

**T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES**



**THE IMPACT OF INFLATION ON THE QUALITY OF FINANCIAL DATA
IN THE PRIVATE SECTOR IN JORDAN DURING THE FINANCIAL
CRISIS**

MASTER'S THESIS

MO'ATH ALİ MOHAMMAD ABU SİL

**Department of Business
Business Administration Program**

AUGUST, 2022

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Thesis Advisor: Prof Dr. Esin Nesrin CAN

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APPROVAL PAGE



DECLARATION

I hereby declare with respect that the study “The Impact Of Inflation On The Quality Of Financial Data In The Private Sector In Jordan During The Financial Crisis”, which I submitted as a Master thesis, is written without any assistance in violation of scientific ethics and traditions in all the processes from the Project phase to the conclusion of the thesis and that the works I have benefited are from those shown in the Bibliography. (.../.../20...)

MO'ATH ALI MOHAMMAD ABU SIL

FOREWORD

This project was made with the support and assistance of many people at all levels. Many thanks to my administrator Prof Dr. Esin Nesrin CAN who has offered guidance and support, and significantly added to the quality of my work. I also offer my gratitude to Istanbul Aydin University management, Institute of Graduate Studies, who supported me through this project. Finally, thanks to my family and numerous friends who endured this long process with me, always offering support, care, and love through thick and thin.

August 2022

MO'ATH ALI MOHAMMAD ABU SİL

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ABSTRACT

This report is regarding assessing the prevalence of misinformation and creative accounting in the financial statements of Jordan based companies. The approach is to determine to what extent the inflation and misinformation affect the financial results of organizations. The companies for this purpose are selected from those listed on Amman Stock Exchange and dealing in different sectors. There has been an attempt on assessing the compliance of corporate governance codes in these companies and also where the country is lacking. The economic variables such as the GDP rates, inflation and exchange rates in the country are also discussed.

It has been found in the report that those companies which provided higher dividends were the ones that had least disclosures. The companies that have transparency in their operation comparatively made more disclosure in the financial statements. It has been discovered that inflation has been a factor that prompted companies to interfere with the financial results. The creative accounting has been followed in companies that has suffered financial distress and now wanted to make the financial results better through finding loopholes in the current laws. It has also been practiced when the company is expected to be acquired or merged in the coming time.

The report concludes that one of the effective strategies to tackle the adverse impact of inflation on financial reporting practices is formation of policies by the central bank of Jordan during the times of crisis. It has in 2007 interfered in the market however the recession still impacted the Amman stock exchange companies. During that time the country regulated the banks to increase scrutiny on the loans being provided to the companies. The financial crisis occurred from the developed

countries and mainly due to the unguaranteed loans provided by US based banks to private companies which later went bankrupt.

The country should focus on locating more oil reserves. It will help it to set up a new industry and can subsequently export to abroad and increase its earnings. The GDP will witness a push and the unemployment rate will come down. In addition to that the country should increase the exports of agricultural based products, fertilizers and other items that form part of its exports bulk. Currently the country is in trade deficit which must be minimized through exporting more.

The financial statements can provide a fairer view in case the companies have sustainable growth and the need to overstate the figures does not arise. For this purpose the compliance with the corporate codes must be implemented on a national level. There must be a framework within which the businesses should operate. The country's businesses are the proponent for its GDP growth and in case the government policies help the local businesses to prosper the instances of creative accounting will also decrease.

The country has 1 million barrel of oil reserves while the actual production is less than 1000 barrel a day. There is a need to locate more oil resources and exploit its natural resources for the purpose of facilitating trade in the international markets. It can be said that the instances of creative accounting and interference in the financial statements are not new to the countries. The main factors behind these are increase in inflation and low GDP growth. These variables must be addressed to promote fair accounting practices.

Keywords: inflation, financial crisis, Financial Management, Accounting

FINANSAL KRİZ SIRASINDA ÜRDÜN'DE ÖZEL SEKTÖRDEKİ ENFLASYONUN FINANSAL VERİLERİN KALİTESİNE ETKİSİ

ÖZET

Bu rapor, Ürdün merkezli şirketlerin mali tablolarında yanlış bilgi ve yaratıcı muhasebenin yaygınlığını değerlendirmekle ilgilidir. Yaklaşım, enflasyonun ve yanlış bilgilerin kuruluşların finansal sonuçlarını ne ölçüde etkilediğini belirlemektir. Bu amaca yönelik şirketler, Amman Menkul Kıymetler Borsası'nda işlem gören ve farklı sektörlerde faaliyet gösteren şirketler arasından seçilmektedir. Bu şirketlerde ve ayrıca ülkenin eksik olduğu yerlerde kurumsal yönetim kodlarının uygunluğunun değerlendirilmesi için bir girişimde bulunulmuştur. Ülkedeki GSYİH oranları, enflasyon ve döviz kurları gibi ekonomik değişkenler de tartışılmaktadır.

Raporda, daha yüksek temettü sağlayan şirketlerin en az açıklama yapan şirketler olduğu tespit edildi. Faaliyetlerinde şeffaflığa sahip olan şirketler, finansal tablolarda karşılaştırmalı olarak daha fazla açıklama yapmıştır. Enflasyonun şirketleri finansal sonuçlara müdahale etmeye sevk eden bir faktör olduğu ortaya çıktı. Yaratıcı muhasebe, finansal sıkıntı yaşayan ve mevcut yasalardaki boşlukları bularak finansal sonuçları daha iyi hale getirmek isteyen şirketlerde takip edildi. Şirketin önümüzdeki dönemde satın alınması veya birleşmesi beklendiğinde de uygulanmıştır.

Raporda, enflasyonun finansal raporlama uygulamaları üzerindeki olumsuz etkileriyle mücadelede etkili stratejilerden birinin kriz zamanlarında Ürdün merkez bankasının politika oluşturması olduğu sonucuna varılıyor. 2007'de piyasaya müdahale etti, ancak durgunluk Amman borsa şirketlerini hala etkiledi. Bu süre zarfında ülke, şirketlere verilen krediler üzerindeki incelemeyi artırmak için bankaları düzenlemiştir. Finansal kriz, gelişmiş ülkelerden ve esas olarak ABD merkezli bankaların daha sonra iflas eden özel şirketlere sağladığı teminatsız kredilerden kaynaklanmıştır.

Ülke daha fazla petrol rezervi bulmaya odaklanmalıdır. Yeni bir sanayi kurmasına yardımcı olacak ve akabinde yurt dışına ihracat yapıp kazancını artırabilecektir. GSYİH bir baskıya tanık olacak ve işsizlik oranı düşecek. Buna ek olarak, ülke, ihracatının büyük bir bölümünü oluşturan tarıma dayalı ürünler, gübreler ve diğer kalemlerin ihracatını artırmalıdır. Şu anda ülke, daha fazla ihracat yaparak en aza indirilmesi gereken ticaret açığında.

Şirketlerin sürdürülebilir bir büyüme göstermesi ve rakamları abartma ihtiyacının doğmaması durumunda finansal tablolar daha adil bir görünüm sağlayabilir. Bu amaçla kurumsal kodlara uyum ulusal düzeyde uygulanmalıdır. İşletmelerin içinde faaliyet göstermesi gereken bir çerçeve olmalıdır. Ülkenin işletmeleri, GSYİH büyümesinin savunucusudur ve hükümet politikalarının yerel işletmelerin gelişmesine yardımcı olması durumunda, yaratıcı muhasebe örnekleri de azalacaktır. Ülkede 1 milyon varil petrol rezervi bulunurken, fiili üretim günlük 1000 varilin altındadır. Uluslararası pazarlarda ticaretin kolaylaştırılması amacıyla daha fazla petrol kaynağının bulunmasına ve doğal kaynaklarının kullanılmasına ihtiyaç vardır. Yaratıcı muhasebe ve finansal tablolara müdahale vakalarının ülkeler için yeni olmadığı söylenebilir. Bunların arkasındaki ana faktörler, enflasyondaki artış ve düşük GSYİH büyümesidir. Bu değişkenler, adil muhasebe uygulamalarını teşvik etmek için ele alınmalıdır.

Anahtar Kelimeler: enflasyon, finansal kriz, Finansal Yönetim, Muhasebe

TABLE OF CONTENT

DECLARATION	iii
FOREWORD	iv
ABSTRACT	v
ÖZET	vii
TABLE OF CONTENT	ix
LIST OF TABLES	xi
I. INTRODUCTION	1
A. Goals of study	2
B. Importance of Study	3
C. Hypothesis study	4
D. Model study.....	5
E. Terminology	5
F. Limitations	6
II. THE THEORETICAL FRAMEWORK AND PREVIOUS STUDIES	7
A. Theoretical framework	7
1. Concept of inflation.....	7
a. Cost-push inflation	7
b. Built-in inflation.....	7
c. Demand-pull inflation	8
B. Previous Studies	9
1. The Jordan Crisis	9
III. METHODOLOGY OF THE STUDY	14
A. Introduction	14
B. Methodology study	15
C. Community study	15
D. Validity of the report.....	16
E. Conclusion	17
IV. FINANCIAL ANALYSIS AND HYPOTHESIS TESTING	18

A. Introduction	18
B. Study sample	19
C. Test hypothesis	25
D. Use of Corporate Governance in dealing with misrepresentation and misinformation in financial statements	26
V. FINDINGS AND RECOMMENDATIONS.....	30
A. Introduction	30
B. Result	31
C. Recommendations	35
VI. REFERENCES.....	38
APPENDIX	42
RESUME.....	50

LIST OF TABLES

Table 1 GDP and unemployment rates in Jordan.....	23
Table 2 GDP and unemployment rates in Jordan %	23



I. INTRODUCTION

The inflation can have huge impacts on the cost of living of the people. It results in an increment in the general price levels. It also reduces the purchasing power of the people and makes the loans expensive. The quality of financial data can also be impacted due to this effect of the inflation. The report establishes how the financial statements can get affected by the inflation levels. In the years when high inflation is recorded, it usually results in high costs for the companies. As the cost of sales is high due to higher level of inflation in the economy, the gross profits amounts are low for the period. The operations cost also stay high as the companies need to pay more for the expenses that renders the profits low for the company.

The report presents the scenario of financial crisis on the economy of Jordan and shows how various of its sectors were impacted as the result of that. During this time a high recession in the market was recorded and virtually all the stock on the Amman Stock exchange launched a downward price trend. This had severe impact for the companies and many of these opted for creative accounting in order to hide their losses and fall in revenues. The economic and social implications of this market crash have been discussed in the report.

The report thus provides a brief outlook on a wide range of economic implications that are caused by inflation in the economy of Jordan. The inflation has been declining in the country for the last few years and the same can pose the issue of economic recession. The same has been discussed in detail in the report. The effective measures that can be taken during this time by the central bank are to adjust its public expenditures, interest rates and tax rates in the economy. Due to the economic slowdown after the covid pandemic many countries such as the USA and Australia has taken initiatives to cut down the tax rates so that the small businesses can re-establish in the economy and the output can be increased.

The KPIs and ratios have been used so as to understand the implications of inflation and the misinformation on the financial statements of the Jordan based

companies. With the help of this approach, an attempt has been made to understand their financial condition. There might be miscommunication or an approach to conceal the real facts for the companies that has been analysed through the extensive study of news articles and other publications. The scandals that happened in Jordan based companies are also studied in detail in the report (Airout 2017).

The research problem is identifying why inflation interferes with the financial data. It has been analysed in the context of Jordan companies by observing their financial performance during the time of financial crisis.

One research problem is also analysing the impact of inflation on the performance of the economy as whole. The inflation can cause serious issues to the businesses and the same applies to the stock market performances. Here the companies that are analysed are registered on Amman Stock exchange. It will be studied how the inflation articulates the stock market performance on whole.

In this research one of the tasks is also to understand the implications of good earnings management for the companies. It is an effort by the companies to make their financial statements look more attractive and at the same time not violating the accounting norms and the principles. The question arises here is up to what extent this practice is acceptable. Through this research report the attempt has been made to know that how these practices are applicable to the industries in Jordan and how these have been following the corporate governance code. It will also facilitate the comparison of Jordan based companies with their global counterparts (Gertler and Gilchrist 2018).

Considerably, the Jordanian economy is very service-oriented and heavily dependent on foreign grants which have affected the kingdom depending on the magnitude of these grants. According to Jordan's ministry of finance, the grants increased by 102% (from \$484 million to \$980 million). In the same context, the budget deficit is another huge challenge to the Jordanian government, which forces the government to continue depending on foreign grants and assistances.

A. Goals of study

The report aims to achieve following goals-

- i) Finding out how inflation has affected the businesses in Jordan

during the financial crisis

- ii) The strategies companies used to deal with the financial crisis in Jordan amid rising inflation levels.
- iii) To advise future businesses regarding how to effectively deal from inflation.
- iv) Finding out the scandals in the industries of Jordan and how these have impacted their financial statements.
- v) To know the appropriate strategies to implement when the companies are entrapped in the recession times.

B. Importance of Study

The importance of the study lies in the fact that it helps in assessment of financial data and the impacts it has from the inflation levels. Inflation can be said to be a global issue and the companies must form strategies to deal with inflation. In absence of effective measures the business will succumb to it and the business can report huge expenses.

The study aims at providing a clear picture of the financial crisis in Jordan and the state of economy during that time. It should be noted that the twin effect of misinformation and the inflation can adversely affect the financials of a company. In the private sector it can be a prevalent practise to hide the losses by showing the revenues more. It can have negative consequences as the investors and other stakeholders might get negatively affected from this practise. The revenue is considered to be an effective KPI for businesses as it can attract the stakeholders and delude the people dealing with the company, if found to be incorrect. As an approach to earning management the company might interfere with the financial figures, which may mislead the stakeholders of the business (Gertler and Gilchrist 2018).

The report shall be important as a basic guide for the further research works in this domain. Here the chief goal is analysing the impact of inflation over the financial statements. The report is important as it can lead the investors towards whether or not to deal with the company.

In the modern times, it has been an important duty for every company to

study their external environment. These are constantly affected due to the impact of outside factors such as inflation, exchange rates and the interest rates. This motivates the companies to go beyond the limits of earnings management and take a step towards concealing the real figures. This mismanagement can be caused by voluntary efforts or unknowingly, in case there are other factors such as misinformation; that deter the companies in presenting the truest state of financial position of its business (Prasoon and Reddy 2021).

C. Hypothesis study

The hypothesis study is concentrated on finding out whether the inflation has any impact on the quality of financial statements. The hypothesis for the given studies is as under-

H₀– Inflation has a dominant effect over the quality of financial statements

H₁- Inflation does not impact the quality of financial statements

The rising levels of inflation in the economy of Jordan will have disastrous effect over the stock performance. The high input costs lead to low profits for the companies as their input costs also increase. This results in goods being expensive which are not affordable by the customers. Even when low prices are maintained the profits reduce as the company has to cover the revenues with comparatively higher level of costs. The reduced profits for these companies affect the stock prices and the value of these come down. The demand of the shares reduce during this time and due to low demands and high selling prices the share further weakens (Kim, Batten and Ryu 2020).

The results of this hypothesis testing are provided in the results and analysis section where the justifications have been providing for why a particular hypothesis is accepted and the other hypothesis is rejected. The research is supported by the use of data for 4 Jordan based companies that hail from different sectors.

Therefore the report can be said to be the reflective of best sample as it represents the characteristic of population in a much better way. In case the companies from the same industry were selected then it would not be a right choice since the companies can respond to market conditions in different ways (Olbrys 2021).

A diversified sample of companies here deals with this limitation and it can be said this will maintain the validity and acceptance of this research work. The companies are main businesses in the private sector and the concepts of economics are well-implies on these owing to their large structure and business area. The report will conclude the fact that whether or not the financial crisis and the inflation induced during this time impacted the way in which financial reporting was done in the companies. In case there was no impact, then it would amount to rejection of the null hypothesis and acceptance of the other hypothesis. However, if the case is that there appears to be a significant impact, in that scenario the null hypothesis is accepted and the other is rejected.

D. Model study

The report is characterised by use of various graphical and tabular models. These are prepared throughout the report and it shows the relationship between dependent and the independent variables. The research model here is derived. Existing literature and pre-collected data will be studied to make generalisations. The derived model is used since it is more reliable than the other model such as observational and experimental.

This report also consists of the use of experimental model as well. It considers analysing the data of the companies in Jordan during the financial crisis. The effect of crisis on the private businesses of Jordan is also analysed. The report also considers providing independent statements on the situation of Jordan during the time and the effect of the macro-economic variable of inflation towards the dressing up of financial statements. The model aims at providing an outlook on the businesses during this time and studying if there were cases of overstatement of financial information in the businesses (Prasoona and Reddy 2021).

Prasoona, J. and Reddy, R.G., 2021. Analysis of financial statements. *Biotica Research Today*, 3(5), pp.373-375

E. Terminology

Inflation, window-dressing, misinformation, financial statements, financialcrisis, impact of oil prices, inflation during covid

F. Limitations

The limitations of the study are-

- vi) It is specific to the private companies of Jordan only. In different geographical locations the companies can show different behaviour and can have other ways to deal with the rising inflation rates.
- vii) The case scenario here is of the financial crisis in Jordan. It might not be related to financial crises of other markets
- viii) The time factor has been a reason also that might impact the quality of the report. In case of more time and financial resources, the results could be more detailed (Sorthaix et al 2019).
- ix) The data from secondary sources have been used for the purpose. In case primary data was used, the results could differ. However to prevent data bias, the secondary data is used. Here there is no personal bias as data belongs to the other research works that has large study samples.
- x) There have been fewer research studies on this subject. Therefore due to the lack of existing literature the research topic has been challenging. Further researches in this area could provide more clarifications.
- xi) The sample size has been small for the study. The results of the report could be more genuine and reliable when the sample size is large (Kim, Batten and Ryu 2020)

II. THE THEORETICAL FRAMEWORK AND PREVIOUS STUDIES

A. Theoretical framework

1. Concept of inflation

It can be defined as the rate at which the value of the currency of the nation is falling. It leads to decline in the purchasing power of the currency of a nation. The prices of the goods increase and the customers have to spend more money to buy same quantity of goods. It is opposite to the deflation, which occurs when the purchasing power of the customer increases as the prices decline. The inflation can be of three types- which are cost-push inflation, built-in inflation and demand-pull inflation.

The inflation can be challenging for a country but it is also an indicator of growth. A country with very low inflation will be perceived as growing with a very low rate. The inflation however should not increase in excess as this would amount to high volatility in the market. In case of high inflation the burden is on the customers and their purchasing power is reduced to the lowest extent. Prices in general increase and the cost of living increases drastically (Sortheix et al. 2019)

a. Cost-push inflation

This inflation is caused as the result of increase in prices of the inputs used in the production process. It is caused by increase in prices of the key commodities which also results in increase in prices for intermediate goods. Overall due to high price of inputs, the final product costs more as well. It reduces the purchasing power of the customers and hence, is a source of inflation.

b. Built-in inflation

It results as per general expectation of the public or the adaptive expectations that the inflation will increase in the future period. As the costs of goods and services in the economy increase the workers expect that the same trend will continue for a

long time and in order to maintain their standard of living, more wages are demanded by the employees. Here increase in either of these leads to the increase in other and vice versa. For example, when wages are increased, the employers have to add up more costs in the products that lead to higher prices (Sortheix et al. 2019).

c. Demand-pull inflation

This inflation in this type occurs when the money supply increases in the market. The increased credit stimulates the prices of goods and services. Here the prices increase more than the existing production capacity of the economy. Here the prices increase as the demand for goods increase in the market but the purchasing power of the customers keeps reducing.

The root cause of inflation is a sudden increase in the supply of money in the economy. Since the production and presence of resources are limited, a large stream of money supply vest people with more cash and hence the value of per unit of money starts declining. The money if being lent to the individuals tends to reduce the value of the legal tender. Therefore, whenever the money supply increases, it tends to decrease the purchasing power of the public (Zaefarian et al. 2017).

- **Effects of inflation and misinformation on financial statements**

The inflation has a critical impact over the financial statements with the most prominent being increase in general level of expenditures. It also increases the financial requirements for the company as when the inflation increases the input material becomes expensive and company has to incur more expenses on its daily operations. In the years of high inflation, the financials of the company get negatively affected. The costs increase and the profits come down. However it is also an opportunity to increase the sales as when prices are high and the products are distinguished, the customers have to spend more to acquire its products (Kim, Batten and Ryu 2020).

One issue that the inflation can cause is of the overstatement of the financial figures of the company. The business can show a high increase in the revenues however which might not be true. Also within the veil of inflation there can be overstatement of costs of the company which can deter the other investors to take interest in the company and the finance can be procured to favourite parties at terms and conditions which further put interest payment burdens on the company.

Due to the effect of inflation the Price/ Earnings ratio drops for the companies. This ratio depends on the following factors-

- a) The prospects for the future earnings for the company
- b) The risk variable attached with the prospects of earnings for the company

The ratio is used to represent the optimism or the growth in the company's business. As due to the inflation there is an overstatement of ROE, the P/E ratio might not reflect the right picture.

The inflation tend to increase the misinformation practices in the preparation of financials statements since during this time the key figures can be inflated; however the rise might not be as steep as presented in the statements. The misinformation can cause serious damage to the reliability of the financial data presented in the statements and the stakeholders might not be able to take their decisions on misinformed statements (Zubair, Kabir and Huang 2020).

This practice is however limited since the statements are first under the lens of auditors and any practice which cause overstatements of figures or the use of misinformation can be pre-detected and a qualified report can be issued to the company

B. Previous Studies

1. The Jordan Crisis

The economy of Jordan is abundant and market-oriented economy and also rich in terms of human resources. The total geographical area of the country is 89.3k sq. km. The service sector accounts for 64% of the GDP of the economy. The year 1980 has not been favourable for the country as during this time the economic imbalances started to arise. These were at the peak by the year 1989.

In collaboration of the IMF and the World Bank the major economic restructure processes began after this event. In order to promote the sustainable growth in the economy, various economic adjustment programs were implemented during this period. The statistics for a further period can be seen in the table presented in appendix (table 1.1).In 2005, during the reign of His Majesty King

Abdullah II, a comprehensive agenda has been prepared for the next 10 years. The agenda was released in the year 2005 and had following objectives (Ramey 2019)

- a) Introduction of financial reforms
- b) Social welfare
- c) Vocational and labour training
- d) Political development with the inclusion of all levels in decision making
- e) Higher education and scientific research reforms

The major agenda of the country during this time is the financial reform pillar. It has been featured in the national agenda. Following were its major objectives so that the economic challenges can be addressed- (Kim, Batten and Ryu 2020)

- a) Maintaining and performance of a sustainable budget
- b) Removal of subsidies in oil and other goods
- c) Improve efficiency in the resource allocation
- d) Simplification of the tax procedures
- e) Removal of the non-tax barriers

A similar financial shock was experienced by Jordan during the year 2005 when there was a sharp increase in the prices of the oil as well as a drop in grants from external sources. During the years 2008 -2009 this issue was aggravated as because of international financial crises (Alawin and Oqaily 2017).

Budget distortions

Following distortions were recorded in the budget during great depression of 2008-09-

- a) The economic deficit was recorded 10.3% of GDP in the year 2009. This was exclusive of the external grants
- b) In 2007 the subsidies for food and other items were \$715 million. In 2009 these already declined to \$223 million.

Whereas the banking sector in Jordan is considered sound and well

supervised, the Jordanian's government has enhanced the confidence in banks recently by moving to fully guarantee bank deposits during the global financial crisis until the end of 2009. Banking sector in Jordan has not been seriously affected by the global economic crisis due to its limited exposure to international property and equity markets (European Commission, 2010). The limited exposure with global financial markets has bulwarked it from the direct impact of the global

financial crisis. As mentioned earlier in this paper, the government of Jordan has guaranteed all bank deposits until the end of December 2009, which led to reassure the investors in this sector

The growth during the years 2008, 2009 and 2010 can be seen in the table 1.2 in the appendix. The growth in GDP after the crisis has been 7.6% in the year 2008 but in 2009 it again went down to 2.3%. Being a developing nation, the growth should be more for the country.

Hussein (2009) studied the impacts of financial crisis on Egypt economy. He pointed out that the stock prices

dropped down sharply because of the extensive selling by the foreign investors which affected the local investors.

Furthermore, Orozco and Lesaca (2009) reported that some Arabic stock markets have been affected by the crisis

such as Saudi Arabia, Kuwait, Doha and Abu Dabi by 50%. While some other Arabic stock markets were

relatively unaffected such as Morocco, Lebanon and Jordan.

- **Jordan Situation**

In the year 2010 the ministry of finance issued major amendments that include -

- a) New tax laws to replace the former laws in practice. This time the focus was on reduction of tax rates.
- b) Drafting new customs law
- c) Connecting electronically the customs with other government departments

d) Issuance of debt tools for mobilization of domestic savings in the country

- **Medium term measures in the county (Fiscal policy measures)**

In order to deal with the financial crisis the government focused in the following areas-

- a) Reduction of operational expenditures
- b) Merging smaller government institutions
- c) Control on government's consumption of petroleum-based products
- d) Making plans for capital expenditures (Airout 2017).

As per Qaisi (2020), the Central bank of Jordan plays an important role in implementing the roles that reduce the effect of financial crisis. In the study it had been studied by the use of two variables which are overnight deposit window and loans and advance rates. The data for these has been analyzed through the use of SPSS. The above variables can be said to have a huge impact on the non-performing loans ratio.

According to Airout (2017), the financial crisis resulted in sudden collapse of share market in Jordan. The research found that during the high inflation, the most secured form of investments was in the real estate. Ever since 2000 the investments in the real estates have been increasing at high rates. The country witnessed an explosion bubble of real estates during the year 2007. Here the values depreciated and the individuals were not able to repay the debts even after selling the properties.

This resulted in decrease in share prices of the real estate companies and many of these had to declare bankruptcy. The result is that the stocks in Amman Stock Exchange (ASE) reduced much in the value during 2008, because of the fear in investors for another financial crisis.

Jordan has abundance of natural resources however the proven oil reserves have been declining in the country. The reserves were highest by 20 M barrels in the year 1991 however during this time due to high production the graph has come down close to 5M barrels in 1992 and 1M barrels in 1994. This has proved that the country's oil resources are depreciated. There is a need to locate more resources so that an income stream through oil production can be secured. Currently the existing

capacity of production is not enough to meet its domestic demand (See Table 1.3 in appendix



III. METHODOLOGY OF THE STUDY

A. Introduction

In this section of the report the methodology will be discussed. The methods for this are experimental, derived, simulation and the observational method. In the study the deductive method of study has been followed. Here the information has been collected for the organisations during the financial crisis in the Jordan.

The data will be collected randomly for the companies listed on the Amman Stock Exchange. As of 2014, it had a total of 237 listings. The official currency is JOD for the country. The methodology for the purpose of analysis here is through using KPIs and ratio analysis. The news articles for the companies in the report are also extensively studied to understand how these have responded during the times of inflation and financial crisis.

It might happen that the companies under the study are showing high performance during the time of inflation as the revenues tend to go high; however, for most of the businesses it will portray a negative performance since the prices are inflated for the input materials. In the report the attempt has been made to identify these scenarios when the companies were into recession due to crisis or inflation and how these have responded to overcome this issue (Pandey and Pandey 2021).

This methodology of doing a historical analysis on the companies of Jordan is optimum for this report as it would facilitate the researcher to make inferences on stock performance and also researching on the tactics of interferences with the financial statements used by these companies.

- **Stock market performance of Amman**

The movements in the stock exchange can be explained through the pattern in which indices of this exchange moved. By the end of the year 2020, the stock market as measured by ASE100 index was low by 8.7%. It has been during the time when the country was marred with the lockdowns imposed the pandemic. In the end of

2019, the total was 1815.2 points but by the end of the year 2020, it was already down to 1657 points (Alawin and Oqaily 2017).

In case the performance of ASE20 is tracked, it was at 806.5 points by the end of 2020. The same was 891 points by the end of 2019. Hence during the year due to the recession caused by pandemic, it has limited the performance of the stock market indices.

At this stock exchange the investors can deal through the financial services companies that have been registered under the Jordan Security commission and hence buy/ sell shares and securities. This stock exchange was founded in the year 1999. The market cap of this exchange was 18.1 billion in the year 2014.

B. Methodology study

The methodology that has been used for this purpose is through analyzing its financials. The tool of ratio analysis will also be used for the purpose of analyzing the relationship of the variables. Here the return has been calculated for the companies during the times of financial crisis and also during the time of high inflations have been calculated (Yang 2021).

In the report, the methodology has been used on the companies of Jordan which are listed on the stock exchanges. The financial data has been fetched through the annual reports of these companies. The companies that have been studied for the purpose are Afar for energy co. PLC , Al Manara Insurane PLC and the Arab bank. These companies reflect the major stake in the stock market in terms of market capitalization.

C. Community study

The community studies are the field of sociology and anthropology. It focuses on the study of social structure and the community as a whole. Here the research is on topics which are other than the theoretical frameworks. The impact of financial crisis in Jordan has been compared with the trends such as pricing levels and the inflation that has been observed in the society.

The community in the Jordan had mix inferences from the effect of rising inflation levels. For the stock market performance there were mixed responses.

Some of the companies during this time registered high level of growths while other companies witnessed a sharp decline in the prices. It can be said that the relationship of the factors unemployment and employment has been negative in the economy. The condition has been stable for a number of years now (Prasoon and Reddy 2021).

The impact is wide and the investors were the highly concerned parties. The inflation causes high fluctuations in the KPIs of the companies, increasing drastically the cost component. This causes companies to make use of creative accounting and investors can be easily misled through this information.

D. Validity of the report

The report is valid in all its aspects. It has been prepared by using the secondary data that has been fetched through trusted online sources as well as the financial reports of the organizations under study.

The method that has been used is realistic and most optimum for this type of research. The validity should be present in case the future assumptions are put into the model and the results for these should reflect the actual results obtained. The report cannot be said to be valid in case the predictions made on the basis of this report cannot be said to be valid.

- **Discussion**

The major point of discussion here is the adoption of methodology that has been used for the purpose of analysis of data regarding inflation in the country. In 2019 the inflation rate was recorded 0.9. The reduced inflation in the year 2020 indicates there has been reduction in prices of a number of goods and services (Oaisi 2020).

The decline in inflation does not necessarily indicate a favorable position for the economy. For an economy to prosper there should be high economic growth rate. At the lower rates of inflation in Jordan, which is usually maintained fewer than 2%, it ensures the companies there can do the business with confidence. The price for the

inputs for the companies drop extensively and these are able to deliver high performance in terms of revenues.

For the years 2015 and 2016, the rate of inflation went negative for the country. From the last 30 months there has been a trend of reduction in the inflation rates and it is likely to go negative again. If that happens, the country will be in the stage of recession for a long period again. The central bank of the country must take steps for the purpose of discussing the policies to maintain level of inflation (Kandah 2021).

E. Conclusion

The conclusion is that the research aims at studying the impact of financial crisis on the economy of Jordan. The research aims at providing a clear outlook on inflation and its financial implications. In 2020 the inflation rate has been 0.4% in Jordan. For the year 2021 it is expected to be around 1.65%.

The above table provides a clear indication for the inflation trends in the country. In the year 1989 the inflation was as high as 25.67%. The projected inflation level for the year 2025 is around 25 and for 2022 it is around 1.99% (Table 1.4 in appendix)

IV. FINANCIAL ANALYSIS AND HYPOTHESIS TESTING

A. Introduction

In this section the financial analysis has been performed on selected Jordan based companies to check the impacts of inflation on their financial performance. Notably the crisis occurred in the year 2008 hence the reports for this year along with the current year performance are analysed. The data for this purpose is taken from trusted sources such as company's own reports and yahoo finance, which is an accredited website to fetch financial data of companies.

The financial analysis is essential for the purpose of assessment of financial health of the companies. In this part the focus is on assessing the positives and negatives of Jordan based companies. A variety of factors such as stock price and the essential financial figures are used for this purpose in order to make inferences for the companies that have been studied.

In addition to this financial analysis an attempt has been made to gather the non-financial data for the financial crisis in Jordan and situations of inflation. It can be known through analysing this data that how the factors of inflation and misinformation impacted the financial performance of the companies. An impact study on overall economy of Jordan is also conducted so that the whole picture can be considered.

The part also consists of analysis of economic growth in Jordan. The market economy of Jordan can be said to be free market-driven economy. The service sector here forms part of 67.6% of the GDP while the manufacturing sector only forms about 19.2% of GDP. The freedom score of it has been 64.6 which makes it the 69th most free economy in the world. In the recent years the score is down because the trade freedom and the fiscal health in the country have decreased. The main source of the country's income is trade and finance. It constitutes nearly one third of the GDP of the country. Other major sectors of revenue are construction projects, transportation and the communication sector.

The country is a developing country and the per capita income here is not high. The unemployment is rampant and the current government measures to contain its levels are not enough. The country lies in a disaster-prone area and there are constant occurrences of cyclic droughts and frosts. The poverty exists in the country and the only exceptions being neighbourhoods around Amman.

For the year 2019, the debt of the country has been around 34.77 billion dollars. The levels of poverty were 14.4 per cent in the year 2010 which has increased to 15.7% in the year 2018. As per the report of NSPS nearly 1 million people in the country live below the poverty line. The literacy rate in the country is 98.23 per cent. It is measured in terms of educated people over the age of 15 years and above. Below is a depiction of annual growth rate for the country over the years-

The growth has been declining for the country in the last few years. In the year 2020 the growth has been -1.55%. It was as high as 14.35% in the year 1992. The country has been struggling to keep up with the growth of economy. However, in the year 2020 the negative growth is driven mainly due to the impacts of coronavirus which has taken under its grip almost all the economies in the world (Table 1.5).

This trend is likely to foster the prevalence of creative accounting and misrepresentation of the financial figures. During this time the economy growth was sluggish and in order to improve the state of affairs there has been increased instances of building up matters in the financial reports which indicate favorable position and overstatement of essential KPIs such as profits and the revenues (Kim, Batten and Ryu 2020).

B. Study sample

The sample consists of Jordan based companies from different sectors. The companies include the big names such as Zain, Expedia Group, Deloitte, Orange and PwC.

- **Deloitte**

In Jordan the firm started operations in the year 1940 and is a part of the organization Deloitte & Touche. It is present in the country and providing compliance services to the small businesses. It has achieved expertise on local,

regional and even international level and aimed at addressing the requirements of the clients with different backgrounds. Irrespective of the size of the companies, Deloitte has its specialized knowledge and understanding to meet the unique needs of its clients (Oaisi 2020).

In the Middle East region, it has identified its primary market and providing services to more than 3000 professionals. During the time of financial crisis the major stocks of the Amman stock exchange witnesses a high decline. The company has been facing the challenges in the constant growth due to this reason. During the times of crisis and economic recession there is a cumulative effect in the market. The company's clients face financial hurdles and many can shift for different providers for compliance services

Normally the impact of crisis is more on the manufacturing sector companies rather than the service providing companies. Deloitte is in the service sector and provides compliance and tax/accounting services to its clients. The revenues may drift slightly during the financial crisis but the overall impact is not as much degrading as with the companies in other sectors (Mugableh 2019).

- **AFAQ For Energy Co. PLC**

The company is active in the energy sector and also known by the name Afaq energy. The total market cap for the company is 156.20 M JOD. The company has faced the stock market recession during the times when covid19 came into existence and restricted trade rules were issued that aimed at reducing economic activities. It can be seen during the year 2019 that the share price started declining as reflected in the line chart below. The share is yet to recover from that negative impact. The recovery is possible in the coming time as the economic activities have resumed. The current share price is 1.42 for the company. The company started the operations in the year 2008, at the time when the financial crisis occurred in the stock markets at global level.

- **PwC**

In the middle-east region the PwC consists of 7000 people and it deals in providing tax consultancy and the assurance services for their clients. The region is suffering from some of the pressing challenges and the company works to provide solutions to the same. It ensures proper financial reporting and tax filing is exercised

by its clients (Leake and Jordan 2017).

The company deals in the service sector and is entrusted with the task for assuring the clients for their tax compliance. However it is also necessary that its own financials should be free of any creative or modified accounting and it pays the taxes in the right manner. During the time of inflation the clientele of the company is likely to be affected and the company can take advantage of situation. It is hence essential that its statements are free of any bias and audited by professionals who have no interest in the functioning of the company.

The company can be falsely representing its financial information or there can be under or over statement of financial figures. The company's headquarters are in London and on the basis of its acquired experience over the years, it can provide false implications in its financial reports. It is the world's largest firm in the Big-4 accounting firms in the world.

The government of Jordan can work in corporation with the trusted and accredited accounting firms in order to reveal the unusual and misleading transactions and practices by the companies. PwC is one of the most accredited accounting firms and however the failure to spot these errors and misrepresentations can be a challenge to tackle.

As per the article published in The times by Leake and Jordan (2017), the auditor PwC was attacked by the central bank of Ukraine for its alleged failure for spotting £4.2 million hole in the books of accounts. The funds had been siphoned out of the bank of two of its offshore oligarchs.

- **Impact of financial crisis on the economy of Jordan**

As per the report of European commission (2009), the stock market crisis began in the developed countries and slowly it took under its grip other economies of the world. The reason behind this was the unguaranteed loans that have been provided to the companies by the USA based financial institutions.

The Central Bank of Jordan assessed these issues and consecutively to save the economy it issued strict loan classification and issuance guidelines. During the time of crisis there was an increase in the oil prices in the country. This influence has been felt in the Jordan economy and it can be said that despite measures

taken, the country could not escape the impact of the crisis.

It is to be noted that the impact has been felt in a chain and each country has been affected without any exclusion during the crisis.

- **Inflation in Jordan**

The figure 1.7 in appendix shows the level of inflation in the country. It can be seen that the inflation has been slightly rising year by year until 2007. However the steepest rise was recorded between the years 2007 and 2008. During this time the inflation increased from 5% by the end of 2006 to 12% by the end of 2008. It was due to the impact of the financial crisis. However effective measures by the Government were proved useful further in the time and the inflation rate was close to 0% during the year 2009. Here it should be noted that the decreased inflation is a sign that the economic progress was also less during the year. By the end of the year 2011 the inflation levels were already restored to the levels of 5% (Mugableh 2019).

- **Unemployment in Jordan**

The unemployment has been the most pressing challenge of the Jordan economy in the last few years. For the year 2021 the unemployment rate has been 25% in Jordan. His majesty King Abdullah has focused on many occasions to reduce the unemployment rates in the country. The rates are even higher for the people in the age bracket 20-24 and 25-29. The main reason behind this is the covid induced lockdowns and sluggish economic growth during the period. The problems in the labor market of Jordan cannot be said to be recent, rather the issue has been present for a long time and is unlikely to phase out anytime sooner in the future (Mugableh 2019).

The table 1.8 in appendix indicates the state of unemployment and GDP rates of the country over the years from 2005 to 2020. It can be seen that the GDP growth rate was 8.2% in the year 2007. During the financial crisis the GDP growth rate declined to 5% by the end of 2009 and further dropped to 2.3% in the year 2010.

(The country has not recovered from the impact of the financial crisis. In the year 2020 the GDP growth has been only 2.5%. One main reason for decline in GDP rate has also been the covid induced lockdowns and barriers in trade practices as the borders were not open. There is a high correlation between the variables GDP and

the Unemployment which has been presented in the table below-

Table 1 GDP and unemployment rates in Jordan

GDP and unemployment rates in Jordan		
Years	GDP %	Unemployment %
2005	8.1	14.8
2006	8.1	14
2007	8.2	13.1
2008	7.2	12.7
2009	5	12.9
2010	2.3	12.5
2011	2.7	12.9
2012	2.4	12.2
2013	2.6	12.6
2014	3.4	11.9
2015	2.5	13
2016	2	15.3
2017	2.1	18.3
2018	1.9	1
2019	2	19.1
2020	2.5	23.2

Table 2 GDP and unemployment rates in Jordan %

	GDP %	Unemployment %
GDP %	1	
Unemployment %	-0.31109	1

The coefficient of correlation comes out to be -0.311 for the country. It means the variables move in the opposite direction. In all the years when Jordan has high GDP growth rates the unemployment rate has been shrinking. However in years when the GDP growth is low the unemployment rates are naturally higher. It is because of the fact when the GDP is more, the production of goods and services increases that results in providing employment to more people. On the contrary when the GDP growth is less, the instances of unemployment are likely to be more.

- **Exchange rate impact on the financials**

The Jordan based companies which have global presence are constantly affected by the exchange rate fluctuations. In case the company receives payments from foreign subsidiaries the higher exchange rate is profitable as it can get more

domestic currency with the foreign income. On the other hand when the value of one's currency increases it is more favorable to import as the dollar is weaker than the home currency and the country can import at less prices. During the times of inflation it is always better to export more and import less. Once the inflation is corrected and back to normal levels the country would end up with favorable trade balances (Olbrys 2021).

For the private businesses in UK, it would mean that the focus should be on exporting more during the inflation is high. At this time the price levels are high. It would be more profitable in case the countries are targeted which already have higher inflation rate. Here the costs would be low for the country in which the goods are produced. For a market where it is sold, if the inflation is high, it means more revenue will be fetched. Thus the Jordan based businesses could do much more during the times it has been known that the outside market is in grip on inflation and the governments have not yet facilitated any policies regarding imports and exports. During this time to save the domestic economy from inflation it might happen that the local governments take measures that forbid the foreign parties to enter the country (Mugableh 2019).

- **Country's mineral exports during the financial crisis**

The financial crisis did not impact the exports of Potash and Phosphate for the country. Rather there was a recorded increase in its volumes of exports. The total volume of exports for Potash in 2007 was 1794 ton and for phosphate it was 5541 ton. The exports have been increasing ever after. This trend shows the country has huge reserves for these minerals and it should aim for achieving more extraction and exports of these minerals to stabilize the economy during tough times (Table 1.9).

- **Ratios of Jordan companies**

The P/E ratio indicates the estimated prices of its stock based on a few years of earnings in the future period. It is a measure of assessing the share price in relation to the EPS. It can be calculated by using the ratio below-

- **Share price/ Earnings per share**

The ratios should not be high as it would indicate the stock prices are excessive for the listed companies. For an investor, if the decision is to invest in the

company's shares, the shares with low P/E are preferred. In case the P/E is high, it would mean there is a high inflation and the stock can also crash. However it is not always true. A higher P/E can also mean that company has high goodwill and its business has good growth opportunities. Hence the P/E ratio must not be the only indicator for making the investment related decisions. With a good P/E ratio the foreign institutions can be attracted towards increasing investments into its domestic market. It will increase the cash flow and the companies can be more profitable. The table below shows the P/E ratio of Amman stock exchange listed companies- (Mugableh 2019)

The ratio was 31.10 in the year 2004 which has come down to 16.55 in the year 2016. It means the time is favorable to invest in the local businesses. During this time it might also happen that the companies showed negative performance and subsequently the share prices also fall. Here it was likely that the P/E ratio had been to the lowest levels (Table 2.0).

The companies have to do better financially and increase their stock prices so that the P/E ratios can be made better. The creative accounting can be used to enhance the financial performance of these companies which will improve the stock prices and the P/E ratio can be enhanced. Therefore it is necessary that these practices are avoided (Olbrys 2021).

The IFRS issues accounting standards and the nations have to adopt similar accounting frameworks in order to facilitate accounting compliance and bring the companies under one umbrella. The creative accounting can make way by finding loopholes in the IFRS. It can be avoided by ensuring the standards are amended from time to time. Also, the country requires tax reforms so that the practice of large corporates to pay less taxes can be avoided.

C. Test hypothesis

The H₀ is selected and the alternate hypothesis H₁ is rejected. Here it can be said that the inflation and the misinformation have extended implications for Jordan. From the above information that has been analyzed the conclusion can be made that during the times of higher inflation, there were higher instances of companies interfering with the figures. It provides easy incentives for the companies to alter the

financial figures so that the stakeholders and the investors can be kept optimistic for company's performance.

The null hypothesis was in favor of impact of inflation on the financial statements of private players in the economy. It can be known from their financials that whenever the inflation was high or the economy was in distress there has been low performances on the stock exchanges as well as a dip in their profit figures. It had created a problem of uncertainty and the business took several years to restore back to normal performance levels.

D. Use of Corporate Governance in dealing with misrepresentation and misinformation in financial statements

The corporate governance is regarding how the companies are managed. It is about the flow of information and what measures are in place to manage the functions of an organization. For example the stock market of a country can be governed by an authority that is responsible for publishing rules and policies for its conduct. It is a part of its governance policies and the stock market listed companies must prove adherence to these codes to set an example of good conduct. Anything against its rules will be a violation and strict measures can be taken against the concerned company (Osadchy et al. 2019).

The corporate governance in the country can be classified into following six areas-

- a) Government oversight and the legislative framework
- b) Adherence to accounting standards
- c) Disclosure policies in the financial statements
- d) There should be a transparency if a business is privatized
- e) Revolutions in the financial market

• Detection of creative accounting in Jordan

The creative accounting is that realm of accounting whereby the actual numbers are changed or modified to desired numbers. It has been in practice of various companies and recent scandals in the country have increased the demand for

more scrutiny on the financial statements of these companies by external auditors. With the increasing influence of corporate accounting practices the instances of creative accounting can be reduced. There must be strong adherence to the accounting principles, rules and the policies so that the same code can be applicable to the businesses and there is fairness in terms of preparation of financial statements. It enhances the comparability for the companies.

Based on the research, following reasons have been identified which encourage the managers to perform creative accounting-

- a) In order to gain back in confidence the banks to which the companies have high debts to pay. It is also done so that the companies can receive new finance through financial institutions.
- b) Restoring the confidence of suppliers and the customers of the business who might have concerns for its survival due to weak market performance.
- c) Concealing the mistakes that have been made by the management.
- d) Prolong stay of company executives and accumulation of benefits before these finally exit before bankruptcy.
- e) Creation of favorable circumstances so that other businesses may take interest in their acquisition (Mugableh 2019).

- **Dividend policies in Jordan**

The first and foremost objective of the companies is to maximize the wealth of their shareholders. The dividend policy is regarding how the dividends are paid by the companies. Based on the current state of earnings and the previous pattern of dividend distribution the companies can decide on the dividend policies for current year. In Jordan there has been a link between the financial disclosures made by the firms and their dividend policies. The Jordan based companies that provided more dividends were those which paid higher dividends. The companies that have more transparency are also those which paid least dividends. The conclusion was made from here that more disclosures by the companies led to a negative impact on the profit distribution of companies. It is misleading to the investors who make their decisions based on the dividend policies. The company's financial viability is

affected through the dividend distribution approach it undertakes. For the companies that distribute more dividends from EPS tend to have higher investor response from the investors (Ramey 2019).

- **About Amman Stock Exchange**

The ASE was established in the year 1999 in the form of not for profit organization. There are seven members in its board of directors. In the country there are 68 brokerage firms which are also its members. There are a total of 237 companies which are listed on this exchange. The leader of this exchange is King Dr. Kamal Ahmad Al-Qudah. The chairperson being Mr. Mazen Wathaifi takes charge of affairs of the exchange.

The exchange has a website from where the live information regarding the stocks can be tracked. The data such as trading value, number of securities, number of transactions and the trading volumes have been provided on its website. The below illustration indicates how the data has been presented in graphical format, which can assist its investors to determine their purchase strategies and invest in the securities that are on offer (Ramey 2019).

The website also provides other details such as the historical data, circulars and disclosures, E-disclosure policies and the daily publications (Table 2.1).

- **Disclosure policies by Amman Stock Exchange**

In order to restrict the companies from producing false information in the balance sheets and other statements, in addition to the financial disclosure as per accounting bodies, the stock exchange rules are also to be followed. The disclosure rules are effective after these get nod from the board of directors of the exchange.

As per the data available on the official website the Article 1 of the policy document states that instructions contained therein are applicable for the year 2018 and above. The stock exchange also has to disclose some data which is listed in the article 3. It includes-

- a) Names and addresses of its members
- b) Decisions formed by the stock exchange
- c) The list of securities and shares that are not allowed to trade

- d) The members that have been suspended
- e) The financial statements of the members
- f) Violations committed by the members
- g) Licensed brokers

The articles published by the exchange can be accessed on its website and the listed companies must have compliance with these terms. This should be strictly followed by the companies so as to achieve fairness and transparency. In case, these rules are not followed, it will result in non-compliance and the given companies can be charged for that violation (Source: Amman Stock Exchange).



V. FINDINGS AND RECOMMENDATIONS

A. Introduction

In this section of the report the findings and recommendations of the whole report are studied. It will be analyzed based on the above discussions, the impacts of inflation on the financial information of the private sector companies. In addition to that the recommendations are also added regarding what the country should do; the measures to take when there is a financial crisis. The role of central bank of Jordan in tackling the financial crisis and the strategies to deal with such crisis will be discussed and recommendations will be made. It is essential that the country make evaluations of economic conditions from time to time and take effective measures to deal with the issues such as high inflation, low GDP growth and unemployment rates etc.

It can be noted that the use of corporate governance is highly beneficial for Jordan companies to restrict themselves from unfair practices such as misrepresentation of financial figures. In addition to that the internal control system must be fair so that the external auditors can count on these. The efforts must arrive primarily from the private players. In case these are implemented on a larger scale, naturally the private sector will be an attractive option for the investors who can take their decisions based on the financial data provided by these entities (Yang 2021).

Yang, P., 2021. The linkages of four stock markets: Evidence from the pre- and post-2007 financial crisis. Working paper, September.

Throughout the report the focus is on assessing the prevalence of issues in financial statements prepared by Jordan businesses. It can be said that too much of the extent the triggers for this behavior are economic variables increased inflation and interest rates and the misinformation while preparing the statements. To save the companies to display unfavourable financial positions, the executives opt for interfering with the figures and use creative accounting.

The stakeholders and the new investors can be easily misled into conveying a

favorable picture while the disclosures made by the companies are not adequate.

The corporate compliance codes or the governance policies are not in favor of the creative accounting practices. In order to stop the companies to follow such practices, the private players must be provided compulsion for following the codes. The government should put more weight to improve economic variables such as the inflation and the GDP and favorable economic progress deter the companies to interfere with the financial results. The companies must also follow a corporate compliance framework which pushes it towards achievement of its financial objectives. By following the codes of the framework the companies can track where these are lacking towards achievement of their financial and non-financial objectives. The use of balance score cards should be stressed on by the authorities so that the companies can follow corporate governance duties in a proper way.

The country also has some proven reserves of oil. The current production capacity is 403 barrels of oil per day. The daily consumption of the country is 114,000 barrels, which makes it 75th country in terms of daily oil consumption. The daily deficit is 113,597 barrels of oil. The country is required to improve its oil production capacities. Notable it has 1 million barrels of oil reserves, which could last for several years. It should set up oil extraction businesses and export the stock of oil to increase export revenues. This measure will also help it to acquire foreign exchange, push up the revenues for the local businesses and increase the GDP growth. With increased revenues the instances of misinformation in the financial statements can be prevented (Zubair, Kabir and Huang 2020).

B. Result

The result of this report is in favour of the fact that the factors of inflation and misinformation affect the quality of financial reporting of Jordan based companies. It has been observed through the analysis of collected data that the likelihood for creative accounting increases with the higher level of inflation in the market. These are the time when the companies can commit for misrepresentation to show the results more favourable.

As per the research work of Al Attar (2016), which consists of studies on listed commercial banks on Amman stock exchange, there exists a high and stable

level of compliance with corporate governance in the commercial banks of Jordan.

- **Corporate governance reforms in Jordan**

In the year 2005 there has been an agreement between the ABJ- the operator of all the banks in the country and the International Financial Corporation (IFC). Notably the IFC is a part of World Bank which has the main purpose of rehabilitation of private sector banks in developing countries.

The reforms have initiated in order to provide technical assistance to the banks provided these all comply with the corporate governance codes. The central bank of Jordan in this regard has issued a booklet that lists rules and guidelines which are to be followed by the banking companies. The booklet provides the vision statements of the central bank and the codes on how the rules and regulations must be followed in order to stay committed to international standards.

- **Results of correlation between Unemployment and GDP growth rates**

There exists a negative correlation between the variables unemployment and the GDP rates. It has been noticed in Jordan economy that when the unemployment rates decrease, it means the country is having high GDP rates. However when the GDP is low for a year it would imply that the unemployment rate is likely to be high for the year (Mugableh 2019)

The country must strive to improve the GDP as with the increased production across the sectors more people will be absorbed by the market which will decrease the unemployment rates in Jordan. The country must work for obtaining absolute advantage in increasing the exports of the products which are produced in less cost or more abundantly in the country. The major export goods for the country are textiles, vegetables, pharmaceuticals products, potash and fertilisers. The total exports as per the data of 2017, amounted to be \$7.51 billion for the year.

In the graph in 2.2 (see appendix) the trend can be seen for GDP growth for the country. Ever since the year 2004, it has been steadily declining. The growth rate of country was 17% in 2004 which in 2015, had come down to -15%. In 2010 it again restored back to the level of 10%. In 2019 it has remained only 5%. The country has not yet recovered from the financial crisis of 2007-08.

The total exports have been \$8.31 billion for the year 2019 and the imports during this period has been \$19.36 billion. Overall, the trade deficits had been

\$11.02 billion for the year. Out of the total GDP, the exports of the goods amounted to be 23.72% and the imports have been 41.65%.

In the table below the country's top importers and exporters are listed. The country must facilitate more international trade so that the trade balance can be made favourable and the local businesses can prosper.

It can be seen from the above table that the major export partners of the company are US, Saudi Arabia, India and Iraq. The country can work for improving trade relations with these countries and set up treaties and arrangements to facilitate easy flow of goods across borders. The table below represents the major exports and imports of the country (Airout 2017)-

The major export of the country includes Fertilizers, Apparel: Knit, Pharmaceutical, inorganic chemicals and Aircraft. With US alone the trade deficit has been \$574 million in the year 2019. The Jordan also specialises in agricultural products such as virgin olive oil, strawberries, baby cucumbers and green beans. The country needs an agricultural revolution so that the total output can be increased and be exported to foreign countries. This will increase country's GDP and with better figures the managers are not required to opt for creative accounting practices (Table 2.3).

The country is required to follow the policies of international trade to improve its trade relations with major trading partners. It has established efficiency in some of its production areas and can produce labour intensive products at much cheaper rates than the global counterparts. The country must invest in these areas and especially improve its stance at the agriculture and farming products. The service sector comprises a large share of country's GDP and providing boost this sector will be highly favourable. The country has long been a settlement for tax consultancy business firms which provide services to businesses internationally (Zubair, Kabir and Huang 2020).

The country suffers from several structural problems. It has a lack of natural resources and the population has also gone beyond 10 million. The unemployment rate is too high which is largely because of fewer women involved in economic

activities. The refugee wave from the countries of Iraq and Syria also posed some problems for the country. It will push up the financial woes for the country as it has to handle the additional burden of high population. The hardest hit has been the covid induced economic recessions which have derailed many small businesses. The measures of the government to revive these enterprises are not sufficient (Krafft et al. 2018).

The country is required to promote robust economic growth which can bring back the businesses in shape. The country is expected to receive a support of

\$1.5 billion from Washington after the IMF came ahead and appraised its economic reforms. The main challenges for the country are hunger, unemployment and the poverty.

The key strategy to solve these issues is through forming strategies by the authorities that aim at driving the economic growth as it has been discussed, that the main propeller to increasing financial misconduct has been the unfavourable state of businesses in the country, which must be addressed by the policy makers.

Therefore the result from the above analysis is that the country has to focus on eradicating the root causes that work as trigger for the companies to constitute misconducts. When these are addressed the misconducts in the financial statements can be avoided. In addition to that the central bank of the country must create effective monetary policies to control the flow of cash in the market. In the times of inflation the interest rates can be increased which will make the cost of raising new finance to climb high, while at the same time promoting the people to save more money in the banks as the higher interest will be provided. It will help in absorbing the excess cash in the market and consequently reduce the level of inflation which is needed for high economic growth.

Based on the overall GDP of USD \$44.4 billion, the country ranks 89th in the world as per the data of 2019. The country needs to swiftly build its corporations and markets so that the level of GDP can be increased. With proper regulations in place and the use of effective policy formations the businesses can be sustainable. The companies must follow a professional code of conduct and be following corporate governance norms. It will create an atmosphere of trust and the foreign parties might be tempted to invest in the country (Airout 2017).

C. Recommendations

The recommendation can be provided to the country to regulate its financial markets in a much better way. The share market crisis can be tackled through effective policies by the authority that is responsible for handling country's stock markets and forming guidelines. It will prevent the companies from taking actions such as misrepresentation of figures in the financial statements as these have to follow a code. The country's company law should be amended from time to time so as to address the issues that arise due to harsh financial circumstances that provide an incentive to the companies to interfere with the financial figures, to make the statements look more attractive (Mugableh 2019).

In order for the Jordan to recover from the impact of financial crisis an efficient regulatory system must be in the place. The stock crashes cannot be avoided altogether but the impact of recession can be significantly reduced through efficient government measures.

Financial governance is needed in Jordan and its compliance must be ensured at larger level as the bankruptcy of various companies in the past has raised questions on the quality of their financial data. The codes for this must be at par with the IFRS and OECD codes. The term corporate governance can be defined as the way in which the companies are managed. Jordan is known for having some of the best corporate governance practices but there is still more to achieve in the areas of independence for internal and external audits, shareholder entitlements independence of directors etc. As per Aridah et al., (2020), the improvements are required in the following areas-

- a) There has to be increased awareness regarding the importance of corporate governance and why the companies need to adhere to it and forgive the practise of mismanaging/ altering the financial data.
- b) The use of creative accounting can be beneficial to some extent. However the managers should avoid this practise in case it leads to false implications to the stakeholders and prospective investors of the business.
- c) There are still a large number of companies that are managed by

families and these have not been listed on the Amman Stock exchange.

- d) The adequate disclosures are required presently only to the Amman stock exchange listed companies. Here it should be noted that the private sector which comprises of a number of smaller businesses, it is necessary that corporate governance is applicable. The effort of the government must be to include these concerns under its ambit so that the governance practices can be implemented on a larger scale (Krafft et al. 2018)

- **Recommendations for reducing the levels of inflation**

The central bank of Jordan can use a variety of measures to fight off the inflation. It is a situation in which the production costs increased marginally but the prices of the goods climb too high. It makes the currency of the country to worth less than what it was earlier. The inflation must be contained by the government so that the businesses can be saved and sustainable economy growth is maintained. Following are the recommendations during this time-

- a) **Wage and price controls-** During this time jobs can be cut to save the funds and price controls can be used however it will only increase the state of unemployment. Hence it cannot be exercised in the first place.
- b) **Contractionary monetary policy-** In this the money supply in the market can be reduced. The interest rates are increased so that the costs of finance go high for the businesses. The excess cash from the market can be absorbed back by the government and financial institutions as due to increased bank rates people go towards saving the money with these institutes to earn interest. This situation creates reduced spending in the economy which eventually turns down the impact of inflation.

There can be various alternatives in exercising the monetary policies which are -

- 1 i) Increase in interest rates by the central bank
- 2 ii) Increase in reserve requirements by the commercial banks (Forbes 2019)
- 3 The above mentioned tools are quite effective in fighting off the inflation in

the economy of Jordan. The first tool propels people to save more money in the banks as the interest rates are high while the second measure requires bank to have high cash reserves with the central banks so that the remaining amount which is used for lending in the market is less.

- 4 There is also an alternate method to fight inflation which is directly enacting policies to reduce the money supply in the market. It can be in the form of government calling the debts which the parties are required to pay and also increasing the interest rates of the government bonds so that more people can be lured into buying these bonds.
- 5 The control on inflation will result in positive affect for the economy. The prices of the goods will be back to the normal levels and the purchase power of the customers can be increased in the economy. For the companies it will be favourable as the financial figures will reflect a better picture. The inaccuracies and the use of creative accounting would be less in case the financials are better.
- 6 Hence it can be said that the inflation has a long lasting impact on the financials of the companies. The instances of creative accounting and interfering with the financial figures are more during the tough times. In case the whole economy is rescued the prevalence of such practices can be reduced to some levels. The overall recommendation is that the government of Jordan must make codes and policies that save the economy from financial recession and provide incentives to the businesses that have been facing hard times after the pandemic. During the whole period there was a sluggish response in the stock exchange and the whole index value declined. With the help of effective policies, the inflation and misinformation can be dealt in a much better way. It is recommended to develop a code of financial governance and professional conduct for the businesses at both large and small levels so that the practice of misconduct in the financial reports can be avoided (Krafft et al. 2018)

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APPENDIX

Appendix 1: Tables



Appendix 1: Tables

Major Economic Indicators, 1989 and 2004

	1989	2004
Real GDP Growth, %	-13.4	8.6
Inflation, % change of CPI	25.7	3.4
Budget Deficit (including grants), % of GDP	-10.1	-2.7
Budget Deficit (excluding grants), % of GDP	-21.7	-12.8
Foreign Reserves, million US\$	130	4,824
External Debt, % of GDP	190	66.1

(Source: Oecd.org)

Financial Crisis: Effects and Measures

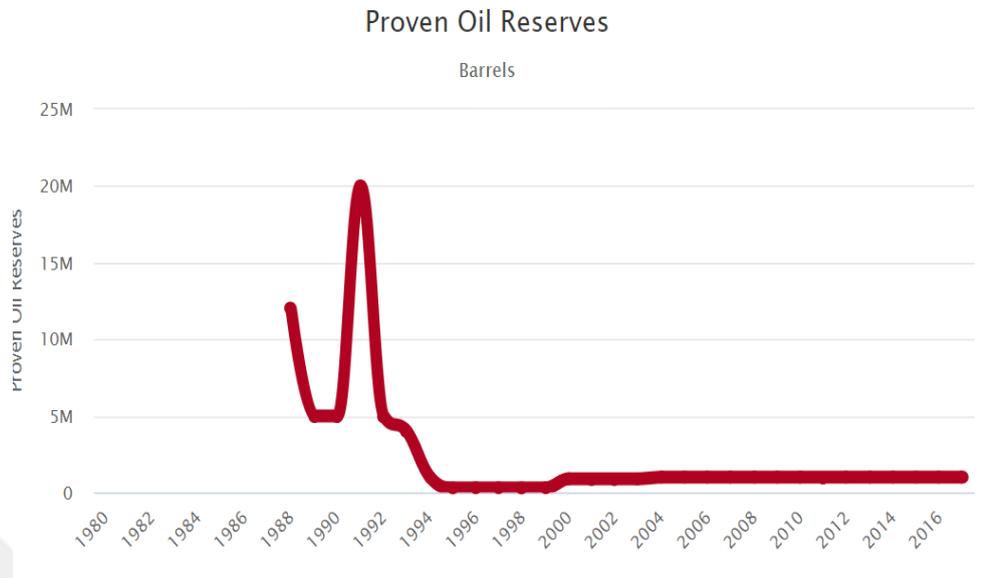
Major Economic Indicators, 2008-2010

	2008	2009	2010 IMF Forecast
Real GDP Growth, %	7.6	2.3	3.4
Inflation, % change of CPI	14.0	-0.7	5.7
Budget Deficit (including grants), % of GDP	4.3(*)	8.5	6.2
Budget Deficit (excluding grants), % of GDP	8.8(*)	10.3	7.8
Foreign Reserves, billion US\$	7.7	10.9	--
Total Debt, % of GDP	52.9	55.8	57.3

(*): Revenues excludes an amount of US\$ 500 million representing sale of treasury land.

(Source: Oced.org)

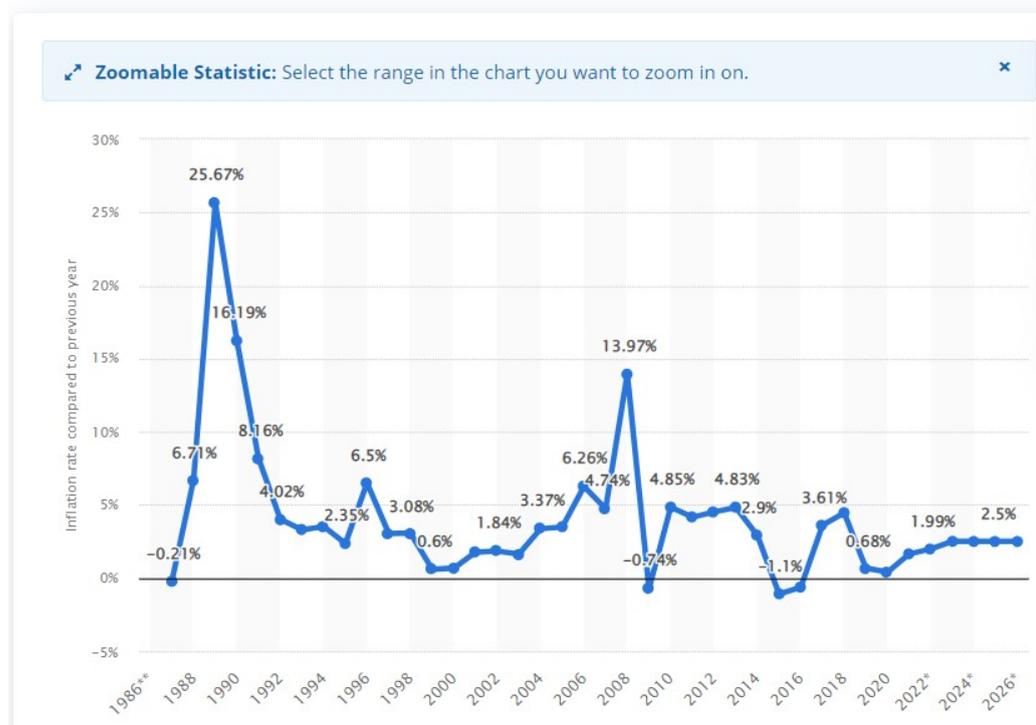
Oil reserves in Jordan



(Source: worldmeters.info)

Jordan: Inflation rate from 1986 to 2026*

(compared to the previous year)



(Source: Statista)

GDP growth (annual %) - Jordan

World Bank national accounts data, and OECD National Accounts data files.

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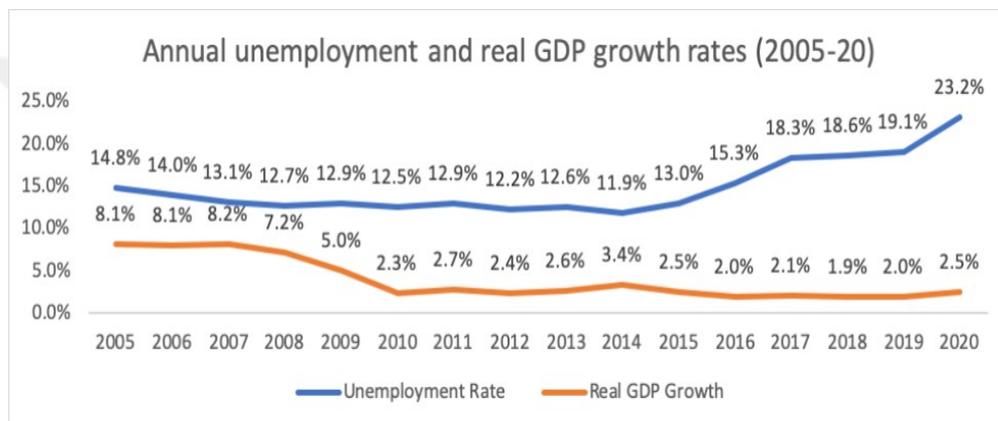
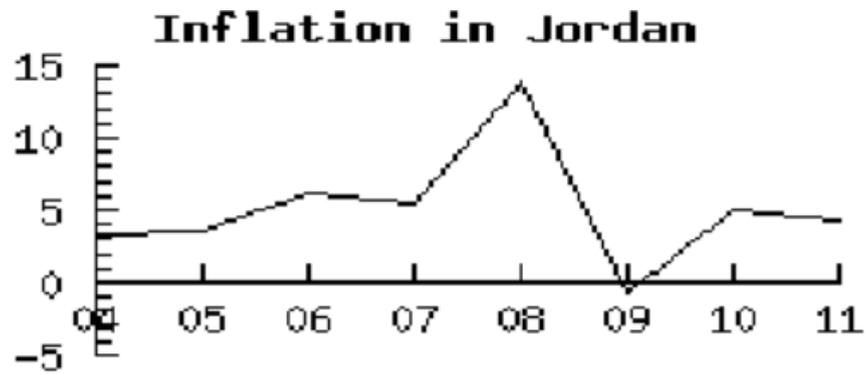
(Source: Data.worldbank.org)

Zoom 1m 3m 6m YTD 1y 5y

Dec 12, 2016 → Dec 13, 2021



PwC – Share price



(Source: Mei.edu)

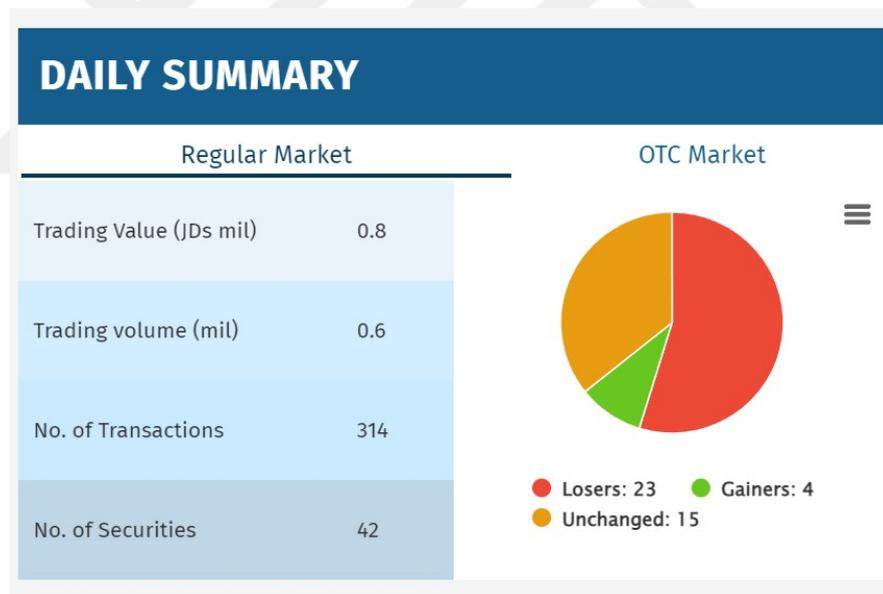
year	Potash (1000 ton)	Phosphate (1000 ton)
2005	1829.000	6374.700
2006	1728.000	5870.800
2007	1794.400	5541.400
2008	2004.600	6265.600
2009	1122.700	5152.900
2010	1933.500	6528.800

<i>Year</i>	<i>P/E Ratio</i>
2004	31.108
2005	44.203
2006	16.747
2007	27.986
2008	18.820
2009	14.363
2010	26.345
2011	22.564
2012	15.575
2013	14.742
2014	15.307
2015	14.028
2016	16.550

**Source: Amman Stock Exchange 2016 annual reports*

Yearly average P/E ratio of Jordanian companies from 2004 to 2016

(Source: Amman Stock Exchange)



(Source: Ase.com)

JORDAN COUNTRY GROWTH V/S WORLD GROWTH V/S GDP GROWTH



(Source: Wits.Worldbank)

Top 10 Export Countries

Country	Export USD\$
United States	\$1,967,153,896
Saudi Arabia	\$843,374,332
India	\$701,671,716
Iraq	\$634,694,229
United Arab Emirates	\$358,704,549
Kuwait	\$307,377,973
China	\$206,889,987
Lebanon	\$198,293,965
Egypt	\$167,335,840
Indonesia	\$135,260,077

Top 10 Import Countries

Country	Import USD\$
Saudi Arabia	\$3,106,916,360
China	\$3,086,738,055
United States	\$1,599,849,954
Turkey	\$880,933,923
India	\$861,742,128
Germany	\$822,373,645
Egypt	\$792,178,656
Italy	\$608,781,399
United Arab Emirates	\$517,756,080
France	\$424,735,001

(Source: Globaledge.mse.edu)

Top 10 Export Goods

HS Code	Export USD\$
(61) Apparel: Knit	\$1,824,083,818
(31) Fertilizers	\$865,539,745
(30) Pharmaceuticals	\$636,882,464
(28) Inorganic Chemicals	\$528,102,768
(25) Natural Minerals & Stone	\$455,835,088
(84) Industrial Machinery	\$308,358,983
(85) Electrical Machinery	\$260,769,232
(71) Precious Stones & Metals	\$253,804,670
(88) Aircraft	\$245,902,564
(39) Plastics	\$242,836,231

Top 10 Import Goods

HS Code	Import USD\$
(27) Oil & Mineral Fuels	\$3,461,297,601
(84) Industrial Machinery	\$1,530,571,479
(87) Motor Vehicles & Parts	\$1,347,718,132
(85) Electrical Machinery	\$1,316,072,177
(99) Items nesoi	\$819,635,338
(10) Cereals	\$779,045,946
(39) Plastics	\$669,003,574
(60) Knitted Fabrics	\$661,616,914
(30) Pharmaceuticals	\$550,838,015
(72) Iron & Steel	\$425,150,251

(Source: Globaledege.mse.edu)



RESUME

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