was later merged with the Dubai Financial Market (DFM) to form the Dubai Financial Services Authority (DFSA), which is now the regulatory authority for financial sector in Dubai.

Despite the growth of the financial sector, financial inclusion remained a challenge in the UAE in 2011 the World Bank estimated that only 22% of the adult population in the UAE had an account at a formal financial institution (Giron, 2021). Many individuals, particularly those in rural areas, had limited access to banking services. To address this issue, the UAE government implemented several initiatives to promote financial inclusion. In 2015, the UAE government launched the Emirates Digital Wallet, which is a mobile payment platform that allows users to pay bills, transfer money, and make purchases using their mobile phones (Ghandour et al., 2023). The platform is designed to increase financial inclusion by providing an affordable and accessible way for individuals to access financial services. In 2017, the UAE government launched the National Strategy for Financial Inclusion, which aims to increase financial

inclusion in the country (Jahan et al., 2019). The strategy focuses on four key areas includes enhancing financial literacy, expanding the range of financial products and services, improving the regulatory environment, and building partnerships between government, private sector and civil society.

## **2.5 UAE and Other Countries**

The comparative analysis of financial development and inclusion in the UAE with other countries can provide valuable insights into strengths and weaknesses of the UAE's financial sector and identify potential areas for improvement. The United States is one of the largest and most developed financial markets in the world, with a well-established regulatory framework and deep capital markets. The country has a long history of financial innovation and has been a pioneer in developing new financial products and services. In terms of financial development, the United States has highly developed banking system, with a large number of banks and other financial institutions operating in the country (Cao et al., 2022). The country also has deep capital markets, including a well-developed stock market and large bond market. The regulatory framework for the financial sector in the United States is well established, with a range of regulatory agencies responsible for overseeing different aspects of the financial system.

In terms of financial inclusion, the US has made significant progress in recent years. According to the World Bank, 93% of the adult population in the US has an account at a formal financial institution (Datta and Singh, 2019). The country has implemented several initiatives to promote financial inclusion, including the Community Reinvestment Act, which requires banks to serve the needs of low and moderate income communities, and the establishment of the Consumer Financial Protection Bureau, which is responsible for protecting consumers from abusive financial practices. In comparison, the UAE's financial sector is still developing, but it

has made significant progress in recent years. The country has established itself as a leading financial center in the region, attracting foreign investment and becoming a hub for financial innovation.

Singapore is another country with highly developed financial sector. The country has established itself as a leading financial center in Asia, attracting significant foreign investment and becoming a hub for financial innovation. In terms of financial development, Singapore has highly developed banking system, with a large number of local and international banks operating in the country (Tang et al., 2022). The country also has deep capital markets, including a well-developed stock market and a large bond market. The regulatory framework for the financial sector in Singapore is well-established, with the Monetary Authority of Singapore responsible for overseeing the banking, insurance, and capital markets sectors. In terms of financial inclusion, Singapore has made significant progress in recent years. According to the World Bank 99% of the adult population in Singapore has an account at a formal financial institution (Güven, 2019). The country has implemented several initiatives to promote the financial inclusion, including the establishment of the Financial Education Network, which aims to improve financial literacy among Singaporeans, and the introduction of the Central Provident Fund, which is a compulsory savings scheme for all employees in the country.

Saudi Arabia is a country in Gulf region. It has a well-established banking sector and deep capital markets, with the Saudi Arabian Monetary Authority responsible for regulating the financial sector in the country (Orlando and Bace, 2021). In terms of financial inclusion, Saudi Arabia has made significant progress in recent years. 52% of the adult population in Saudi Arabia has account at a formal financial institution (Shabir and Ali, 2022). The country has implemented several initiatives to promote financial inclusion, such as the National Financial

Inclusion Strategy and the establishment of the Saudi Credit Bureau, which is responsible for collecting and sharing credit information among financial institutions in the country.

Moreover, Japan also has highly developed financial sector, with a well-established banking system and deep capital markets. The Financial Services Agency (FSA) is responsible for regulating the financial sector in Japan (Yudanto and Yuspin, 2022). In terms of financial inclusion, Japan has made significant progress in recent years, with 95% of adult population with bank accounts (Rashid, 2020). The government has implemented several initiatives to promote financial inclusion, such as the Basic Resident Registration System, which provides a unique ID number for all residents and facilitates access to financial services.

Furthermore, the China's financial sector has been growing rapidly with a well-established banking system and deep capital markets. The China Banking and Insurance Regulatory Commission (CBIRC) and the China Securities Regulatory Commission (CSRC) are responsible for regulating the financial sector in China (Lessambo, 2023). In terms of financial inclusion, China has made significant process in recent years, with the government implementing several initiatives to promote financial inclusion, such as the establishment of mobile payment systems and the issuance of national ID cards that facilitate access to financial services.

Additionally, India has the highly and effectively regulated financial sector along with the growing economy. The Reserve Bank of India (RBI) is responsible for regulating the financial sector in India (Mahato, 2022). In terms of financial inclusion, India has made significant progress in recent years, with the government implementing several initiatives to promote



financial inclusion, such as the “Jan Dhan Yojana” scheme, which aims to provide access to banking services to all households in the country.

## **2.6 Current Status of UAE**

### **2.6.1 Progress**

The United Arab Emirates (UAE) has made significant progress in developing its financial sector over the past few decades. The country has attracted significant foreign investment and its financial sector has become major contributor to the national economy. The financial sector in the UAE is dominated by banks, with 49 commercial banks operating in the country (Choudhary, 2020). These banks are regulated by the Central Bank of UAE, which oversees the banking sector and ensures that financial institutions comply with regulations and guidelines. In addition to banking, the UAE also has a well-developed capital market, with two stock exchanges – the Abu Dhabi Securities Exchange (ADX) and the Dubai Financial Market (DFM) – operating in the country. These stock exchanges have attracted significant foreign investment, and their market capitalization has grown significantly in recent years.

The UAE is also a major hub for Islamic finance, with the country being home to several Islamic banks and financial institutions. In fact, Islamic finance accounts for a significant proportion of the country’s financial sector, with around 20% of the country’s banking assets being Shariah-compliant (Bugshan et al., 2021). Furthermore, the UAE is positioning itself as a global fintech hub, with the Dubai International Financial Center (DIFC) hosting several fintech firms and startups. The country has implemented several initiatives to promote fintech, such as the DIFC Fintech Hive, which provides a platform for fintech firms to collaborate and innovate.

### **2.6.2 Challenges**

Despite the progress made in developing the financial sector, there are still several challenges facing the sector that must be addressed to ensure continued growth and stability. One of the main challenges facing the sector is impact of COVID-19 pandemic, which has disrupted the global economy and affected the financial sector in the UAE. The pandemic has led to a decline in the economic activity, which has affected the profitability and stability of financial institutions in the country. Secondly, according to (Kumar and Kishore, 2019), another challenge facing the financial sector is the issue of non-performing loans (NPLs) which have been on the rise in recent years. NPLs are loans that in default or close to being in default, and they pose a significant risk to the stability of the banking sector. The Central Bank of the UAE has implemented several measures to address the issue of NPLs such as the creation of a credit bureau to improve credit risk assessment. Additionally, according to a research by (Maghyreh and Abdoh, 2021), the financial sector in UAE is vulnerable to external shocks, such as fluctuations in oil prices and changes in global economic conditions (COVID-19). The country's economy is heavily dependent on oil exports, which makes it vulnerable to changes in oil prices. Moreover, the country's financial sector is closely linked to global financial markets, which means that changes in global economic conditions can affect the stability of financial institutions in the country.

## **2.7 Empirical Studies**

Several studies have been conducted on financial development and inclusion in the UAE. These studies have conducted on various aspects of financial sector, including the banking sector, securities markets, and insurance markets. The study conducted by (Saleem et al., 2020), investigated the relationship between financial development and economic growth in the UAE.

The study used the Autoregressive Distributed Lag (ARDL) bounds testing approach to analyze the long-run and short-run relationship between financial development, economic growth and other macroeconomic variables. The study found that financial development has a positive and significant impact on economic growth in the UAE. The result also showed that there is a bidirectional casualty between financial development and economic growth in the long-run. In the short-run, however the study found that financial development has no significant impact on economic growth. The findings of this study suggest that financial development is an important determinant of economic growth. Policymakers should therefore focus on promoting financial development in the country as a means of promoting economic growth and development.

An empirical study conducted by (Hasan et al., 2021), investigated the determinants of financial inclusion in the UAE. The study used a logistics regression model to analyze the factors that influence access to financial services in the country. The study found that income, education and employment status are the most significant determinants of financial inclusion in the UAE. The results also showed that access to financial services is higher among men than women and among nations than non-nationals. The findings of this study suggest that policymakers should focus on promoting financial inclusion among low-income households, women and non-nationals in the UAE. This can be achieved through targeted financial education programs, the development of innovative financial products, and the expansion of the reach of financial services.

Another study conducted by (Ahmed et al., 2022), investigated the impact of institutional quality on financial development in UAE. The study used a panel data analysis to analyze the relationship between institutional quality, financial development and economic growth. The study found that institutional quality has a significantly positive impact on financial

development. The results also show that institutional quality has significant impact on economic growth, and that financial development mediates the relationship between institutional quality and economic growth. This study founded that policymakers should focus on enhancing the institutional growth in UAE in order to improve the financial development and economic growth. This can be performed through the development of strong legal system, effective regulatory frameworks and strong property rights.

The study conducted by (), discovered the connection between financial inclusion and entrepreneurial activity in the UAE. This study used micro-level data from the Global Entrepreneurship Monitor (GEM) to analyze the factors that influence the entrepreneurial activity in UAE (Kinnunen and Georgescu, 2020). The study found that the access to financial services has a worthy effect on the entrepreneurial activity in country. The results showed that education and innovation are important determinants of entrepreneurial activity in the country. This study found that the focus on financial inclusion among entrepreneurs can be possible with the measures as the development of innovative financial products, the provision of financial education programs and the expansion of reach of financial services.

(Kalaitzi and Chamberlain, 2020), conducted a study in which they researched the effects of financial development on income inequality in the UAE. The study used time series data to analyze the factors that influence income inequality in the country. This research concluded that the financial development has a negative impact on income inequality. The results also showed that institutional quality and education are important determinants of income inequality in the country. This study further suggested on the bases on its results that in UAE the focus must be on reducing the income inequality.

## **2.8 Impact of COVID-19**

More than 4.3 million confirmed cases and more than 290,000 deaths have occurred worldwide as a result of the COVID-19 pandemic (Nicola et al., 2020). This raises concerns of an impending recession and economic crisis. Many jobs have been lost due to social distancing, self-isolation and travel restrictions in all economic sectors. Due to the lack of vaccination and particularly limited treatment options, proven non-drug mediation procedures to prevent the pandemic. The most severe disruption to the global economy since World War II has been caused by unprecedented global travel restrictions and calls to stay at home. With global travel boycotts affecting more than 90% world population and distant constraints on the open world social events and the flexibility of the region, the tourism industry has largely come to a standstill in March 2020. Millions of jobs in the global tourism industry have been lost to flight, event and hotel cancellations since the implementation of the quarantine. The long-term development of the tourism industry has proven to be highly dependent on growth in the decade since the global financial crisis, with international arrivals surpassing 1.5 billion for the first time in the past decade. However, COVID-19 has abruptly ended the previous phase of the tourism industry development.

The coronavirus pandemic is negatively impacting various sectors disrupting financial activities at the same time, developments around the world (Association of Southeast Asian Nations (ASEAN) (Sadiq et al., 2021). According to World Economic Forum 2020 the pandemics are related to health problems as well as economic problems. Accordingly, it is necessary to have a plan to develop the economy after COVID-19 with stakeholders playing an important role. It is then hoped that the government will be able to devise strategies to end the COVID-19 pandemic by easing the blockade to accelerate the economic recovery and reduce

risks. The incomes of the middle class increased significantly due to the increase in GDP per capita of the ASEAN economy from 1970 to 2010 (Haque et al., 2022). ASEAN's economic growth was positively impacted by the opening of trade and investment, while government spending and inflation had no positive effect a significant impact on economic growth.

The government introduced PSBB, also known as large scale social restriction, after the COVID-19 pandemic, in which a large number of people were infected (Andriani, 2020). Several countries are experiencing layoffs due to these difficulties and regulations (PHK). This situation shows that economic activity has been limited and disrupted over time in most countries. Impact of the coronavirus pandemic marked by sought changes, guideline revisions, changes in creative workflows, developments in the direction of mass communication to growth slows due to industry downturn, confirmation delay due to lingering effects of Coronavirus pandemic. Currently, the coronavirus pandemic continues to be a health crisis and even became a currency emergency in the East Asian regions, causing an increase in the number of unemployment and deprivation.

Digital financial innovation, or DFI, is financial solutions that assist companies in carrying out their operations and using digital technology. Blockchain, big data analytics, social media, near-field communication, peer-to-peer technology, crowdfunding, internet and artificial intelligence are all under the umbrella of DFI, among others. The concept of DFI in this study relates to how a company's DFI compares to a competitor's DFI in terms of quality, functionality, uniqueness, application or novelty (Yang et al., 2022). Businesses can benefit from using DFI in many ways, including increased customer satisfaction and increased profits, financial performance supply chain; Financial inclusion for value chain actors; fundraising for social enterprises; and risk management in the face of natural disasters, such as COVID-19. DFI has

many advantages in terms of efficiency and cost, but it also increases risks for all stakeholders. Businesses are particularly vulnerable to the need for digital transformation to embrace digital technology, as well as the changing nature of technology and the competitive landscape. Organizations must be ready to adapt to these changes. There is a huge need for practical research in this area, despite the growing recognition that DFIs facilitate the digital transformation of organizations.

The authoritative preparation assumption is dug deep into the board and offers all the shameful hypothetical support for investigating the availability of associations for DFI. To reap the full benefits of DFI, it is clear that organizational readiness is a necessary prerequisite. In agreement, it is confirmed that organizations cannot reap the full benefits of DFI due to lack of organizational readiness, despite its widespread use, implementation, and ease of use (Louman et al., 2020). Although DFI is a game changer for achieving sustainable growth, the situation remains vulnerable in developing countries, where associations are no exception to with cutting edge change. There is a huge need for practical research in this area, despite the increasingly recognized role of DFI in facilitating an organization's digital transformation. Due to the COVID-19 pandemic, many businesses in a developing country like the United Arab Emirates (UAE) have reported high levels of volatility in their financial flows, which has threatened the possibility of survival (or leading to the closure of) many businesses due to lack of preparation. In addition, the service sector, one of the largest sectors in the UAE economy, is mainly supported by secure, reliable and convenient financial transactions and customer experiences, and the absence of its side results in a loss in business, especially after COVID.

The pandemic has had a significant impact on the financial sector in the UAE, as businesses and individuals have been forced to adapt to new ways of working and accessing

financial services. Many businesses have faced significant challenges, such as reduced demand, disrupted supply chains, and financial difficulties. This has put pressure on financial institutions to provide support and assistance to businesses and individuals. To mitigate the impact of the crisis, the government and financial institutions in the UAE have implemented a range of measures, such as loan deferrals, payment holidays, and stimulus packages (Gerth et al., 2021). The Central Bank of UAE has also launched several initiatives to support the financial sector, such as a liquidity facility and a loan guarantee scheme. Financial inclusion has become even more important during the COVID-19 pandemic, as individuals and businesses need access to financial services and support to cope with the impact of crisis (Ozili, 2019). The government and financial institutions in the UAE have implemented several initiatives to promote financial inclusion, particularly for vulnerable and underserved segments of society.

One such initiative is the UAE central Bank's financial inclusion strategy which aims to promote financial inclusion and literacy in the country. The strategy includes several key objectives, such as increasing access to financial services, promoting financial education and awareness, and strengthening the regulatory environment. The government has also launched the promotion financial inclusion during the pandemic such as the "Together We Are Good" campaign, which aims to provide financial and social support to individuals and businesses affected by the crisis (Sahu, 2021). The campaign includes several initiatives such as a social solidarity fund, food aid program and a business support program.

Furthermore, digitalization has played a crucial role in promoting financial inclusion during the COVID-19 pandemic, as it has enabled individuals and businesses to access financial services remotely and safely. The government and financial institutions in the UAE have launched digital strategies to promote financial inclusion, such as digital banking, digital



payments, and digital wealth management. The government's launch includes the "UAE Pass" platform, which provides individuals with digital identity that can be used to access a wide range of government and financial services (Press, 2023). The platform aims to promote financial inclusion by making it easier for individuals to access financial services and other government services remotely.

The UAE's economy is heavily dependent on oil exports, which account for around 30% of GDP and over 90% of export earnings (Gulzar, 2022). However, the government has been making concerted efforts to diversify the economy in recent years, with a particular focus on developing the non-oil sectors. The government has identified a number of key sectors for development, including tourism, finance, logistics, and renewable energy. The United Arab Emirates (UAE) is a country that has seen tremendous economic growth over the past few decades, largely driven by its oil wealth. However, in recent years, the UAE has been making concerted efforts to diversify its economy and reduce its dependence on oil. One key aspect of this diversification has been the development of its financial sector, which is seen as a critical component of a modern and diversified economy. The UAE's financial sector is regulated by the Central Bank of the UAE (CBUAE). The CBUAE is responsible for regulating and supervising banks and other financial institutions, as well as for setting monetary policy (Ramiah et al., 2023). The CBUAE has been instrumental in promoting financial development and inclusion in the UAE, through a range of initiatives aimed at promoting financial stability, improving financial infrastructure, and enhancing financial literacy.

The UAE has made significant progress in developing its financial sector in recent years, with a particular focus on promoting financial inclusion. One of the key initiatives in this regard has been the establishment of the Emirates Institute for Banking and Financial Studies (EIBFS),

which is a leading provider of training and education in the banking and finance sector in the UAE (AlShamsi, 2020). The EIBFS offers a wide range of courses and programs aimed at developing the skills and knowledge of professionals in the banking and finance sector, as well as promoting financial literacy among the general public. The EIBFS also works closely with banks and other financial institutions in the UAE to develop customized training programs tailored to the specific needs of these institutions. Another key initiative aimed at promoting financial inclusion in the UAE has been the establishment of the UAE Banks Federation (UBF) (Basha et al., 2021).

The UBF is a non-profit organization that represents the banking sector in the UAE, and works to promote the interests of its members and the overall development of the banking sector in the UAE. The UBF has been instrumental in promoting financial inclusion in the UAE, through a range of initiatives aimed at expanding access to financial services and products. For example, the UBF has launched a number of financial literacy campaigns aimed at educating the public about the importance of financial planning and the various financial products and services available to them. The UBF has also worked to develop a regulatory framework that promotes responsible lending and borrowing practices, and has established a credit bureau to help banks and other financial institutions assess creditworthiness. In addition to these initiatives, the UAE has also made significant progress in developing its financial infrastructure. The country has a well-developed banking system, with a large number of domestic and foreign banks operating in the country. The UAE has also developed a modern and efficient payment system, with a range of electronic payment options available to consumers and businesses.

## **2.9 UAE Sustainable Finance Framework**

In light of the global COVID-19 pandemic that has profoundly impacted every aspect of society in the United Arab Emirates, there is a growing need to better understand and manage these risks in order to avoid disturbances. This is consistent with the growing threats associated with environmental and climate hazards. Where necessary, Real Money will not only act as a deal or sponsor/implementer for sustainable businesses, but also as a response to reduce and monitor existing/the future hazards involves many ecological, social and environmental risks. Based on public and covert campaigns since the 2016 UAE Green Money Provincial Report, reiterating the Dubai Sustainable Money Statement and Abu Dhabi Convenience Money Announcement and in line with the will of the UAE aims to enhance successful progress towards a green economy (Koch, 2022). The UAE's Sustainable Finance Framework aims to improve the enabling environment for the integration of sustainable financial practices and strengthen cooperation between the public and private sectors, as reaffirmed in several policies. and national strategy, leading to increased green and climate investments in the UAE.

The recommendations in the studies are based on an inventory of the most important sustainable finance initiatives that have been implemented since the 2016 State of Green Finance in the UAE report, a consultative survey of associated stakeholders in the public and private sectors, and international benchmarking of global sustainable finance best practices that are relevant to the UAE. As per (Durrani et al., 2020), the better inventory network interest of practical money items and environment and green venture projects are likewise focused on as a key activity subject of maintainable money system. Next made sense of by (Griffith-Jones et al., 2020), the arrangement of limit working to existing and future economical money experts is featured through the advancement of authorization plans for feasible money preparing

programs, advancement of business venture and development in supportable areas, as well as the sendoff important college educational plans to advance ceaseless development and development in the UAE practical monetary area.

Countries are becoming increasingly aware that the requirements and opportunities for sustainable finance cannot be met without active involvement in promoting financial system shifts, including through market innovations, voluntary/mandatory standards, public-private partnerships, and supporting policy, regulatory, and fiscal measures (Boitreaud et al., 2020). As a result, in-depth discussions between relevant ministries, financial regulators, academics, and participants in the private financial sector will be required to set the UAE on a path toward a more environmentally sustainable, resource-efficient, and socially inclusive economic model. Accordingly, enhancing the competitiveness of the UAE's financial services and strengthening the country's capacity in the sustainable finance sector will help the UAE stay at the forefront of global efforts to combat climate change and environmental protection as a green economic model (Chien et al., 2021).

## **2.10 UAE Laws on Financial Development**

The UAE has undergone significant economic growth and transformation over the past few decades, with the country becoming a hub for finance, trade and commerce in the Middle East. The government of the UAE has implemented various laws and policies to support financial development and inclusion that have played a vital role in the country's economic progress. According to (Bayzid et al, 2020), one of the most essential laws implemented by the UAE government to support financial development and inclusion is the Central Bank Law, which was first introduced in 1980. The law established the Central Bank of the UAE as the primary regulatory authority for financial institutions in the country. The Central Bank Law has

helped to create a stable financial system in the UAE, which has attracted both domestic and international investors.

Another significant law that has played a crucial role in financial development and inclusion in the UAE is the Commercial Companies Law (Ali et al., 2022). The law, which was first enacted in 1984, governs the establishment and operation of companies in the UAE. The Commercial Companies Law has provided a legal framework for businesses to operate in the country, which has attracted foreign direct investment and created new job opportunities for Emiratis. The UAE government has also implemented policies to promote financial inclusion. One of these policies is the National Strategy for Financial Literacy, which was launched in 2019 (Lusardi, 2019). The Strategy aims to improve financial literacy among Emiratis, particularly among vulnerable populations such as low-income households and the elderly. By providing financial education and training, the UAE government hopes to improve financial inclusion and empower individuals to make informed financial decisions.

The UAE government also implemented policies to support small and medium-sized enterprises (SMEs), which are critical drivers of economic growth and job creation (Haddad et al., 2020). One of these policies is the SME Development Fund, which was established in 2019. The fund provides financial support to SMEs in the UAE, including loans, grants, and other financial services. By supporting SMEs, the government hopes to promote entrepreneurship and innovation, which will contribute to the country's economic growth and development. In addition to the laws and policies, the government has also established various institutions to support financial development and inclusion. According to (Dewar and Hussain, 2021), one of these institutions is the Emirates Securities and Commodities Authority (ESCA), which is responsible for regulating the securities and commodities markets in the UAE. ESCA has played

a critical role in promoting transparency and investor protection in the country's financial markets, which has attracted foreign investors and contributed to the growth of the UAE's financial sector.

Additionally, the UAE government has also established institutions to support financial inclusion. One of these institutions is the Khalifa Fund for Enterprise Development, which was established in 2007 (Alsharji et al., 2019). The Fund provides financial technical support to Emirati entrepreneurs and SMEs with a particular focus on women and youth. By supporting these groups, the Khalifa Fund aims to promote financial inclusion and empower individuals to contribute to the country's economic growth and development.

## **2.11 Impact on Economic Growth**

Financial decisions are substantial to undertake while initiating a new business venture or while transforming business processes in multiple directions. Business growth is dependent on financial decisions taken by strategic management in order to sustain in highly intense and competitive markets (Al Ahbabi and Nobanee.,2019). Operational expenses related to production involve adequate management dimensions to integrate based on which cost-factor can be minimized. Organizational growth and profitability are dependent on cost-effective practices initiated within the manufacturing process. It is an essential element to minimize expenses in order to increase revenue margins, as providing shareholders with dividend payments requires considerable business growth and stability (KANAKRIYAH.,2020). Stakeholders' expectations can be non-financial; however, shareholders' priority is to attain expected returns in a timely manner. The study of Montiel et al. (2021) concludes that business expansion decisions involve investments to integrate based on which subsidiary enterprises can be operated within international dimensions.

The findings of El-Sayegh et al. (2020) show that the construction sector in the UAE is growing with time due to appropriate financial decisions considered by regulatory bodies and government authorities. Government spending majorly contributes to social growth, political stability, societal well-being and economic development. The total federal budget in UAE is for about AED 58.931 billion during the year 2022, out of which 41.15% is allocated for social developmental projects by fulfilling environmental concerns, funding for the education sector, healthcare etc., based on which infrastructural development and economic stability are broader outcomes to attain based on federal reserves (Ibrahim.,2019). The GDP growth rate in UAE for the year 2022 is about 7.6%, which indicates the extent of revenue margins generated based on financial decisions taken by the government each year (Mosteanu.,2019).

Results of Song and Zhou. (2020) show that the Covid-19 outbreak is one of the challenging situations globally for regulatory authorities and national governments as spending countries' financial reserves are identified to be inadequate due to major economic decline. A decrease in the labour force impacted business operations as maintaining certain standards of procedure became the foremost priority to integrate (Faulks et al.,2021). The findings of Bobbie-Poku. (2019) conclude that business cash-flow margins become abrupt due to high-scale business decline. Many of the investors, i.e. individuals, financial investment companies etc., predicted spending decisions to be riskier as investing within well-reputed businesses is not secure enough during pandemics.

The findings of ELLILI. (2021) show that the financial stock market in UAE was adversely impacted during the Covid-19 outbreak as financial investors predicted more investment risks due to high volatility in stocks and bonds, due to which spending decisions are inadequate during pandemics. Tourism and infrastructural development are a major industry in

UAE that contributes majorly towards GDP growth and economic stability; however, the extent of the tourism business is reduced as foreign tourists avoid visiting tourist locations (Gyamfi et al.,2021). Financial contribution from the tourism sector during the year 2020 in UAE is about 2.7% of the total GDP growth rate, due to which economic imbalance is broadly predicted as a result (Ahmed et al.,2020). A study by Moghrabi et al. (2023) concludes that the role of financial technologies is substantial during economic downfall as, with time, digital automation techniques provide a more secure and robust mechanism to monitor and control internal business functioning. In this regard, artificial intelligence, blockchain technology, cloud computing mechanism, big data software etc., are essential to maintain financial inclusion (Awotunde et al.,2021).

Financial institutions in UAE are largely relying on digital advancements in order to provide more security to financial investments for customers. Well-reputed banks and larger financial investment enterprises etc. are more aware of adopting risk management practices as by introducing transparency and integrity, smart contracts/agreements are signed based on which optimal investment opportunities are provided among the consumer market (Haddad and Souissi.,2022). Findings of Schär. (2021) show that the need to hire third-party auditing companies has become most common in order to maintain effective checks and balance on the financial system of the business. The recruitment of highly qualified auditors with ACCA/CA certification is provided with financial contracts to overlook internal audits of the firm based on which an overview related to existing financial standing is being analyzed (Nehme et al.,2022).

## **2.12 The Implication of Digital Technology**

Providing digital security among potential customers and business clients is necessary as business growth is dependent on financial securities provided to each customer with investments



in stocks/bonds etc. (Lu et al.,2021). The global financial crisis is a major example for financial institutions nowadays in terms of investment security and particular spending decisions (Sachs et al.,2019). Large-scale businesses and small and medium enterprises are more aware of risky investments and funding decisions due to which implication of, i.e. cost-effective, credible financial system, digitally secure etc. is to introduce in order to overcome risks predicted in the past (Roy and Prabhakaran.,2022). The findings of Antal et al. (2021) conclude that the usage of blockchain technology provides a more decentralized mechanism in terms of financial security by introducing a digital ledger system based on which transactions can be recorded within ledgers as third-party interference is not involved with more administration-functioning based on which customers feel secure to make investments within financial institutions. Accounting functions and data reconciliation principles that previously involved time and effort to record within manual ledger systems are managed based on digital technological means (Secinaro et al.,2021).

The implication of artificial intelligence and blockchain technology provides real-time automation functions based on which compliance framework is maintained within firms and businesses of the UAE (Wang et al.,2020). Consumers are provided with more secure financial services in terms of transactions through which long-term loyalty is maintained within financial businesses. A study by Javaid et al. (2021) shows that the digital revolution provides robust security among business clients as customers' financial information needs to be secured based on data management software. The auditing functions in businesses are more transparent and accurate based on which risks are eliminated, and secure investment decisions are provided to customers in order to secure their investments (Roszkowska.,2021). The findings of Demirkan et al. (2020) conclude that usage of cloud computational mechanism provides ease within

financial accounting procedures as financial analytics bring more robust principles while managing, i.e. accounts payable, accounts receivable, auditing mechanism, reporting functions etc., based on which transactional process, i.e. cash payments, issuance of cheques etc. are managed by using real-time digital functions. Moreover, online e-commerce digital methods for transferring money/cash have become substantial by using mobile applications and Android functions (Witoelar et al.,2021).

Maintaining customers' trust has become a priority as digital payment methods with real-time cash transfers bring more confidence among customers in UAE (Al-Jeshi et al.,2022). Business transactions in terms of product selling, service deliverance etc., are managed based on using smart applications through which buyers' cash payments and sellers' cash receivables information is maintained based on digital transcripts for each single business activity (Lemma.,2020). Monitoring business transactions become substantial with blockchain applications based on which customers' security is maintained. External interference/hacking, internal fraudulent activities etc., are managed by using artificial intelligence mechanisms and cloud computing software (Birkinshaw.,2019). A study by Mehrban et al. (2020) shows that the integration of big data techniques provides ease for financial intuitions in terms of managing fraudulent activities and inadequate business transactions. Risk mitigating strategies are implemented based on identified risks through which risk managers overcome financial risks.

### **2.13 The Financial Security System in UAE**

A study of Khan and Malaika. (2021) shows that the financial stability department in UAE is responsible for managing functioning by identifying risks that are faced by financial bodies in the country as it provides support to the Central banks in the regions based on which adequate strategic decisions are taken. The gross official reserves in UAE were increased to \$118.4 billion

during the year 2020 (Mangwendeza.,2020). The central bank of UAE has performed the role of mandating policy structure for the banks in terms of the monetary and credit functions (Bechara et al.,2021). The investment risks are managed based on well-structured policy patterns adopted within banks of UAE to secure investment decisions of the customers is an adequate concern for financial institutions; however, smaller financial sectors in the regions, including, i.e. insurance etc., involve major risks due to weak supervision and in-adequate systematic risks creating complexities for investors (Bouteraa et al.,2022).

Investment decisions in banks of UAE involve minimal risks due to lower interest rate risk as many of the assets are short-term. The policy structure in banks is revised every three years of time-period based on which economic downturns are stabilized by introducing a new policy framework facilitating the general public in the country (Feyen et al.,2021). The regulatory practices and compliance structure is more secure based on which operational challenges and customer decisions are managed. The other financial markets, i.e. security market etc., are not yet developed, due to which trading decisions for foreign direct investors (FDI) become a questionable concern (Rezagholizadeh et al.,2020). Trust factors become most common for well-reputed investing agencies as spending in smaller enterprises and micro-finance banks might be identified to be inadequate due to which extent of customer ratio is more towards major financial institutions, i.e. banks etc. (Das.,2023).

A study by Hoang et al. (2023) shows that UAE's central bank introduced a financial infrastructure transformation programme (FIT) in order to bring digital functioning in terms of financial services to the region. The core objective of the initiative is to make the financial sector in the UAE be digital payment hub by introducing policy frameworks and principles adopted by central banks globally inadequate practice. In order to transform service mechanisms within the

financial institutions by replacing traditional methods with digital patterns in order to provide real-time services among customers in regions of UAE (Bahia.,2022). By introducing supervisory functioning, more secure data management alternatives are provided to financial institutions in order to overcome risks (Park and Kim.,2020). Findings of Al Nuaimi. (2019) show that to stabilize the financial markets of UAE in global dimensions, the government is focusing on promoting sustainable financing based on the bulk of investments as regulatory bodies, i.e. Dubai financial services authority (DFSA), Financial services regulatory authority (FSRA) etc. are performing their substantial responsibilities in order to maintain sustainable financial growth in UAE.

To fulfil corporate social responsibilities, financial institutions are directed to adopt corporate governance mechanisms by introducing tax policy structures to process sustainable practices (Jan et al.,2021). The initiative is a road map for maintaining social stability by working on financial projects through which community members are brought together to promote local talent (Offenhuber.,2019). Dubai international financial centre (DIFC) has become an adequate partner with the sustainable fintech alliance based on which UN sustainable development goals are to implement within each financial institution in UAE based on which transparency patterns and inclusion principles are introduced (David and Williams.,2022). Transforming traditional financial practices into a green financial system is a broader goal for DIFC, based on which the financial industry contributes towards sustainable economic growth in UAE (Alblooshi.,2022). Moreover Abu-Dhabi Global market introduced sustainable finance agenda for managing ESG requirements by disclosing listings, spot commodities etc., based on which a more secure and robust mechanism is introduced within financial institutes internally.

A research study by Stalmachova et al. (2022) shows that in order to support digital transformation, laws related to electronic transactions are introduced to provide transparency and robust security among potential customers. The interior ministry of the UAE implemented global financial regulations by providing secure digital patterns to the consumer market in terms of online service usage, as bio-metric verification-based accounts are accepted legally (Zarrouk et al.,2021). Moreover, by introducing a digital identity system more transparent framework is introduced in terms of customer security. The fintech initiative is promoted by considering strategic national investment decisions by Dubai's international financial centre in order to promote innovative business ventures (Belozyorov et al.,2020). The adequate implication of new generation technology is the prime solution to overcome financial challenges based on which economic sustainability will be maintained in UAE in the long run.

A study by Al-Tawil. (2022) indicates that Cabinet members in UAE introduced an anti-money laundering squad and financial action task force involved to overcome financial frauds that may occur in UAE. Moreover, a digital currency project is initiated by the central bank to stabilize international settlements between UAE and other countries (Sethaput and Innet.,2023). By introducing digital ledger technology, cross-border transactions and international fund transfers can be managed by reducing the cost factors. The central banks of Saudi Arabia and UAE initiated a cross-border digital currency pilot known as Project Aber for managing cross-border transactions (Boros and Horváth.,2022). Managing domestic and cross-border commercial transactions is necessary to benefit from the initiative. A study by Ghak and Zarrouk. (2022) shows that the central bank of UAE (CBUAE) and dubai financial services authority (DFSA) performs major roles in order to regulate financial institutions and maintaining an adequate policy framework based on which social and economic growth can be

maintained in UAE as financial institutes perform a crucial role in terms of development in a country; therefore, the regulatory framework needs to be adequate enough that supports laws and legal system in a region.

## **Chapter 3 : Methodology**

The section on methodology provides an overview related to the research direction adopted by the researcher within a study, as it particularly depends on the researcher's own choice and nature of the topic regarding which methods to introduce within a study in order to explore research objectives under examination (Sarker.,2021). Research philosophy to consider, research approach to integrate, research design to implement, data collection process to utilize etc., are essential elements of the chapter that provides readers with an overview related to the researchers' approach to address each research question under investigation.

### **3.1 Research Philosophy**

The section on philosophy provides an overview regarding which data and information to include within research studies as the researcher's own understanding and individual perspective to gather data about particular phenomena to explore can be considered (Tamminen and Poucher.,2020). Moreover, data can be extracted by involving human subjects within a study as particular knowledge and information among participants are made integral elements within research studies. The following are two various types of philosophy, i.e. interpretivism, positivism etc. (Hürlimann and Hürlimann.,2019).

#### **3.1.1 Interpretivism**

The interpretive school of thought indicates how people perceive related to a research problem under investigation as by involving human subjects in a study, different opinions and viewpoints are introduced in research studies based on which expected results can be generated (Nickerson.,2022). A study by Van der Walt. (2020) shows that each participant possesses different mental capabilities, due to which viewpoints may differ from each other. The rationale

for including random participants in a study is to gather a bird's eye view related to a particular wonder in order to fulfil different dimensions in a study; various participants are involved based on which reliable results can be generated further in the study (Junjie and Yingxin.,2022). The responses gathered from each participant are further transformed by a researcher based on their own particular understanding while involving primary data in the study (Curry.,2020). The interpretivism approach defines how the researcher explores the topic under consideration by involving the surrounding environment to bring ground rationale to a study (Jayasuriya.,2023). By gathering societal knowledge and by extracting information from the surrounding environment, broader outcomes can be generated in studies.

### **3.1.2 Positivism**

The positivist school of thought indicates data/information collected from scientific studies. Secondary data extracted from reliable and authentic secondary sources demonstrates the positivist approach (Alharahsheh and Pius.,2020). Moreover, scientific information gathered within observational labs and experimental patterns is an essential factor based on which quality secondary data is generated to include within studies. Secondary data collected within experimental labs involves minimal chances of error due to minimal human intervention based on which accurate and precise information is introduced in research (Tamminen and Poucher.,2020). By involving factual knowledge, the ground rationale can be maintained within studies.

### **3.1.3 Justification of Interpretivism Philosophy**

For the current study, interpretivism philosophy is used.



## **3.2 Research Approach**

The section on approach provides the direction adopted by the researcher within a study as it depends on the researcher's own particular choice regarding which direction to adopt, particularly while exploring each research question (Maarouf.,2019). The procedure followed by a researcher in order to collect, analyze and further interpret data/information collected is adequately functioning within the section of the approach. The following are two main types of research approaches in particular, i.e. inductive, deductive etc. (Ustun and Tracey.,2020).

### **3.2.1 Inductive Approach**

Inductive reasoning is the centre focus of the researcher when a research study is needed to be conducted from the ground level or initial stage in order to explore ground rationale within a study, as researchers emphasise conducting a study from scratch defines the inductive school of thought (Young et al.,2020). Researchers' own perspectives on exploring particular phenomena are the centre of attention as involvement with the surrounding environment is the core objective based on which detailed analysis regarding phenomena to investigate is the broader rationale of the study (Sibeoni et al.,2020). The findings of Fleischmann and Ivens. (2019) conclude that the end result of the approach is to generate a particular social theory which can be used by future researchers within their studies. Researchers have no prior knowledge and information related to the topic under investigation, as the inductive approach is considered in a particular scenario when no scientific information or secondary knowledge is available related to a particular topic (Zhao et al.,2022). Moreover, when no such past research studies are conducted on a particular topic of consideration, then inductive reasoning is emphasized by the researcher.

With a research question researcher's core emphasis is to determine the rationale based on which logical arguments are generated within studies (Walter and Ophir.,2019). A study by Wu et al. (2021) shows that no hypotheses statements are developed while using inductive reasoning as researchers' broader emphasis is to focus on general observations based on which adequate rationale is introduced within research. The direction within inductive reasoning is from general to specific, with the end result of creating a particular social theory in the result.

### **3.2.2 Deductive Approach**

Deductive reasoning is a prime emphasis for researchers when past social theory is used to generate hypotheses statements within a particular study, as by utilizing specific social theory; a broader understanding can be generated within studies (Pearse.,2019). By using a theory, variables can be generated within a study that assists the researcher in order to investigate the impact between variables (Casula et al.,2021). By generating hypotheses, statement researcher's emphasis is to validate each hypotheses statement by accepting or rejecting each hypothesis in a further section of the study. Theoretical support directs the researcher while determining the research problem. The direction of the deductive approach is from specific to general.

### **3.2.3 Justification of Inductive Approach**

For the current study inductive approach is used.

## **3.3 Research Design**

The research design provides the overall direction considered by the researcher within a study as philosophy to utilize, approach to consider, data collection method to include etc., are essential elements within the section of the design (Bloomfield and Fisher.,2019). Research design provides readers with an overview of the researcher's particular understanding and

approach to conducting the study. The following are various research designs used, i.e. quantitative, qualitative, mixed etc. (Sileyew.,2019).

### **3.3.1 Qualitative Research Design**

Qualitative research design includes the usage of words, concepts, definitions etc., rather than using facts, figures, numbers etc., as qualitative studies include in-depth analysis related to particular phenomena to explore (Salahudin et al.,2020). Descriptive analysis and explanatory patterns are essential functions within qualitative studies as introducing detailed overview ground rationale are initiated in studies (Tomaszewski et al.,2020). The systematic process and subjective patterns to explore research questions are the centres of focus for a researcher as to gain broader insights related to each research objective is a core emphasis in qualitative studies (L. Haven and Van Grootel.,2019). By using secondary knowledge and information, an adequate understanding of the topic under investigation will be determined in particular.

### **3.3.2 Quantitative Research Design**

Quantitative studies involve the usage of numbers, facts, figures etc., rather than utilizing words or descriptive information (Velte and Stawinoga.,2020). By using mathematical and computational software, quantitative data sets are further evaluated. Graphical illustration, statistical representation etc., provide subsequent understanding among readers related to data findings obtained by the researcher within studies. Quantitative data sets indicate factual information, as statistical representation provides a broader overview of the researcher's data findings (Shaver.,2021).

### **3.3.3 Mixed Research Design**

The mixed approach indicates the usage of both qualitative and quantitative research design as it depends on the researcher's own particular understanding and the nature of the topic while using mixed design in study (Leavy.,2022). In order to explore the research problem from different dimensions, both (i.e. qualitative, quantitative etc.) patterns are used in the study.

### **3.3.4 Justification of Quantitative Research Design**

For the current study quantitative research design is used.

## **3.4 Data Collection Process**

To include data and information within a study is an essential element based on which more grounds are introduced in research patterns. Collecting particular data require data collection tools to be used based on which information is extracted from different sources. The data collection methods differ based on the nature of the study and the convenience of the researcher. The data collection process mainly involves, i.e. primary, secondary etc. (Heap and Waters.,2019)

### **3.4.1 Primary Data Collection Process**

When a researcher is interested in collecting first-hand information to include in a study, a primary approach is used. To collect primary data, human subjects are involved in studies in order to gain broader insights related to particular phenomena to explore (Clark et al.,2022). To collect primary data, both physical as well as online methods can be used. To collect primary data, various methods are used, which involves, i.e. questionnaire, interview etc.

#### **3.4.1.1 Questionnaire**

Within quantitative studies, primary data is collected by using a close-ended questionnaire approach based on which participants' understanding is gathered within a study (Aithal and Aithal.,2020). In order to measure the responses of the participants on each survey question, i.e. 5,7, the point Likert scale approach is used through which the intensity of each response is determined (Kumari et al.,2020). During the Covid-19 outbreak online questionnaire approach is used as it is convenient for researchers and participants to utilize online digital methods in order to collect primary data through the questionnaire method (Roth and Latoschik.,2019). The study of Haraldsen. (2023) shows that the questionnaire method is a prime emphasis for the researcher as it is a cost-effective method, and less time is consumed to conduct survey responses from participants.

#### **3.4.1.2 Interview**

Within qualitative studies, primary data is collected by using the interview method as by conducting face-to-face interview sessions broader understanding related to each research question is gathered (DeJonckheere and Vaughn.,2019). To conduct interview sessions, both physical and online methods can be used depending on the researchers' and participants' own convenience and understanding. By collecting open-ended viewpoints from respondents, adequate knowledge is introduced within a study based on which expected results can be generated. The appropriate length to conduct interview sessions is for about 45 minutes approximately (Mirick and Wladkowski.,2019).

#### **3.4.1.3 Sampling Techniques**

Sampling is the process of gathering the audience for primary data collection. In this study the researcher has used the technique of random sampling. In this random sampling

technique, the researcher has gathered the participants randomly according to their convenience from different financial institutions. Total of 120 participants have been arranged to perform the questionnaire based primary data collection method.

### **3.4.2 Secondary Data Collection Process**

To collect secondary data, various authentic secondary sources are used based on which published and reliable secondary information can be extracted to include within a study. The secondary sources include, i.e. books, encyclopedias, books, websites, journal articles etc., through which relevant secondary knowledge is used. (Ruggiano and Perry.,2019).

### **3.4.3 Justification of Primary Data Collection Process**

For the current study primary data collection process is used.

## **3.5 Data Analysis**

To analyze data, different methods are used depending on the nature of the research design and data collection method used by researchers within studies. Within quantitative studies, primary data collected through the questionnaire method is further analyzed based on SPSS software, based on which the reliability of data is predicted (Astivia and Zumbo.,2019). By using different statistical methods in SPSS software, i.e. descriptive statistics, frequency, correlational coefficient etc., each primary data set is analyzed further.

Within qualitative studies, primary data collected through the interview approach is analyzed further by using a thematic analysis technique based on which similarities and differences within the opinions of participants are predicted (Braun and Clarke.,2019). Further, by generating codes, similar themes are identified in each interview session, based on which qualitative results can be generated further in the study.

Within qualitative studies, secondary data collected from different secondary sources is further analyzed based on the content analysis technique through which each secondary information is evaluated in a detailed manner (Vespestad and Clancy.,2021).

### **3.5.1 Justification of Data Analysis**

For the current study, primary data is analyzed further by using SPSS software.

## **3.6 Ethical Consideration**

Maintaining ethical implications within a study is an essential element, as it is a core responsibility of a researcher to provide confidentiality among involved participants (Mootz et al.,2019). While involving participants in a study, it is essential to consider their informed consent, for which an ethical consent form is provided to each participant in order to consider their approval based on which participants are included in the studies (Husband.,2020). Moreover, it is substantial to provide an overview of the rationale for conducting the study and the area of the study where participants' information is to include (Pilbeam et al.,2022). In the same manner, it is necessary to provide complete freedom among participants to withdraw their information in the form of responses at any time from the study whenever they feel uncomfortable.

A study by Navalta et al. (2019) shows that to secure primary responses collected from participants, password-protected USB devices are to be used that consist of encrypted folders that are difficult to access. Further, stored data needs to be secure in a password-protected laptop with encrypted folders through which external interference or breach can be avoided (Liebe and Hunter.,2021). It is the adequate responsibility of the researcher to maintain participants' information limited to themselves rather than sharing it with co-authors in the study, as it is

necessary that researcher who conducts a questionnaire survey or interview sessions with participants will store the information and restrict its access to others (Ball.,2019).

While conducting interview sessions, it is adequate to arrange physical setting and infrastructural arrangements (i.e. rooms, equipment, machines, audio/video devices etc.) to conduct proper interviews as it is necessary to maintain privacy for each participant (Tabassum.,2022). In this regard, individual interview sessions for appropriate 45 minutes are conducted. Record each interview session is essential as different audio/video devices are used to store participants' viewpoints which are included further within studies.

While conducting secondary studies, it is adequate to utilize authentic secondary sources, i.e. google scholar etc., on which published reliable secondary data is available to be used within a study. In this regard best five research articles relevant to the study are extracted (Fregni et al.,2021). Moreover, research articles from the last five years are used in order to have validity within studies.

### **3.7 Limitations in Methodology**

In the current study, the quantitative research design is used by the researcher in order to explore each research question; however, in order to address each question qualitative approach can be used. To collect data primary data collection process is used; however secondary approach can be used in order to investigate each research objective under examination as it depends on the researcher's own understanding and topic under consideration regarding which approach is utilized to fulfil the research problem in the study.



## Chapter 4 : Results and Discussion

### 4.1 Quantitative Analysis

In order to analyze quantitative data, SPSS software is used in order to evaluate each response of the participants collected through the primary data collection process.

### 4.2 Reliability Analysis

To analyze the reliability of data collected from participants based on the 5-point Likert scale approach reliability test is used. The value of Cronbach's alpha needs to be more than the threshold value of 0.7, which indicates that the data set is reliable.

**Table 1:** Reliability Test For Testing The Validity Of Dataset

#### Reliability

[DataSet1]

#### Scale: ALL VARIABLES

##### Case Processing Summary

		N	%
Cases	Valid	120	100.0
	Excluded <sup>a</sup>	0	.0
	Total	120	100.0

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

Cronbach's Alpha	N of Items
.821	10

The above table indicates that the value of Cronbach alpha is calculated to be 0.821, which is more than the threshold value of 0.7; it shows that the primary data set collected from participants based on the survey is reliable enough to include within the study.

### 4.3 Frequency Test

By conducting a frequency test intensity of responses for each participant on each survey question can be predicted respectively. The below section will provide an overview of the frequency overview on responses of the participants for each question.

**Table 2:** Frequency test for Question 01 “Does The Government Of UAE Taking Certain Measures In Order To Stabilize Financial Development?”

**Frequency Table**

Question1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	31	25.8	25.8	25.8
	2.0	20	16.7	16.7	42.5
	3.0	19	15.8	15.8	58.3
	4.0	29	24.2	24.2	82.5
	5.0	21	17.5	17.5	100.0
	Total	120	100.0	100.0	

On asking first survey question, i.e. “Does the government of UAE taking certain measures in order to stabilize financial development” out of 120 participants, 31 responded strongly agree, which indicates that the government of UAE is taking certain initiatives in order to make financial system in the region firmer based on which fraudulent activities and risks can be minimized respectively. 20 managers working in financial institutions responded in agree, which shows that the government is spending large-scale amounts in order to bring innovation within financial practices in each financial institute.

19 participants replied in neutral responses, which shows that they are not sure that rather the government is taking precautionary measures or not. 29 respondents replied in disagreeing, which shows that during the Covid-19 outbreak, no such betterment within financial sectors was identified due to major economic decline. The government of UAE didn't take investment decisions during the pandemic, due to which traditional practices were utilized within many of the smaller financial institutions. Moreover, out of 120 participants, 21 responded strongly disagree, which indicates that the pandemic was not the right to make a certain amount of investments to regulate the banking policy framework due to huge scale loss.

A study by Toufaily et al. (2021) shows that the government of Dubai introduced a new funding process based on which stakeholders are facilitated to make their investment decisions within respective dimensions. By prioritizing domestic and international funding, relative investment opportunities are provided to each investor. The initiative is a central focus in order to maintain financial sustainability based on adequate funding provided by local and international investment companies.

**Table 3:** Frequency Test for Question 02- “Rather Financial Development Influence On Economic Growth In UAE”

Question2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	19.2	19.2	19.2
	2	28	23.3	23.3	42.5
	3	17	14.2	14.2	56.7
	4	29	24.2	24.2	80.8
	5	23	19.2	19.2	100.0
	Total	120	100.0	100.0	

On asking another survey question related to “Rather financial development influence on economic growth in UAE”, out of 120 participants, 23 replied strongly agreed, which shows that financial growth has a substantial influence on economic development in a region. By bringing foreign direct investments into a country, major infrastructural projects, restructuring decisions, construction initiatives, and social growth can be enhanced based on which economic welfare can be maintained in a region. 28 participants responded in agree, which indicates that current financial growth is contributing majorly in UAE to maintain economic stability. Tourism and construction businesses are two major sectors contributing to generating a huge number of profitable margins based on which the GDP growth rate is increased in UAE. As being a tourist hub lot of foreigner and visitors avail of tourism services based on which government earn and spend on economic projects in different regions of the UAE.

17 participants replied in neutral, which indicates that they are not sure that rather financial growth impact on the economic growth in UAE or not. Out of 120 participants, 29 replied in disagreeing, which shows that during the Covid-19 outbreak, many of the financial institutions didn’t generate profitable margins, due to which economic contribution is not managed respectively. 23 respondents answered strongly disagree, which shows that the global financial crisis indicates a major financial decline in money markets due to which economic growth is not attained to that expectations.

Results of Oluseyi.(2022) shows that financial investments within bonds, securities, stocks etc., in financial institutions contribute majorly towards economic growth as banks utilize customers’ investments in different mega construction projects based on which employment opportunities are provided among locals as well as expatriates. Moreover, profitable returns provide adequate economic support in UAE. Banks invest in entrepreneurial businesses based

on which business growth can be maintained. Economic stability can be maintained with adequate investments within large-scale businesses and small and medium enterprises.

**Table 4:** Frequency Test For Question 03- “Rather COVID-19 Outbreak Impact On Maintaining Financial Inclusion In UAE?”

Question3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	25	20.8	20.8	20.8
	2	32	26.7	26.7	47.5
	3	13	10.8	10.8	58.3
	4	31	25.8	25.8	84.2
	5	19	15.8	15.8	100.0
	Total	120	100.0	100.0	

On asking another survey question related to “Rather Covid-19 outbreak impact on maintaining financial inclusion in UAE”, out of 120 participants, 25 replied strongly agree, which shows that during pandemics, many of the financial institutions performed effectively based on which financial inclusion is maintained. 32 participants answered in agree, which indicates that the banking policy framework developed by Central banks is substantial enough based on which majority of financial institutes perform during pandemics based on virtual operating practices. 13 participants replied in neutral, which shows that they are not aware of how Covid-19 influenced on the financial sector of UAE.

31 participants answered in disagreed, which shows that the Covid-19 outbreak created an adverse influence on financial stability in UAE as many of the financial institutes weren’t able to generate expected profitability margins and fulfil customers’ expectations became a broader challenge. 19 respondents out of 120 replied strongly disagree, which shows that it has become an adequate constraint for banks to provide shareholders with their dividend

amounts due to huge losses. Investment decisions taken by financial institutions in various business sectors didn't provide expected returns, due to which overall stability decreased to a huge extent.

The results of Wei and Han. (2021) shows that the Covid-19 outbreak created an adverse impact on financial stability in UAE as many of the financial institutions lack behind due to higher inflation and interest rate policies introduced by central banks, creating an inadequate influence on customers. Due to the huge extent of unemployment rate in UAE, people were unable to provide loan payments in a timely manner as it is difficult to provide interest payments.

**Table 5:** Frequency Test For Question 04- “Do Monitoring And Controlling A Significant Function In Financial Institutions In Order To Avoid Fraudulent Activities”

Question4					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	24.2	24.2	24.2
	2	22	18.3	18.3	42.5
	3	17	14.2	14.2	56.7
	4	23	19.2	19.2	75.8
	5	29	24.2	24.2	100.0
Total		120	100.0	100.0	

On asking another survey question related to “Do monitoring and controlling a significant function in financial institutions in order to avoid fraudulent activities” out of 120 participants, 29 replied strongly agree, which indicates that monitoring functions are essential to overcome fraudulent activities as customers' data security is adequate responsibility of financial institutions to maintain. It is essential to overcome external interference within the

financial systems of banks based on which considerable security is provided to the respective investment amounts of the customers. 22 respondents answered in agree, which shows that digital automation functions provide ease to financial institutes to provide adequate security to the financial system. The implication of a cyber security system and a more integrated artificial intelligence framework develop a quality control mechanism based on which external threats can be minimized and internal risks can be mitigated, respectively.

17 participants replied in a neutral response which shows that they are not familiar with the monitoring functions and impact of controlling mechanisms to overcome financial fraud. Out of 120 participants, 23 replied in disagree, which shows that monitoring and controlling functions are not enough to maintain checks and balances in financial institutions as by conducting auditing functions, accounting frauds can be determined as well. 29 participants replied strongly disagree, which shows that many of the banks are not relying only on monitoring and controlling functions as risk management tactics and fraud detection strategies are predicted to be considerable based on which accounting frauds and financial risks can be identified respectively.

The results of Chapelle. (2019) shows that monitoring is a substantial element based on which risk management principles can be maintained, as it is necessary for financial institutions to utilize controlling processes in order to stabilize internal fraudulent activities, operational risks and external threats. Customers' financial data and information is secure based on which long-term relationship will be maintained with potential clients.

**Table 6:** Frequency test for Question 05- “Do Financial Institutions In UAE Contribute Towards GDP Growth Rate?”

Question5					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	34	28.3	28.3	28.3
	2	22	18.3	18.3	46.7
	3	15	12.5	12.5	59.2
	4	27	22.5	22.5	81.7
	5	22	18.3	18.3	100.0
	Total	120	100.0	100.0	

On asking another survey question regarding “Do financial institutions in UAE contribute towards GDP growth rate” out of 120 respondents, 34 replied strongly agree, which shows that financial bodies are majorly contributing to maintaining the GDP growth rate in UAE. It indicates that many of the foreigner investors and international financial institutes invest their amounts in financial institutes of UAE to attain profitable returns as by using those investments in various projects, constructional growth is managed in different regions of the UAE based on which GDP growth rate and economic development will be maintained. 22 participants answered in agree, which shows that many of the individual investors and local financial investing companies spend largescale amounts in well-recognized banks in UAE based on which economic activities are managed in UAE respectively.

15 participants answered in neutral, which shows that they are not familiar with rather financial institutes contribute towards GDP growth rate or not. 27 participants out of 120 replied in disagree, which indicates that the GDP rate decreased during pandemics as the performance rate for financial institutions reduced, impacting revenue margins respectively. 22 participants replied strongly disagree, which shows that inflation and higher interest rates were major factors



due to which banks faced major losses as the income ratio of people reduced during pandemics due to which timely payments were not provided on loan payments due to which many of the micro finance banks got bankrupt in UAE. In the same manner, a higher inflation rate creates certain challenges for people who avail loan payments as managing interest payments become an adequate constraint to fulfil.

Findings of Islam. (2022) shows that financial institutions provide employment opportunities to both locals as well as expatriates, as with the recruitment of highly qualified and well-experienced candidates, expected revenue productivity can be accomplished based on which the GDP growth rate will be maintained. Moreover, banks in UAE invest in different construction projects based on which employment opportunities are created for people based on which income is generated through which GDP growth rate can be stabilized respectively.

**Table 7:** Frequency Test For Question 06- “Does Dubai International Financial Centre (DIFC) Performs A Crucial Role In Providing Financial Services To Business Clients?”

Question6					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	24	20.0	20.0	20.0
	2	25	20.8	20.8	40.8
	3	14	11.7	11.7	52.5
	4	31	25.8	25.8	78.3
	5	26	21.7	21.7	100.0
	Total	120	100.0	100.0	

On asking another survey question related to “Does Dubai international financial centre (DIFC) performs a crucial role in providing financial services to business clients” out of 120 participants, 24 replied strongly agree, which indicates that DIFC is a major financial institute

in UAE that provides financial services to international business clients, i.e. accounting services etc. through which auditing functions are performed. DIFC is one of the global financial exchange centres that provides exchange rate services to expatriates, visitors etc. 25 participants replied in agree, which indicates that DIFC provides many accounting services to international clients as compliance, auditing, risk management, investment consultancy etc., through secure investment decisions can be taken. Moreover, monitoring and control functions performed based on an auditing mechanism provides adequate check and balance on the accounts of the business.

14 participants answered in neutral, which shows that they are not familiar with current functions performed by DIFC in UAE. 31 participants out of 120 replied in disagreeing, which shows that during the Covid-19 outbreak, it became a challenging factor for DIFC to provide financial services to international business clients. 26 respondents replied strongly agreed with asking the same question.

A research study by Baker and Beeton (2020) shows that DIFC provides tax-free services to clients on each profitability return. Moreover, legal services are provided to financial investors based on which considerable investment decisions can be taken by individual investors and international investing firms. Further, by providing trading for equity funds, it directs a pathway for investors to consider secure investment decisions based on huge dividend payments can be attained.

**Table 8:** Frequency Test For Question 07- “Rather Financial Services Regulatory Authority (FSRA) In Abu Dhabi Performs Supervisory Role For Managing Financial Activities”

Question7					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	19.2	19.2	19.2
	2	26	21.7	21.7	40.8
	3	15	12.5	12.5	53.3
	4	30	25.0	25.0	78.3
	5	26	21.7	21.7	100.0
	Total	120	100.0	100.0	

On asking another survey question related to “Rather financial services regulatory authority (FSRA) in Abu Dhabi performs supervisory role for managing financial activities”, out of 120 participants, 23 replied strongly agree, which indicates that FSRA in UAE provides regulatory responsibilities for each financial institution based on which transparent mechanism is utilized within internal system The core objective for FSRA is to protect rights of the customers while investing in financial institutions or in-case of loan payments. By providing regulatory laws, ethical and legal implications are fulfilled, respectively. 26 participants answered in agree, which indicates that each micro-finance bank or well-reputed financial institution is regulated by FSRA in Abu-Dhabi. By maintaining terms and conditions for pension plans, retirement benefits are provided to employees operating in financial institutions and with an adequate regulatory framework, considerable support is directed to each financial institution.

15 respondents answered in neutral, which shows that they are not sure about what services are provided by FSRA to each financial institution. 30 participants replied in disagree, which shows that during pandemics, FSRA didn’t function adequately as traditional financial models were implemented within the internal functioning of the banks. 26 participants out of

120 replied strongly disagree, which shows that digital disruptions created adequate constraints for FSRA to integrate firm regulatory framework.

The findings of Zarrouk et al. (2021) show that FSRA provides highly standardized services to business clients in terms of security and transparency based on which customers' rights can be preserved within financial institutes, respectively. By providing substantial legal support to business clients based on which investment suggestions are directed through which adequate profitable returns can be attained.

**Table 9:** Frequency Test For Question 08- “Does A Financial Infrastructure Transformation Programme (FIT) Introduced In Order To Bring Digital Automation Within Financial Services?”

Question8					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	16.7	16.7	16.7
	2	31	25.8	25.8	42.5
	3	16	13.3	13.3	55.8
	4	24	20.0	20.0	75.8
	5	29	24.2	24.2	100.0
Total		120	100.0	100.0	

On asking another question related to “Does a financial infrastructure transformation programme (FIT) introduced in order to bring digital automation within financial services” out of 120 participants, 20 replied strongly agree, which indicates that digital transformation is an essential factor to introduce within financial institutes based on which firm control and risk management principles will be introduced. By initiating more integrated mechanisms in terms of monitoring and control, financial risks can be mitigated, and fraudulent activities can be

minimized, respectively. 31 participants answered in agree, which shows that the implication of the artificial intelligence framework is predicted to be essential based on which security services can be provided to customers. To make the UAE one of the digital payment hubs automated support system is adopted to fulfil customers' requirements and stakeholders' expectations.

16 participants out of 120 replied in neutral, which shows that they are not aware of the financial infrastructure transformation programme. 24 respondents answered in disagree, which shows that traditional methods utilized within financial institutions are adequate enough based on which customers are provided with an adequate amount of service benefits to fulfil their transaction activities. 29 participants answered strongly disagree, which shows that many of the micro-finance banks are still relying on traditional methods in the financial system due to a lack of investments and resources; integration of an automated framework is a challenging process.

The FIT program is introduced in order to transform operational practices from traditional to digital ones through which quality mechanism is provided to each business client. With the integration of an automated technological framework, i.e. time, cost etc., can be reduced for customers based on which real-time services can be utilized (Srouji.,2020). By introducing online digital methods, timely interaction is maintained with clients in the long run. Moreover, it provides financial institutes with a more secure process to prevent financial users' data and information from external interference and internal fraud.

**Table 10:** Frequency Test For Question 09- “Do Central Banks In UAE Needs To Revise Banking Policies After Regular Intervals?”

Question9					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	22.5	22.5	22.5
	2	26	21.7	21.7	44.2
	3	14	11.7	11.7	55.8
	4	26	21.7	21.7	77.5
	5	27	22.5	22.5	100.0
	Total	120	100.0	100.0	

On asking another survey question related to “Do central banks in UAE needs to revise banking policies after regular intervals” out of 120 participants, 27 replied strongly agreed, which shows that it is essential to factor revise policy pattern in a regular time period. Many Islamic banks are working under Shariah supervision therefore based on the Central Bank's policy framework, each financial institution will practice, i.e. commercial, financial, investing activities etc., through which long-term relationships with business clients will be maintained. 26 respondents answered in agree, which indicates that it is necessary for the Central Bank to revise policy patterns at regular intervals in order to implement monetary and fiscal policy etc., based on which economic stability will be maintained in UAE. Social development in society can be attained based on effective regulatory practices initiated by banks and other financial institutions for which policy framework performs an essential role in order to provide strategic guidelines to financial management operating in financial institutes.

14 respondents answered in neutral, which shows that they are not familiar with rather Central banks in UAE revised their policy framework or not. 26 participants answered in disagree, which shows that many financial institutions are performing based on standardized

principles; therefore, it is not essential enough for the Central Bank to revise policy patterns at regular intervals. 27 respondents out of 120 answered strongly disagree, which indicates that many of the micro-financial institutions are not performing under the regulations of Central banks, due to which policy revision might not impact the regulatory framework and operational process of financial bodies.

Central banks need to revise policy frameworks in order to bring advancements within operational practices based on which customers will be strategically supported, as in order to fulfil corporate social responsibilities and economic growth; it is essential to revise policy patterns. The findings of Elsayed et al. (2023) show that Central banks utilize monetary policy in order to sustain economic downfall in a region, as it is essential to minimize the inflation rate by lower price values in an economy. Moreover, by controlling higher interest rates, liquidity states for financial institutions are managed respectively.

**Table 11:** Frequency Test For Question 10 “Do Smaller Financial Institutions In UAE Come-Up With Various Challenges In-Terms Of Customer Handling During The Covid-19 Outbreak?”

Question10					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	28	23.3	23.3	23.3
	2	27	22.5	22.5	45.8
	3	22	18.3	18.3	64.2
	4	20	16.7	16.7	80.8
	5	23	19.2	19.2	100.0
	Total	120	100.0	100.0	

On asking another survey question related to ‘Do Smaller financial institutions in UAE come-up with various challenges in-terms of customer handling during the Covid-19 outbreak’ out of 120 participants, 28 replied strongly agree, which shows that many of the financial institutions in UAE come-up with adequate challenges in-terms of customer handling as many of the banks in UAE adopted traditional methods however during pandemics virtual methods were used by financial institutions in order to manage customers. As lack of digital methods in smaller financial institutions creates certain complications for management to fulfil customers’ preferences during the Covid-19 outbreak. 27 participants answered in agree, which indicates that paying interest on loans becomes difficult for customers, due to which handling potential business clients becomes inadequate for smaller financial institutions in UAE.

22 participants answered in neutral, which shows that they are not familiar with rather smaller financial institutes and faced challenges in terms of customer handling or not. 20 participants out of 120 answered in disagree, which shows that many of the smaller financial institutes were providing adequate services to potential clients during pandemics, so fulfilling their expectations is managed in an adequate manner. 23 respondents replied strongly disagree, which indicates that time investment decisions in automated functions and digital dimensions are considerable is adequate for smaller financial institutes based on which customers' rights are managed as an online portal is used to provide real-time response to customers related to their complaints during pandemics.

During the Covid-19 outbreak, many of the smaller financial institutes came up with adequate challenges in-terms of customer handling as with higher inflation and interest rate policies, it became complex for financial institutes in UAE to collect timely loan payments from



each business client due to lower income ratio and a minimal tendency to return payments with higher interest rates respectively (Ahmed et al., 2022).

#### 4.4 Descriptive statistics

A descriptive statistics test in SPSS is used in order to predict tendency within gathered quantitative data sets from participants as mean values in the test indicate that responses of the participants are within the defined mean values for each survey question. The values of standard deviation indicate how far or close each data set is to that of respective mean values. In case the values of standard deviation are lower than mean values, then cluster formation is predicted within participants' responses; however, if values of standard deviation are more than that of mean values, then it indicates that the data set collected from participants is spread out in different directions and responses are dispersed, and it indicates that there is no similarity within the responses of the participants to each other.

**Table 12:** Descriptive Statistics Of Each Survey Question's Mean Values And Standard Deviation

##### Descriptives

[DataSet1] C:\Users\dell\Desktop\DWH-1014 input data sheet.sav

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Question1	120	1.0	5.0	2.908	1.4667
Question2	120	1	5	3.01	1.423
Question3	120	1	5	2.89	1.413
Question4	120	1	5	3.01	1.526
Question5	120	1	5	2.84	1.506
Question6	120	1	5	3.08	1.464
Question7	120	1	5	3.08	1.453
Question8	120	1	5	3.09	1.449
Question9	120	1	5	3.00	1.501
Question10	120	1	5	2.86	1.445
Valid N (listwise)	120				

The above table of descriptive statistics indicates respective means values and standard deviations for each survey question. It is evident that for each survey question, the values of standard deviation are lower than that of the mean values; it indicates that the values of responses provided by participants are close to that of mean values, due to which cluster formation is developed within collected data set from involved participants. Moreover, it shows that there are similarities between the responses of the participants. As for the survey question:1, the value of standard deviation is, i.e. 1.46 etc., which is lower than that of mean value, i.e. 2.9 etc., which indicates that participants have provided responses closer to that of mean values, respectively. In the same manner for the survey question:7, the value of standard deviation is, i.e. 1.45 etc., which is lower than that of mean value, i.e. 3.08 etc. it shows that cluster formation is developed in collected data sets of participants. In the same manner, respective values of standard deviation for other survey questions are lower than mean values, which is evident in the above table.

#### **4.5 Pearson correlational test**

Pearson correlational test in SPSS indicates that fluctuation in one variable is due to a change in another variable as the value of significance (2-tailed) indicates the extent of the relationship between two variables, respectively. A value of significance less than 0.05 indicates a firm relationship between each variable.

**Table 13: Correlational Coefficient For Showing The Value Of Significance For Each**

Question

**Correlations**

[DataSet1] C:\Users\dell\Desktop\DWH-1014 input data sheet.sav

		Correlations									
		Question1	Question2	Question3	Question4	Question5	Question6	Question7	Question8	Question9	Question10
Question1	Pearson Correlation	1	.238**	.234**	.372**	.305**	.266**	.319**	.399**	.283**	.362**
	Sig. (2-tailed)		.009	.010	.000	.001	.003	.000	.000	.002	.000
	N	120	120	120	120	120	120	120	120	120	120
Question2	Pearson Correlation	.238**	1	.306**	.449**	.314**	.355**	.431**	.431**	.445**	.160
	Sig. (2-tailed)	.009		.001	.000	.000	.000	.000	.000	.000	.081
	N	120	120	120	120	120	120	120	120	120	120
Question3	Pearson Correlation	.234**	.306**	1	.336**	.237**	.260**	.307**	.165	.384**	.305**
	Sig. (2-tailed)	.010	.001		.000	.009	.004	.001	.072	.000	.001
	N	120	120	120	120	120	120	120	120	120	120
Question4	Pearson Correlation	.372**	.449**	.336**	1	.194*	.188*	.341**	.433**	.371**	.344**
	Sig. (2-tailed)	.000	.000	.000		.033	.040	.000	.000	.000	.000
	N	120	120	120	120	120	120	120	120	120	120
Question5	Pearson Correlation	.305**	.314**	.237**	.194*	1	.379**	.313**	.342**	.435**	.264**
	Sig. (2-tailed)	.001	.000	.009	.033		.000	.000	.000	.000	.004
	N	120	120	120	120	120	120	120	120	120	120
Question6	Pearson Correlation	.266**	.355**	.260**	.188*	.379**	1	.174	.436**	.337**	.228*
	Sig. (2-tailed)	.003	.000	.004	.040	.000		.057	.000	.000	.012
	N	120	120	120	120	120	120	120	120	120	120
Question7	Pearson Correlation	.319**	.431**	.307**	.341**	.313**	.174	1	.304**	.366**	.250**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.057		.001	.000	.006
	N	120	120	120	120	120	120	120	120	120	120
Question8	Pearson Correlation	.399**	.431**	.165	.433**	.342**	.436**	.304**	1	.348**	.311**
	Sig. (2-tailed)	.000	.000	.072	.000	.000	.000	.001		.000	.001
	N	120	120	120	120	120	120	120	120	120	120
Question9	Pearson Correlation	.283**	.445**	.384**	.371**	.435**	.337**	.366**	.348**	1	.139
	Sig. (2-tailed)	.002	.000	.000	.000	.000	.000	.000	.000		.129
	N	120	120	120	120	120	120	120	120	120	120
Question10	Pearson Correlation	.362**	.160	.305**	.344**	.264**	.228*	.250**	.311**	.139	1
	Sig. (2-tailed)	.000	.081	.001	.000	.004	.012	.006	.001	.129	
	N	120	120	120	120	120	120	120	120	120	120

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

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

The above table is for the correlational coefficient, which shows that the value of significance for two-tailed for most of the variables is less than 0.05, which shows that extent of the relationship between those variables is firm. For, i.e. the value of significance for questions 1 and 3 is 0.01, which is less than 0.05, indicating a firm relationship. In the same manner, the value of significance for questions 3 and 5 is 0.009, which shows strength in a relationship. However, the value of significance for questions 2 and 10 is 0.081, which is more than 0.05, which shows that the intensity of the relationship is weaker. In the same manner, the

value of significance for questions 3 and 8 is 0.07, which is more than the threshold value indicating a weaker relationship. Further, the value of significance two-tailed for questions 6 and 7 is calculated to be 0.057, which is more than 0.05 showing minimal strength in a relationship. In the same manner, the value of significance for questions 9 and 10 is identified to be 0.129, which is more than 0.05, indicating a weaker relationship.

## **Chapter 5 : Conclusion and Recommendation**

It is widely accepted that financial development is important for long-term economic development. The policy makers identify the essential practices of financial inclusion and in many countries financial inclusion has become the priority of policy. An issue of the financial exclusion is faced globally rather than any single country. According to the global statistics the population of more than 2.5 billion adults does not avail the beneficiary strategies of banking services. Mostly the poor people rely on borrowing or saving their finances because of their lower financial conditions. It has been observed that even well-developed financial systems have not succeeded to be all inclusive and certain segments of population remain outside the formal financial system. During the 19<sup>th</sup> century economists believed that the effective management of investment opportunities, efficient corporate control and mobilizing savings results in the improvement of banking systems. These issues arose at the early stage of economic development and in weak institutional environment. Meanwhile the support from market based has placed forward that market reduces ingrained inadequacies linked with bank, therefore comprehensive growth of economy initiates. Also, the support viewed by bank-based systems to be effective for comprehensive growth of the economy for countries with delicate legal system mean while market-based system possesses its advantages with improved legal system.

This study concludes all the aspects of financial development and inclusion such as explanation, impacts, challenges, mitigating techniques and policies implemented by government in UAE. The first section of this research is an introduction which explains the basic concept of financial development and inclusion. This includes that financial development is formation of financial institutions or developmental markets in order to promote the economic growth of a country while financial inclusion is step towards critical economic growth allowing

the businesses to implement the services and markets formed in financial development. Further this section explains that the UAE has one of the greatest economies among the other MENA region areas. The UAE has made significant processes in developing its financial sector in recent year. The country has well-developed financial sector that is characterized by high degree of sophistication and wide range of financial products and services. The research has formed some research objectives and aims along which this research has been conducted.

In the second section of the research literature review, the researcher has collected different studies from different scholars and briefly explained different sectors related to research title. The literature review of this research paper has reviewed about the history of financial development in UAE. The United Arab Emirates (UAE) since it got its independence has become an economic hub and its influence within the GCC region countries continue to increase. UAE started to develop its banking sectors, sovereign wealth funds, financial laws, vision 2021 plan, tax free environment plans and etc. Further this study also reviewed the financial developments and strategies implemented in other countries such as USA, Singapore, Saudi Arabia, Japan, China and India. Researcher reviewed multiple articles which explained the certain progresses in these countries using digital financial services and implementing policies and regulations. Additionally, the researcher explained the various empirical studies that used different techniques to investigate the financial development, inclusion, improvement, relationships and etc. The techniques such as ARDL to find the relationship, logistic regression model to analyze the influential financial factors and several others.

Further the current studies have also been focused in the second section of this study. It concludes that, today, UAE is considering as one of the leading countries in the world as long as matters of GDP and per capita growth are concerned. Additionally, the country has one of

the satisfied populations in the world and this result is associated to increased reasonable and fairly distribution of resources in the country. Today the country has diversified its economy in to various sectors such as construction and real estate, transport, financing, agriculture, tourism, and the entire service sector. The results from these diversifications are a lot, which is clearly being reflected in the continued growth of the country's GDP. As the challenges COVID-19 pandemic has greatly affected the financial resources and services globally. Secondly the limited access of financial services to rural areas has also impacted the financial development of UAE. The risk of cyber security is also noted as the challenge for digitalization of banking sector.

After the critical review of literature reviews the third section of this study explains the methodology of this research followed by the researcher throughout his findings. The methodology of a study is depending on the choice of researcher. In this study the methodology is divided into several sections that differently describe their own purpose and choice of researcher. The first part of research philosophy explains the type of data or information used within a study. The researcher has based this study on the philosophy of Interpretivism. Secondly the research approach explains the direction implemented within a study. The researcher has chosen the inductive type of research approach for this study. It shows that researcher has conducted this study from the basic level or scratch (observations) till high level (theory). Moreover, this study has been based on the quantitative type of design which uses the numbers, facts and figures. The researcher has based his choice according to his convenience. Further, the primary type of data collection method has been used by the researcher including the 10 questionnaires each of that consists of 5 points Likert scale. This method of data collection requires some participants so the researcher has followed the random sampling technique to gather respondents. Random sampling for this study was done within the financial

institutions by and selecting the managers and employees of the researcher's convenience. Additionally, this section has also explained the ways that are used by researcher for data analysis. For this study, SPSS software has been used along with 4 tests conducted that are descriptive statistics, frequency, correlational coefficient and Reliability.

The fourth section of this research study is based on the results and discussions of the data collected and analyzed. This part of research can be concluded with the results of four tests. First the reliability test of this study shows the value calculated by researcher that is 0.821 which shows that data collected is enough for this survey. Next test conducted is frequency test that tells the intensity of responses gathered. It shows the frequency of responses per question generated by respondents. Third test conducted is the descriptive statistics, which shows the mean and standard deviations of each question. Mean is the average of responses collected. The researcher analyzed in this test that each question has different average of responses. And the researcher has explained that the standard deviation in the test must be less than the value of mean, so it shows that both the results are close to each other or else the results would be far. The last conducted by researcher is correlational which shows the comparison of all the 10 questions with each other. The researcher explains that the value of correlation must be less than 0.05 to show the strong relationship. These all the tests have been conducted and analyzed using the SPSS software. The last part of this research study explains the conclusion, recommendations and future studies that can be conducted by future scholars or researchers.

## **5.1 Recommendations**

### **1. Digital Encourage Payments**

Digital payments have become increasingly popular during COVID-19 due to the ease of use and contactless nature of the transactions. To promote financial inclusion in the UAE, the



policy makers and regulators should encourage businesses and individuals to adopt the digital payment methods by providing incentives, such as reduced transaction fees for digital payments and increasing the availability of digital payment options at businesses. Additionally, financial institutions should invest in developing user-friendly digital payment platforms and ensure that their security protocols are robust to protect users' data.

## 2. Expand Access to Financial Education

Financial education programs can help individuals and businesses develop the necessary skills and knowledge to manage their finances effectively. Policymakers and regulators in the UAE must expand access to financial education programs, especially in underserved communities, through initiatives such as online courses, workshops and community outreach programs. These programs should focus on the key areas such as budgeting, saving, investing and managing debt, and be tailored to specific needs of different groups, such as women, youth and migrant workers.

## 3. Promote Financial Inclusion in the Gig Economy

The gig economy has grown significantly during pandemic, as more people turn to freelance and contract work. However, gig workers may face unique financial challenges, such as irregular income and limited access to traditional financial services. In the UAE it is recommended to develop policies and programs that address the unique financial needs of gig workers and provide access to financial products and services tailored to their needs. This may include initiatives such as developing specialized savings and investment products for gig workers, providing access to microfinance loans, and developing educational programs on financial planning for gig workers.

#### 4. Expand Financial Services to Remote and Underserved Areas

Remote and underserved areas of the UAE may have limited access to financial services, which can make it difficult for individuals and businesses to access the resources that need to thrive. Expanding financial services to these areas can help to promote financial inclusion by providing new options for individuals and businesses that may be excluded from traditional financial services. To expand financial services to remote and underserved areas, policymakers and regulators should work with traditional financial institutions and FinTech companies to develop new products and services that are tailored to the unique needs of these areas. They should also promote collaboration between these institutions to develop innovative solutions that leverage technology to overcome geographical barriers.

#### 5. Ensure Consumer Protection

As financial services become more digital and innovative, ensuring consumer protection becomes increasingly important. In the UAE it is recommended that policymakers should strengthen consumer protection frameworks to ensure that consumers are adequately protected against fraud, unfair practices and other risks. This may include measures such as developing consumer protection laws and regulations, establishing dispute resolution mechanisms and enforcing compliance with consumer protection standards.

#### 6. Promote Financial Inclusion for Women

Women in the UAE may face unique barriers to financial inclusion such as cultural norms and legal restrictions. The policymakers and regulators should develop targeted policies and programs to promote financial inclusion for women. This may include initiatives such as providing access to financial education programs tailored to women, developing specialized

financial products and services for money and promoting women's participation in the financial sector through training and mentorship programs.

#### 7. Address the digital divide

The COVID-19 pandemic has highlighted the importance of digital connectivity for access to financial services. To promote financial inclusion, policymakers and regulators in the UAE should work to address the digital divide by expanding access to high-speed internet and other digital infrastructure in the remote areas. This may include initiatives such as subsidizing the cost of internet access for low-income households, developing public Wi-Fi networks in public areas and providing incentives for internet service providers to expand their coverage to rural and remote areas.

#### 8. Leverage Fintech to Expand Access to Financial Services

Fintech companies have been instrumental in expanding access to financial services, especially in remote areas of UAE. In the UAE the policy makers should work with fintech companies to develop innovative solutions that leverage technology to expand access to financial services. These solutions may include mobile banking apps, peer-to-peer lending platforms and crowdfunding platforms, among others. Additionally, financial institutions should collaborate with fintech companies to develop new products and services that meet the evolving needs to their customers.

## **5.2 Future Studies**

The UAE has a well-developed financial system, with a range of financial institutions offering a broad range of financial products and services to individuals and businesses. The COVID pandemic has had a significant impact on global economy, including the financial sector

in the UAE. While the government has implemented a range of measures to support individuals and businesses during the crisis, there is a need to study the impact of COVID-19 on financial inclusion in the country. Further the future research could focus on the extent to which the pandemic has affected access to financial services for different segments of society, including low-income households and small and medium-sized enterprises (SMEs). It could also examine the effectiveness of the government's response in promoting financial inclusion during the crisis and identify any gaps in existing policies and strategies.

Additionally, the gender inequality remains a significant challenge in many countries, including the UAE. There is a need for further research into the gender dimensions of financial inclusion in the country. The future research could explore the extent to which women in the UAE have access to financial services and products and identify any barriers to financial inclusion. It could also investigate the impact of financial inclusion on women's empowerment and economic participation. Furthermore, the innovation and entrepreneurship are the essential drivers of economic growth and development in the UAE. However, there is a need for further research into the role of innovation and entrepreneurship in promoting financial inclusion in the country. The research in the future could focus on the extent to which innovation and entrepreneurship are meeting the financial needs of different segments of society, including low-income households and SMEs. It could also investigate the impact of innovation and entrepreneurship on financial inclusion and economic development in the country.

## References

- Aalbers, M., 2019. Financialization.
- Ahmed, F., Kousar, S., Pervaiz, A. and Shabbir, A., 2022. Do institutional quality and financial development affect sustainable economic growth? Evidence from South Asian countries. *Borsa Istanbul Review*, 22(1), pp.189-196.
- Ahmed, H.M., El-Halaby, S.I. and Soliman, H.A., 2022. The consequence of the credit risk on the financial performance in light of COVID-19: Evidence from Islamic versus conventional banks across MEA region. *Future Business Journal*, 8(1), p.21.
- Ahmed, J., Moonesar, I.A., Mostafa, M., Zakzak, L. and Khalid, F., 2020. UAE economic diversification: a medical tourism perspective. *Economic Development in the Gulf Cooperation Council Countries: From Rentier States to Diversified Economies*, pp.177-189.
- Ahmed, Z., Zhang, B. and Cary, M., 2021. Linking economic globalization, economic growth, financial development, and ecological footprint: Evidence from symmetric and asymmetric ARDL. *Ecological indicators*, 121, p.107060.
- Aithal, A. and Aithal, P.S., 2020. Development and validation of survey questionnaire & experimental data—a systematical review-based statistical approach. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), pp.233-251.
- Al Ahbabi, A.R. and Nobanee, H., 2019. Conceptual building of sustainable financial management & sustainable financial growth. Available at SSRN 3472313.
- Al Nuaimi, M., 2019. An Omnichannel Digital Banking Platform For Smart City Services: UAE Case Study (Doctoral dissertation, The British University in Dubai (BUiD)).
- Alafianta, N.F., Aziz, M.A. and Sahputra, J., 2021. A Historical Review of the Development of the Islamic Banking System (An Analytical Study). *Al-Iktisab: Journal of Islamic Economic Law*, 5(2), pp.133-147.

- Alam, A., 2020. Pedagogy of calculus in India: An empirical investigation. *Alam, A.(2020). Pedagogy of Calculus in India: An Empirical Investigation. Periódico Tchê Química, 17(34), pp.164-180.*
- Alam, N. and Ali, S.N., 2021. Introduction: Fintech and Islamic finance in the Gulf Cooperation Council (GCC). Fintech, digital currency and the future of Islamic Finance: Strategic, regulatory and adoption issues in the Gulf Cooperation Council, pp.1-8.
- Alblooshi, F.S.A.K., 2022. FinTech in the United Arab Emirates: A General Introduction to the Main Aspects of Financial Technology. In *Entrepreneurial Rise in the Middle East and North Africa: The Influence of Quadruple Helix on Technological Innovation*. Emerald Publishing Limited.
- Alharahsheh, H.H. and Pius, A., 2020. A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), pp.39-43.
- Ali, M., Nazir, M.I., Hashmi, S.H. and Ullah, W., 2022. Financial inclusion, institutional quality and financial development: Empirical evidence from OIC countries. *The Singapore Economic Review*, 67(01), pp.161-188.
- Al-Jeshi, S., Tarfa, A., Al-Aswad, H., Elmedany, W. and Balakrishna, C., 2022, November. A Blockchain Enabled System for Enhancing Fintech Industry of the Core Banking Systems. In *2022 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)* (pp. 209-213). IEEE.
- Alketbi, O.S., Ellili, N.O.D. and Nobanee, H., 2022. Firm strategy and financial performance: What is the role of sustainability? Evidence from the banking system of an emerging market. *Business Strategy & Development*, 5(3), pp.259-273.
- AlShamsi, M.S., 2020. Faculty Life and Health Science of the University of Ulster Thesis submitted for the degree of PhD October 2020.

- Alsharji, A., Jabeen, F. and Ahmad, S.Z., 2019. Factors affecting social media adoption in small and medium enterprises: evidence from the UAE. *International Journal of Business Innovation and Research*, 19(2), pp.162-182.
- Al-Tawil, T.N.E., 2022. Anti-money laundering regulation of cryptocurrency: UAE and global approaches. *Journal of Money Laundering Control*.
- Andriani, H., 2020. Effectiveness of large-scale social restrictions (PSBB) toward the new normal era during COVID-19 outbreak: a mini policy review. *journal of indonesian health policy and administration*, 5(2).
- Antal, C., Cioara, T., Anghel, I., Antal, M. and Salomie, I., 2021. Distributed ledger technology review and decentralized applications development guidelines. *Future Internet*, 13(3), p.62.
- Astivia, O.L.O. and Zumbo, B.D., 2019. Heteroskedasticity in Multiple Regression Analysis: What it is, How to Detect it and How to Solve it with Applications in R and SPSS. *Practical Assessment, Research, and Evaluation*, 24(1), p.1.
- Awotunde, J.B., Adeniyi, E.A., Ogundokun, R.O. and Ayo, F.E., 2021. Application of big data with fintech in financial services. In *Fintech with Artificial Intelligence, Big Data, and Blockchain* (pp. 107-132). Singapore: Springer Singapore.
- Bahia, B., 2022. E-payment adoption in the era of digital transformation: the case of Algerian banking system. *Journal of Contemporary Economic Studies* Volume, 7(02), pp.481-496.
- Baker, L. and Beeton, J., 2020. Dubai International Financial Centre's updated data protection law-Part 1: Developing a modern, global law in a UAE financial free zone. *Journal of Data Protection & Privacy*, 3(2), pp.161-171.
- Ball, H.L., 2019. Conducting online surveys. *Journal of human lactation*, 35(3), pp.413-417.

- Baloch, M.A., Ozturk, I., Bekun, F.V. and Khan, D., 2021. Modeling the dynamic linkage between financial development, energy innovation, and environmental quality: does globalization matter?. *Business Strategy and the Environment*, 30(1), pp.176-184.
- Basha, M.B., Muhammad, A.M. and Alhafidh, G., 2021. Bank Selection for SMEs: An Emirati Student Perspective. *Transnational Marketing Journal*, 9(1), pp.63-87.
- Bayzid, M., Alshamsi, A., Albeshr, S., Smith, A., Al Mulla, S., Almutairi, M. and Nobanee, H., 2020. Overview of Financial Institutions in the United Arab Emirates. Available at SSRN 3579299.
- Bechara, M.M., Bossu, W., Liu, M.Y. and Rossi, A., 2021. The Impact of Fintech on Central Bank Governance: Key Legal Issues. *International Monetary Fund*.
- Belozyorov, S., Sokolovska, O. and Kim, Y.S., 2020. Fintech as a precondition for transformations on global financial markets. *Форсайт*, 14(2 (eng)), pp.23-35.
- Birkinshaw, P., 2019. INFORMATION: PUBLIC ACCESS, PROTECTING PRIVACY AND SURVEILLANCE. *The Changing Constitution*, p.358.
- Bloomfield, J. and Fisher, M.J., 2019. Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), pp.27-30.
- Bobbie-Poku, J., 2019. Liquidity risk, credit risk and performance of Universal Banks in Ghana (Doctoral dissertation, University of Cape Coast).
- Boitreaud, S., Gratcheva, E.M., Gurhy, B., Paladines, C. and Skarnulis, A., 2020. Riding the Wave.
- Boros, E. and Horváth, M., 2022. Central Bank Digital Currency: the Next Money Revolution?: Central Bank Digital Currencies in the Dimension of Geopolitics. *PÉNZÜGYI SZEMLE/PUBLIC FINANCE QUARTERLY*, 67(4), pp.506-521.



- Bouteraa, M., Raja Hisham, R.R.I. and Zainol, Z., 2022. Challenges affecting bank consumers' intention to adopt green banking technology in the UAE: A UTAUT-based mixed-methods approach. *Journal of Islamic Marketing*.
- Braun, V. and Clarke, V., 2019. Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), pp.589-597.
- Bugshan, A., Bakry, W. and Li, Y., 2021. Oil price volatility and firm profitability: an empirical analysis of Shariah-compliant and non-Shariah-compliant firms. *International Journal of Emerging Markets*, (ahead-of-print).
- Canh, N.P. and Thanh, S.D., 2020. Financial development and the shadow economy: A multi-dimensional analysis. *Economic Analysis and Policy*, 67, pp.37-54.
- Cao, J., Law, S.H., Samad, A.R.B.A., Mohamad, W.N.B.W., Wang, J. and Yang, X., 2022. Effect of financial development and technological innovation on green growth—Analysis based on spatial Durbin model. *Journal of Cleaner Production*, 365, p.132865.
- Carranza, M. and Niles, M.T., 2019. Smallholder farmers spend credit primarily on food: gender differences and food security implications in a changing climate. *Frontiers in Sustainable Food Systems*, 3, p.56.
- Casula, M., Rangarajan, N. and Shields, P., 2021. The potential of working hypotheses for deductive exploratory research. *Quality & Quantity*, 55(5), pp.1703-1725.
- Chapelle, A., 2019. *Operational risk management: best practices in the financial services industry*. John Wiley & Sons.
- Chen, J., 2022. *Assessing Factors Associated with Wealth and Health of Ontario Workers After Permanent Work Injury* (Doctoral dissertation, Trent University (Canada)).
- Cheng, C.Y., Chien, M.S. and Lee, C.C., 2021. ICT diffusion, financial development, and economic growth: An international cross-country analysis. *Economic modelling*, 94, pp.662-671.

- Chien, F., Ngo, Q.T., Hsu, C.C., Chau, K.Y. and Iram, R., 2021. Assessing the mechanism of barriers towards green finance and public spending in small and medium enterprises from developed countries. *Environmental Science and Pollution Research*, 28(43), pp.60495-60510.
- Cho, S.J., Chung, C.Y. and Young, J., 2019. Study on the Relationship between CSR and Financial Performance. *Sustainability*, 11(2), p.343.
- Choudhary, U.I., 2020. The Impact of Non-Performing Loans (NPLs) on Bank Lending Behaviour: Evidence from the UAE Banking Sector.
- Cicchello, A.F., Kazemikhasragh, A., Monferrá, S. and Girón, A., 2021. Financial inclusion and development in the least developed countries in Asia and Africa. *Journal of Innovation and Entrepreneurship*, 10(1), pp.1-13.
- Clark, P.W., Williams, L.T., Kirkegaard, A., Brickley, B. and Ball, L., 2022. Perceptions of private practice dietitians regarding the collection and use of outcomes data in primary healthcare practices: A qualitative study. *Journal of Human Nutrition and Dietetics*, 35(1), pp.154-164.
- Clark, T.P., 2022. Modernization, Political Economy, and Limits to Blue Growth: A Cross-National, Panel Regression Study (1975–2016). *Rural Sociology*, 87(2), pp.573-604.
- Curry, D.S., 2020. Interpretivism and norms. *Philosophical studies*, 177, pp.905-930.
- Dahiya, S. and Kumar, M., 2020. Linkage between financial inclusion and economic growth: An empirical study of the emerging Indian economy. *Vision*, 24(2), pp.184-193.
- Das, R.C. ed., 2023. *Social Sector Spending, Governance and Economic Development: Perspectives from Across the World*. Taylor & Francis.
- Datta, S.K. and Singh, K., 2019. Variation and determinants of financial inclusion and their association with human development: A cross-country analysis. *IIMB Management Review*, 31(4), pp.336-349.

- David, D. and Williams, S.B., 2022. Financial innovations and Fintech solutions for migrant workers in the MENA region. In *Innovative Finance for Technological Progress* (pp. 257-287). Routledge.
- DeJonckheere, M. and Vaughn, L.M., 2019. Semistructured interviewing in primary care research: a balance of relationship and rigour. *Family medicine and community health*, 7(2).
- Delimatsis, P., 2021. Financial services trade in special economic zones. *Journal of International Economic Law*, 24(2), pp.277-297.
- Demirkan, S., Demirkan, I. and McKee, A., 2020. Blockchain technology in the future of business cyber security and accounting. *Journal of Management Analytics*, 7(2), pp.189-208.
- Dewar, J.R. and Hussain, M. eds., 2021. *The Islamic finance and markets law review*. Law Business Research Limited.
- Dong, K., Dong, X. and Jiang, Q., 2020. How renewable energy consumption lower global CO2 emissions? Evidence from countries with different income levels. *The World Economy*, 43(6), pp.1665-1698.
- Durrani, A., Rosmin, M. and Volz, U., 2020. The role of central banks in scaling up sustainable finance—what do monetary authorities in the Asia-Pacific region think?. *Journal of sustainable finance & investment*, 10(2), pp.92-112.
- ELLILI, N.O.D., 2021. Impact of COVID-19 pandemic on the stock prices across industries: evidence from the UAE. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 8, pp.11-19.
- Elsayed, A.H., Naifar, N. and Nasreen, S., 2023. Financial stability and monetary policy reaction: Evidence from the GCC countries. *The Quarterly Review of Economics and Finance*, 87, pp.396-405.

- El-Sayegh, S., Ahmad, I., Aljanabi, M., Herzallah, R., Metry, S. and El-Ashwal, O., 2020. Construction disputes in the UAE: Causes and resolution methods. *Buildings*, 10(10), p.171.
- Faulks, B., Song, Y., Waiganjo, M., Obrenovic, B. and Godinic, D., 2021. Impact of empowering leadership, innovative work, and organizational learning readiness on sustainable economic performance: an empirical study of companies in Russia during the COVID-19 pandemic. *Sustainability*, 13(22), p.12465.
- Fauzia, L.R. and Trinugroho, I., 2022. The Financial Inclusion-Environmental Quality Nexus: Do Information and Communication Technologies Make a Difference? *International Journal of Business and Society*, 23(3), pp.1588-1599.
- Feijo, C., Lamônica, M.T. and Lima, S.S., 2019. Financial liberalization and structural change: the Brazilian case in the 2000s. *Economia e Sociedade*, 28, pp.177-200.
- Fejza-Ademi, V., Avdullahi, A., Tmava, Q. and Durguti, E., 2022. Analysis of the banking sector competition in Kosovo. *Studia Universitatis Vasile Goldiș Arad, Seria Științe Economice*, 32(2), pp.84-101.
- Feyen, E., Gispert, T.A., Kliatskova, T. and Mare, D.S., 2021. Financial sector policy response to COVID-19 in emerging markets and developing economies. *Journal of Banking & Finance*, 133, p.106184.
- Fleischmann, M. and Ivens, B., 2019. Exploring the role of trust in blockchain adoption: an inductive approach.
- Fregni, F., El-Hagrassy, M.M., Pacheco-Barrios, K., Carvalho, S., Leite, J., Simis, M., Brunelin, J., Nakamura-Palacios, E.M., Marangolo, P., Venkatasubramanian, G. and San-Juan, D., 2021. Evidence-based guidelines and secondary meta-analysis for the use of transcranial direct current stimulation in neurological and psychiatric disorders. *International Journal of Neuropsychopharmacology*, 24(4), pp.256-313.
- Gatti, R., Lederman, D., Alturki, S.A., Fan, R.Y., Islam, A., Rojas, C.J. and Nguyen, H.M., 2021. MENA ECONOMIC UPDATE APRIL 2021: How Institutions Shape the Tradeoff

between Short-Term Needs and Long-Term Costs of Public Debt in Middle East and North Africa. World Bank Publications.

Gerth, F., Ramiah, V., Toufaily, E. and Muschert, G., 2021. Assessing the effectiveness of Covid-19 financial product innovations in supporting financially distressed firms and households in the UAE. *Journal of Financial Services Marketing*, 26, pp.215-225.

Ghak, T.E. and Zarrouk, H., 2022. Opportunities and Challenges Facing SMEs' Access to Financing in the UAE: An Analytical Study. *Contemporary Research in Accounting and Finance: Case Studies from the MENA Region*, pp.311-328.

Ghandour, A., Al-Srehan, H. and Almutairi, A., 2023. Analysis of Demand and Supply for Mobile Payments in the UAE during COVID-19. *Journal of Risk and Financial Management*, 16(2), p.59.

Girón, A., Kazemikhasragh, A., Cicchiello, A.F. and Panetti, E., 2021. Financial inclusion measurement in the least developed countries in Asia and Africa. *Journal of the Knowledge Economy*, pp.1-14.

Griffith-Jones, S., Attridge, S. and Gouett, M., 2020. Securing climate finance through national development banks. ODI Report.

Gulzar, S., 2022. Economic Structure of Muslim Countries. *Al-Azḩvā*, 37(58), pp.41-50.

Guven, M., 2019. Extending pension coverage to the informal sector in Africa.

Gyamfi, B.A., Bein, M.A., Adedoyin, F.F. and Bekun, F.V., 2021. To what extent are pollutant emission intensified by international tourist arrivals? Starling evidence from G7 Countries. *Environment, Development and Sustainability*, pp.1-22.

Haddad, A. and Souissi, M.N., 2022. The impact of Shariah Advisory Board characteristics on the financial performance of Islamic banks. *Cogent Economics & Finance*, 10(1), p.2062911.

- Haddad, M.I., Williams, I.A., Hammoud, M.S. and Dwyer, R.J., 2020. Strategies for implementing innovation in small and medium-sized enterprises. *World journal of entrepreneurship, management and sustainable development*, 16(1), pp.12-29.
- Haque, M.A., Raza Shah, S.M. and Arshad, M.U., 2022. Sustainable Economic Growth and FDI Inflow: A Comparative Panel Econometric Analysis of Low-Income and Middle-Income Nations. *Sustainability*, 14(21), p.14321.
- Haraldsen, G., 2023. What computerized business questionnaires and questionnaire management tools can offer. *Advances in Business Statistics, Methods and Data Collection*, pp.335-355.
- Hasan, M., Le, T. and Hoque, A., 2021. How does financial literacy impact on inclusive finance? *Financial innovation*, 7(1), pp.1-23.
- Heap, V. and Waters, J., 2019. Data collection methods. In *Mixed Methods in Criminology* (pp. 141-176). Routledge.
- Heitzman, N., Seidel, T., Opitz, A., Hetmanek, A., Wecker, C., Fischer, M., Ufer, S., Schmidmaier, R., Neuhaus, B., Siebeck, M. and Stürmer, K., 2019. Facilitating diagnostic competences in simulations: A conceptual framework and a research agenda for medical and teacher education. *Frontline Learning Research*, 7(4), pp.1-24.
- Heremans, D. and Berlage, L., *THE GLOBAL VILLAGE*.
- Hoang, Y.H., Ngo, V.M. and Vu, N.B., 2023. Central bank digital currency: A systematic literature review using text mining approach. *Research in International Business and Finance*, p.101889.
- Hürlimann, C. and Hürlimann, C., 2019. Research Philosophy and Ethics. *Valuation of Renewable Energy Investments: Practices among German and Swiss Investment Professionals*, pp.111-126.

- Husband, G., 2020. Ethical data collection and recognizing the impact of semi-structured interviews on research respondents. *Education Sciences*, 10(8), p.206.
- Ibrahim, C., 2019. Government spending and non-oil economic growth in the UAE. *Economics and Business*, 33(1), pp.82-93.
- Islam, N., 2022. A study on the impact of target deposit mobilization on the employees of the banking industry.
- Jahan, M.S., De, J., Jamaludin, M.F., Sodsriwiboon, P. and Sullivan, C., 2019. The financial inclusion landscape in the Asia-Pacific region: A dozen key findings. *International Monetary Fund*.
- Jan, A.A., Lai, F.W. and Tahir, M., 2021. Developing an Islamic Corporate Governance framework to examine sustainability performance in Islamic Banks and Financial Institutions. *Journal of Cleaner Production*, 315, p.128099.
- Javaid, M., Haleem, A., Singh, R.P., Khan, S. and Suman, R., 2021. Blockchain technology applications for Industry 4.0: A literature-based review. *Blockchain: Research and Applications*, 2(4), p.100027.
- Jayasuriya, N., 2023. Paradigm: Positivism, Interpretivism, Pragmatists, and Critical Thought. In *Social Research Methodology and Publishing Results: A Guide to Non-Native English Speakers* (pp. 11-21). IGI Global.
- Junjie, M. and Yingxin, M., 2022. The Discussions of Positivism and Interpretivism. *Online Submission*, 4(1), pp.10-14.
- Kalaitzi, A.S. and Chamberlain, T.W., 2020. Merchandise exports and economic growth: multivariate time series analysis for the United Arab Emirates. *Journal of Applied Economics*, 23(1), pp.163-182.
- KANAKRIYAH, R., 2020. Dividend policy and companies' financial performance. *The Journal of Asian Finance, Economics and Business*, 7(10), pp.531-541.

Karanfil, F. and Omgba, L.D., 2023. The energy transition and export diversification in oil-dependent countries: The role of structural factors. *Ecological Economics*, 204, p.107681.

Khairunnessa, F., Vazquez-Brust, D.A. and Yakovleva, N., 2021. A review of the recent developments of green banking in Bangladesh. *Sustainability*, 13(4), p.1904.

Khan, M.A. and Malaika, M., 2021. Central Bank Risk Management, Fintech, and Cybersecurity. International Monetary Fund.

Kinnunen, J. and Georgescu, I., 2020, May. Entrepreneurial activity-a matter of microeconomic conditions or macroeconomic freedoms. In *Proceedings of 5th Business and Entrepreneurial Economics Conference (BEE-2020)*. Rijeka, Croatia (pp. 88-97).

Koch, N., 2022. Greening oil money: The geopolitics of energy finance going green. *Energy research & social science*, 93, p.102833.

Kumar, V. and Kishore, P., 2019. Macroeconomic and bank specific determinants of non-performing loans in UAE conventional bank. *Journal of Banking and Finance Management*, 2(1), pp.1-12.

Kumari, A., Ranjan, P., Vikram, N.K., Kaur, D., Sahu, A., Dwivedi, S.N., Baitha, U. and Goel, A., 2020. A short questionnaire to assess changes in lifestyle-related behaviour during COVID 19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 14(6), pp.1697-1701.

L. Haven, T. and Van Grootel, D.L., 2019. Preregistering qualitative research. *Accountability in research*, 26(3), pp.229-244.

Latif, S.H., 2019. Halal Conception and Other Factors Affecting Income Distribution in Islam. *International Journal of Islamic Economics and Finance Studies*, 5(3), pp.1-15.

Leavy, P., 2022. Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches. Guilford Publications.



Lemma, V., 2020. Fintech regulation: Exploring new challenges of the capital markets union. Springer Nature.

Lessambo, F.I., 2023. China Banking Insurance Regulatory Commission. In Fintech Regulation and Supervision Challenges within the Banking Industry: A Comparative Study within the G-20 (pp. 133-144). Cham: Springer Nature Switzerland.

Liebe, H. and Hunter, C.J., 2021, October. Ethical considerations of academic surgical research. In Seminars in Pediatric Surgery (Vol. 30, No. 5, p. 151097). WB Saunders.

Lin, Z.Q., 2021. Belt and Road Initiative: The New Silk Road for the New Chinese Era Analysis of the Initiative and its delicate role in a global pandemic.

Louche, C., Busch, T., Crifo, P. and Marcus, A., 2019. Financial markets and the transition to a low-carbon economy: Challenging the dominant logics. Organization & Environment, 32(1), pp.3-17.

Louman, B., Meybeck, A., Mulder, G., Brady, M., Fremy, L., Savenije, H., Gitz, V. and Trines, E., 2020. Innovative finance for sustainable landscapes (Vol. 7). CIFOR.

Lu, X., Guo, J. and Zhou, H., 2021. Digital financial inclusion development, investment diversification, and household extreme portfolio risk. Accounting & Finance, 61(5), pp.6225-6261.

Lusardi, A., 2019. Financial literacy and the need for financial education: evidence and implications. Swiss Journal of Economics and Statistics, 155(1), pp.1-8.

Lv, C., Shao, C. and Lee, C.C., 2021. Green technology innovation and financial development: do environmental regulation and innovation output matter? Energy Economics, 98, p.105237.

Maarouf, H., 2019. Pragmatism as a supportive paradigm for the mixed research approach: Conceptualizing the ontological, epistemological, and axiological stances of pragmatism. International Business Research, 12(9), pp.1-12.

- Maghyereh, A. and Abdoh, H., 2021. The effect of structural oil shocks on bank systemic risk in the GCC countries. *Energy Economics*, 103, p.105568.
- Mahato, J.K., 2022. Reserve Bank of India and Its Functions. *Supremo Amicus*, 29, p.95.
- Mangwendeza, K.K., 2020. An investigation of the relationship between balance of payments and economic growth in Namibia (Doctoral dissertation, University of Namibia).
- Mehrban, S., Nadeem, M.W., Hussain, M., Ahmed, M.M., Hakeem, O., Saqib, S., Kiah, M.M., Abbas, F., Hassan, M. and Khan, M.A., 2020. Towards secure FinTech: A survey, taxonomy, and open research challenges. *IEEE Access*, 8, pp.23391-23406.
- Mena, C., Karatzas, A. and Hansen, C., 2022. International trade resilience and the Covid-19 pandemic. *Journal of Business Research*, 138, pp.77-91.
- Mirick, R.G. and Wladkowski, S.P., 2019. Skype in qualitative interviews: Participant and researcher perspectives. *The Qualitative Report*, 24(12), pp.3061-3072.
- Moghrabi, I.A., Bhat, S.A., Szczuko, P., AlKhaled, R.A. and Dar, M.A., 2023. Digital Transformation and Its Influence on Sustainable Manufacturing and Business Practices. *Sustainability*, 15(4), p.3010.
- Montiel, I., Cuervo-Cazurra, A., Park, J., Antolín-López, R. and Husted, B.W., 2021. Implementing the United Nations' sustainable development goals in international business. *Journal of International Business Studies*, 52(5), pp.999-1030.
- Mootz, J.J., Taylor, L., Wainberg, M.L. and Khoshnood, K., 2019. Ethical considerations for disseminating research findings on gender-based violence, armed conflict, and mental health: A case study from rural Uganda. *Health and human rights*, 21(1), p.81.
- Mosteanu, N.R., 2019. Intelligent Foreign Direct Investments to boost economic development—UAE case study. *The Business & Management Review*, 10(2), pp.1-9.

- Mwangi, M., Kaijage, E. and Ganesh, P., 2021. Moderating Effect of Firm Characteristics on the Relationship between Electric Power Outage Dynamics and Financial Performance of Manufacturing Firms in Kenya.
- Namkung, J.M., Peng, P. and Lin, X., 2019. The relation between mathematics anxiety and mathematics performance among school-aged students: A meta-analysis. *Review of Educational Research*, 89(3), pp.459-496.
- Navalta, J.W., Stone, W.J. and Lyons, S., 2019. Ethical issues relating to scientific discovery in exercise science. *International journal of exercise science*, 12(1), p.1.
- Nehme, R., Michael, A. and Haslam, J., 2022. The impact of time budget and time deadline pressures on audit behaviour: UK evidence. *Meditari Accountancy Research*, 30(2), pp.245-266.
- Niankara, I. and Muqattash, R., 2020. The impact of financial inclusion on consumers saving and borrowing behaviours: a retrospective cross-sectional evidence from the UAE and the USA. *International Journal of Economics and Business Research*, 20(2), pp.217-242.
- Nickerson, C., 2022. Interpretivism paradigm & research philosophy. *Simply Sociology*, 5.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M. and Agha, R., 2020. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International journal of surgery*, 78, pp.185-193.
- Nurmohamed, R., 2020. Shari'a Law and Its Impact on the Development of Muslim and Non-Muslim Business Relations in the United Arab Emirates. *Law and Development Review*, 13(2), pp.443-472.
- Offenhuber, D., 2019. The platform and the bricoleur—Improvisation and smart city initiatives in Indonesia. *Environment and Planning B: Urban Analytics and City Science*, 46(8), pp.1565-1580.

Okechukwu, I.K. and Ndidi, N.C., 2020. Sovereign Wealth Fund (SWF): A Tool for Diversifying Nigeria's Emerging Economy. *The International Journal of Humanities & Social Studies*, 8(7).

Oluseyi, T.A., 2022. *Risk Management Strategy and Financial Performance of Listed Banks at Nigeria Stock Exchange* (Doctoral dissertation, JKUAT-COHRED).

Orlando, G. and Bace, E., 2021. Challenging times for insurance, banking and financial supervision in Saudi Arabia (KSA). *Administrative Sciences*, 11(3), p.62.

Ozili, P.K., 2020. Financial inclusion and Fintech during COVID-19 crisis: Policy solutions. *The Company Lawyer Journal*, 8.

Ozili, P.K., 2021, October. Financial inclusion research around the world: A review. In *Forum for social economics* (Vol. 50, No. 4, pp. 457-479). Routledge.

Park, H. and Kim, J.D., 2020. Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5(1), pp.1-25.

Pearse, N., 2019. An illustration of a deductive pattern matching procedure in qualitative leadership research. *Electronic Journal of Business Research Methods*, 17(3), pp. pp143-154.

Pilbeam, C., Anthierens, S., Vanderslott, S., Tonkin-Crine, S. and Wanat, M., 2022. Methodological and ethical considerations when conducting qualitative interview research with healthcare professionals: reflections and recommendations as a result of a pandemic. *International Journal of Qualitative Methods*, 21, p.16094069221077763.

Press, R. (2023) Federal Tax Authority releases UAE pass feature on EmaraTax platform, ZAWYA. Zawya. Available at: <https://www.zawya.com/en/press-release/government-news/federal-tax-authority-releases-uae-pass-feature-on-emaratax-platform-f41serzk> (Accessed: April 10, 2023).

- Ramiah, V., Pereira, V., Dasgupta, B., Frino, A. and Pham, H., 2023. Banking and Financial Institutions in the Gulf Cooperation Council Region. *Doing Business in the Middle East: A Research-Based Practitioners' Guide*.
- Rashid, M.H., 2020. Prospects of digital financial services in Bangladesh in the context of fourth industrial revolution. *Asian Journal of Social Science*, 2(5), pp.88-95.
- Rezagholizadeh, M., Aghaei, M. and Dehghan, O., 2020. Foreign direct investment, stock market development, and renewable energy consumption: Case study of Iran. *Journal of Renewable Energy and Environment*, 7(2), pp.8-18.
- Riabi, I., Ayed, H.K.B. and Saidane, L.A., 2019, June. A survey on Blockchain based access control for Internet of Things. In *2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC)* (pp. 502-507). IEEE.
- Rongwei, X. and Xiaoying, Z., 2020. Is financial development hampering or improving the resource curse? New evidence from China. *Resources Policy*, 67, p.101676.
- Roszkowska, P., 2021. Fintech in financial reporting and audit for fraud prevention and safeguarding equity investments. *Journal of Accounting & Organizational Change*, 17(2), pp.164-196.
- Roth, D. and Latoschik, M.E., 2019. Construction of a validated virtual embodiment questionnaire. *arXiv preprint arXiv:1911.10176*.
- Roy, N.C. and Prabhakaran, S., 2022. Sustainable response system building against insider-led cyber frauds in banking sector: A machine learning approach. *Journal of Financial Crime*.
- Ruggiano, N. and Perry, T.E., 2019. Conducting secondary analysis of qualitative data: Should we, can we, and how? *Qualitative Social Work*, 18(1), pp.81-97.
- Sachs, J.D., Woo, W.T., Yoshino, N. and Taghizadeh-Hesary, F., 2019. Why is green finance important?

Sadiq, M., Hsu, C.C., Zhang, Y. and Chien, F., 2021. COVID-19 fear and volatility index movements: empirical insights from ASEAN stock markets. *Environmental Science and Pollution Research*, 28, pp.67167-67184.

Sahu, M., 2021. Public policy measures for COVID-19 crisis management: lessons from the UAE. *Fulbright Review of Economics and Policy*, 1(2), pp.246-265.

Salahudin, S., Nurmandi, A. and Loilatu, M.J., 2020. How to Design Qualitative Research with NVivo 12 Plus for Local Government Corruption Issue in Indonesia? *JURNAL STUDI PEMERINTAHAN (JOURNAL OF GOVERNMENT & POLITICS)*, 11(3).

Saleem, H., Shabbir, M.S. and Bilal khan, M., 2020. The short-run and long-run dynamics among FDI, trade openness and economic growth: using a bootstrap ARDL test for co-integration in selected South Asian countries. *South Asian Journal of Business Studies*, 9(2), pp.279-295.

Sarker, I.H., 2021. Deep learning: a comprehensive overview on techniques, taxonomy, applications and research directions. *SN Computer Science*, 2(6), p.420.

Schär, F., 2021. Decentralized finance: On blockchain-and smart contract-based financial markets. *FRB of St. Louis Review*.

Secinaro, S., Calandra, D. and Biancone, P., 2021. Blockchain, trust, and trust accounting: Can blockchain technology substitute trust created by intermediaries in trust accounting? A theoretical examination. *International Journal of Management Practice*, 14(2), pp.129-145.

Sethaput, V. and Innet, S., 2023. Blockchain application for central bank digital currencies (CBDC). *Cluster Computing*, pp.1-15.

Shabir, S. and Ali, J., 2022. Determinants of financial inclusion across gender in Saudi Arabia: evidence from the World Bank's Global Financial Inclusion survey. *International Journal of Social Economics*.

- Shaver, J.M., 2021. Evolution of quantitative research methods in strategic management. *Strategic management: State of the field and its future*, pp.83-97.
- Shofawati, A., 2019. The role of digital finance to strengthen financial inclusion and the growth of SME in Indonesia. *KnE Social Sciences*, pp.389-407.
- Sibeoni, J., Verneuil, L., Manolios, E. and Révah-Levy, A., 2020. A specific method for qualitative medical research: the IPSE (Inductive Process to analyze the Structure of lived Experience) approach. *BMC Medical Research Methodology*, 20(1), pp.1-21.
- Sileyew, K.J., 2019. *Research design and methodology* (pp. 1-12). Rijeka: IntechOpen.
- Sinha, N. and Shastri, S., 2021. Does financial development matter for domestic investment? Empirical evidence from India. *South Asian Journal of Business Studies*, (ahead-of-print).
- Song, L. and Zhou, Y., 2020. The COVID-19 pandemic and its impact on the global economy: what does it take to turn crisis into opportunity? *China & World Economy*, 28(4), pp.1-25.
- Srouji, J., 2020. Digital payments, the cashless economy, and financial inclusion in the United Arab Emirates: Why is everyone still transacting in cash? *Journal of Risk and Financial Management*, 13(11), p.260.
- Stalmachova, K., Chinoracky, R. and Strenitzerova, M., 2022. Changes in business models caused by digital transformation and the COVID-19 pandemic and possibilities of their measurement—case study. *Sustainability*, 14(1), p.127.
- Tabassum, M., 2022. Understanding End-Users' Privacy Perceptions, Concerns, Behaviors, and Needs in the Smart Home (Doctoral dissertation, The University of North Carolina at Charlotte).
- Tamminen, K.A. and Poucher, Z.A., 2020. Research philosophies. In *The Routledge international encyclopedia of sport and exercise psychology* (pp. 535-549). Routledge.

- Tang, C., Irfan, M., Razzaq, A. and Dagar, V., 2022. Natural resources and financial development: Role of business regulations in testing the resource-curse hypothesis in ASEAN countries. *Resources Policy*, 76, p.102612.
- Tasci, A.D., 2020. Exploring the analytics for linking consumer-based brand equity (CBBE) and financial-based brand equity (FBBE) of destination or place brands. *Place Branding and Public Diplomacy*, 16, pp.36-59.
- Tomaszewski, L.E., Zarestky, J. and Gonzalez, E., 2020. Planning qualitative research: Design and decision making for new researchers. *International Journal of Qualitative Methods*, 19, p.1609406920967174.
- Tooze, A., 2020. Is the coronavirus crash worse than the 2008 financial crisis. *Foreign Policy*, 18, p.2020.
- Toufaily, E., Zalan, T. and Dhaou, S.B., 2021. A framework of blockchain technology adoption: An investigation of challenges and expected value. *Information & Management*, 58(3), p.103444.
- Tram, T.X.H., Lai, T.D. and Nguyen, T.T.H., 2021. Constructing a composite financial inclusion index for developing economies. *The Quarterly Review of economics and finance*.
- Uddin, M.K., Pan, X., Saima, U. and Zhang, C., 2022. Influence of financial development on energy intensity subject to technological innovation: Evidence from panel threshold regression. *Energy*, 239, p.122337.
- Ustun, A.B. and Tracey, M.W., 2020. An effective way of designing blended learning: A three phase design-based research approach. *Education and Information Technologies*, 25(3), pp.1529-1552.
- Van der Walt, J.L., 2020. Interpretivism-constructivism as a research method in the humanities and social sciences-more to it than meets the eye. *International Journal of Philosophy and Theology*, 8(1), pp.59-68.



- Velte, P. and Stawinoga, M., 2020. Do chief sustainability officers and CSR committees influence CSR-related outcomes? A structured literature review based on empirical-quantitative research findings. *Journal of Management Control*, 31(4), pp.333-377.
- Vespestad, M.K. and Clancy, A., 2021. Exploring the use of content analysis methodology in consumer research. *Journal of Retailing and Consumer Services*, 59, p.102427.
- Vo, D.H., Nguyen, N.T. and Van, L.T.H., 2021. Financial inclusion and stability in the Asian region using bank-level data. *Borsa Istanbul Review*, 21(1), pp.36-43.
- Walter, D. and Ophir, Y., 2019. News frame analysis: An inductive mixed-method computational approach. *Communication Methods and Measures*, 13(4), pp.248-266.
- Wang, M., Wang, B. and Abareshi, A., 2020. Blockchain technology and its role in enhancing supply chain integration capability and reducing carbon emission: A conceptual framework. *Sustainability*, 12(24), p.10550.
- Wei, X. and Han, L., 2021. The impact of COVID-19 pandemic on transmission of monetary policy to financial markets. *International Review of Financial Analysis*, 74, p.101705.
- Witoelar, F., Wicaksono, T.Y. and Mangunsong, C., 2021. Binding constraints on digital financial inclusion in Indonesia: An analysis using the decision tree approach.
- Wu, Q., Yang, C. and Yan, J., 2021. Towards open-world feature extrapolation: An inductive graph learning approach. *Advances in Neural Information Processing Systems*, 34, pp.19435-19447.
- Wu, Y., Chen, Y., Wang, L., Ye, Y., Liu, Z., Guo, Y. and Fu, Y., 2019. Large scale incremental learning. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 374-382).
- Yang, Y., Shi, S. and Wu, J., 2022. Digital Financial Inclusion to Corporation Value: The Mediating Effect of Ambidextrous Innovation. *Sustainability*, 14(24), p.16621.

- Yeung, H. and Al-Barashdi, S., 2022. Institutional Development of the Dubai International Financial Centre and the Qatar Financial Centre: The Insolvency Law Framework. In *Bank Insolvency Law in Developing Economies* (pp. 127-148). Routledge.
- Young, M., Varpio, L., Uijtdehaage, S. and Paradis, E., 2020. The spectrum of inductive and deductive research approaches using quantitative and qualitative data. *Academic Medicine*, 95(7), p.1122.
- Yudanto, Y. and Yuspin, W., 2022, September. Bank Financial Institutions in Indonesia and Their Supervision. In *Proceeding International Conference Restructuring and Transforming Law* (pp. 302-313).
- Zarrouk, H., El Ghak, T. and Bakhouch, A., 2021. Exploring economic and technological determinants of FinTech startups' success and growth in the United Arab Emirates. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), p.50.
- Zarrouk, H., El Ghak, T. and Bakhouch, A., 2021. Exploring economic and technological determinants of FinTech startups' success and growth in the United Arab Emirates. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), p.50.
- Zhang, D., Mohsin, M., Rasheed, A.K., Chang, Y. and Taghizadeh-Hesary, F., 2021. Public spending and green economic growth in BRI region: mediating role of green finance. *Energy Policy*, 153, p.112256.
- Zhao, Z., Fan, F., Jie, H., Yang, Z., Dong, M., Chua, E.K. and See, K.Y., 2022, September. In-circuit impedance measurement setups of inductive coupling approach: A review. In *2022 Asia-Pacific International Symposium on Electromagnetic Compatibility (AP EMC)* (pp. 228-230). IEEE.

## Appendix

### Questionnaire

For the current study, the 5-point Likert scale questionnaire method was used to collect primary data from respondents in the study. The participants included in the study are managers and employees working in financial institutions of UAE, i.e. banks, financial investment companies etc. The total number of participants in the study is 120.

1. Does the UAE government take certain measures to stabilize financial development?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

2. Rather financial development influence on economic growth in UAE?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

3. Rather Covid-19 outbreak impact on maintaining financial inclusion in UAE?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

4. Do monitoring and controlling a significant function in financial institutions to avoid fraudulent activities?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

5. Do financial institutions in UAE contribute towards GDP growth rate?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

6. Does Dubai international financial centre (DIFC) performs a crucial role in providing financial services to business clients?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

7. Rather financial services regulatory authority (FSRA) in Abu Dhabi perform a supervisory role in managing financial activities?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

8. Is the financial infrastructure transformation programme (FIT) introduced to bring digital automation within financial services?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

9. Do central banks in UAE need to revise banking policies after regular intervals?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

10. Do Smaller financial institutions in UAE face various challenges regarding customer handling during the Covid-19 outbreak?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree