

# The Impact of Macroeconomic Factors on Saudi Stock Market (Tadawul) Prices

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**Abstract** - Financial markets play a crucial role in the foundation of the stable and efficient financial system of an economy. This research paper identifies the factors affecting the performance of the stock market in Saudi Arabia, known as aggregate (Tadawul), while the index is called Tadawul All Stock Index (TASI). The movements in the stock market can be quite volatile and sometimes movements in share prices can seem divorced from economic factors [1]. However, there are certain underlying factors which have a strong influence over the movement of share prices and the stock market in general. In this paper, we discuss the factors affecting the Saudi stock market, where the main factors have been identified, together with their own sub factors.

It can be discerned that generally, shares will be in greater demand when investors have the prospect of earning more dividends. Therefore, factors which make firms more profitable will tend to cause a rise in stock markets.

There are eight sectors listed on the Saudi stock market: Banks & Financial Services, Petrochemical Industries, Cement, Energy & Utilities, Agriculture & Food Industries, Telecommunication & Information Technology, Hotel & Tourism, Insurance, Industrial Investment, Building & Construction, Real Estate Development, Transport and Media and Publishing.

The sectors mentioned above include a number of companies listed on the Saudi stock market, amounting to 170 different companies which fall in different sectors, and because of the potential profit and loss of the shares of these companies, this highlights the existence of external factors and internal factors that affect returns and stock prices [2].

In this research paper, we will mention factors that have different effects on stock returns and which are divided into main factors (Political, Oil price, Company news and Industry performance, Performance and Investor sentiment and Economic factors), as well as sub factors that will be discussed later with the related details [3].

**Keywords:** Tadawul, TASI, Macroeconomic Factors.

## 1 Introduction

Saudi companies began operating in the mid-1930s, when a new company was founded as the first Arabic automotive stock company in Saudi Arabia, and by 1975 there were about 14 joint-stock companies. This has led to rapid economic growth in the Saudi capital, mergers with foreign banks in the 1970s, and newly established large numbers of companies and banks.

However, the Saudi Stock Exchange remained unofficial until the early eighties of the last century, when the government began its consideration of a regulated market for trading and the creation of the necessary regulations for that purpose. As it was, in 1984, a ministerial committee under the Ministry of Finance and National Economy, the Ministry of Commerce and the Saudi Arabian Monetary Agency was formed in order to organise and develop the market. The Saudi Arabian Monetary Agency is a government agency concerned with organising and monitoring the market until the Capital Market Authority was established in 2003 under the "Capital Market Law", which oversees the regulation and control of the financial market through the instructions and rules designed to protect investors and ensure fairness and efficiency in the market.

## 2 Literature Review

**Previous studies.** There have been several studies that focused on the factors affecting the stock market prices or index.

**Durga, Sultan and Bokkasam (2014)** in their research examined the three important factors influencing the returns in the Saudi Stock Exchange (TASI) based on the macroeconomic variables of the Saudi economy. The dependent variable (a factor or reason that is applied to see its impact on the result) taken here is the Saudi index that is Tadawul All Stock Index (TASI). Meanwhile, the three independent variables (a result that is measured by the impact of the independent variable) considered for this study were Oil WTI, Saudi Exports and Price Earnings Ratio. Correlation analysis revealed that Saudi Exports and PE Ratio were found to be highly correlated with the TASI. The researchers were able to confirm that the TASI was positively correlated with the three economic variables considered, i.e., Oil WTI, Saudi Exports and PE ratio. Since the three independent variables were significantly correlated with the dependent variable, the step-wise regression established the significant importance each of these three variables had in predicting the TASI [3].

Next, **Almazari (2014)** investigated the internal factors that affected the profitability of the banking sector. This study's main objective was to compare the profitability of the Saudi

and Jordanian banks by using internal factors for estimation. The researcher concluded on the following: The findings of this study reflected the actual status of the sample banks. Since then, very few empirical studies had been undertaken investigating the characteristics of internal factors affecting the profitability of banks in Saudi Arabia and Jordan [2].

Besides that, **Arouri and Fouquau (2009)** examined the short-run relationships between oil prices and Gulf Cooperation Council (GCC) stock markets. Since GCC countries were major world energy market players, their stock markets might be susceptible to oil price shocks. To account for the fact that stock markets might respond non-linearly to oil price shocks, both linear and non-linear relationships were analysed. The findings illustrated that there were significant links between the two variables in Qatar, Oman and UAE. Thus, stock markets in these countries reacted positively to oil price increases. For Bahrain, Kuwait and Saudi Arabia, it was found that oil price changes did not affect stock market returns. The researchers concluded that: First, the relationships between oil price changes and stock market returns in GCC countries could be expected to vary from one economic sector to another. A sector analysis of this link would be informative. Second, the same approach applied in this article could be used to examine the effects of other energy products, such as natural gas. Third, further research could examine the links of causality binding oil and stock markets in GCC countries and other oil-exporting countries [4].

In addition, **Aurangzeb (2012)** identified the factors affecting the performance of stock markets in South Asia. The data used in this study was collected from the period of 1997 to 2010 of three South Asian countries, i.e., Pakistan, India and Sri Lanka. Regression results indicated that foreign direct investment and exchange rates had significant positive impact on the performance of stock markets in South Asian countries while interest rates had negative and significant impact on the performance of stock markets in South Asia. Results also demonstrated the negative but insignificant impact of inflation on stock market performance in South Asia. It was recommended that in order to take full advantage of the stock market and carry on with the international markets, well managed macroeconomic policies were necessary in which interest rates and inflation rates were thoroughly monitored and there was a need to reduce the value as much as possible. This would give confidence to the investors as well as the industries. It was also recommended that some extra benefits were given to foreign investors as it was observed that the influence of foreign investors was strong in the region [5].

Research conducted by **Al-Abedallat and Al Shabib (2012)** aimed to study the effect of the change in investment and gross domestic product (GDP) on the Amman Stock Exchange Index, through the study of the relationship between the change in the investment and the rate of growth in gross domestic product (GDP) and the movement of the Amman Stock Exchange Index from 1990 - 2009. To test its hypotheses, the study used statistical analysis (SPSS), and chose multiple regression to analyse the relationship between

the dependent variable (Amman Stock Exchange Index) and the independent variables (investment and GDP).

The study concluded that there was a relationship between two macroeconomic indicators (investment and GDP) and the Amman Stock Exchange Index, and between each of them separately and the stock index, which meant that the movement of prices in the Amman Stock Exchange was affected by the movement of these two variables, and there was the effect of both variables on the movement of the Amman Stock Exchange Index. The impact of the change in investments was greater than the impact of change in GDP on the Amman Stock Exchange index [9].

### 3 Problem statement

Many individuals, entrepreneurs, companies and governments are investing large sums of money in the financial markets, nevertheless, the majority of market participants are not well informed about how to deal with the stock market and thus, they have a tendency to act irrationally. The lack of information at the right time and the cost of obtaining new information can cause a state of imbalance in the performance of the market and the performance of investors.

The movements of the stock market are difficult to understand and predict. This creates the need for empirical analysis, which can help in the understanding and prediction of the stock market and to help predict potential stock market prices. Hence, this study attempts to address the gap in the literature through the relationship between the stock prices of analysing and influencing internal and external factors in the Saudi stock market.

## 4 Data Collection

### 4.1 Data Collection

The data for this study was collected from 500 reports which were published from September 2015 to February 2016. By using daily data to portray a larger view of the relationship and data filtration criteria, the data covered 150 day observations for each variable. Data regarding TASI and the sectors have been extracted from the official website of the Saudi Stock Exchange ([www.tadawul.com.sa](http://www.tadawul.com.sa)) and from the website of Aljazira Capital (<http://www.aljaziracapital.com.sa>). Aljazira Capital was chosen as a source as it is a Saudi Closed Joint Stock company operating under the regulatory supervision of the Capital Market Authority and it specialises in securities business and providing dealing, underwriting, managing, arranging, advisory and custody services.

The aim of this paper is to investigate the effects of macroeconomic determinants on the performance of the Saudi stock market. It proposes to identify the factors affecting stock market prices through daily, weekly and monthly economic reports that specialise in Saudi financial market affairs analysis.

## 4.2 Brief Description of Factors

### 4.2.1 Political

The political factor is a major cause for the stability of the economy in general and the stock prices in the financial market in particular. This is because this factor also affects neighbouring countries. Non-political stability and exposure to political shocks such as demonstrations have confirmed the changes in market volatility as a result of some domestic and international events that have an impact on the domestic economy and the financial market [11].

### 4.2.2 Oil price

The price of oil and the stock market work in the opposite direction, with an increase in oil price leading to the decrease of the returns in the stock market, and vice-versa [6].

### 4.2.3 Company news and Industry performance

Many events can cause the price of a stock to rise or fall, from specific news about a company's earnings to a change in how investors feel about the stock market in general. Here are some company specific factors that can affect the share price: News releases on earnings, profits, future estimated earnings, Announcement of dividends, Introduction of a new product, Product recalls, Securing a new large contract, Employee layoffs, Anticipated takeover or merger, Change of management and Accounting errors or scandals [11].

### 4.2.4 Performance and investor sentiment

Investor sentiment or confidence can cause the market to go up or down, which can cause stock prices to rise or fall. The general direction that the stock market takes can affect the value of a stock: [7]

- Bull market – a strong stock market where stock prices are rising and investor confidence is growing. It is generally tied to economic recovery or an economic boom, as well as investor optimism.
- Bear market – a weak market where stock prices are falling and investor confidence is fading. It often happens when an economy is in recession and unemployment is high, with rising prices.

### 4.2.5 Economic factors

#### 4.2.5.1 Growing, Shrinking and Shocks

In summary, previous empirical research has suggested a connection between stock market development and economic growth, but this is far from definitive. Although the relationship postulated is a causal one, most empirical studies have addressed causality obliquely, if at all. Moreover, most studies have not adequately dealt with the fact that efficient markets should incorporate expected future growth in current period prices.

#### 4.2.5.2 Interest rates

The bank can raise or lower interest rates to stabilise or stimulate the economy, otherwise known as monetary policy. If a company borrows money to expand and improve its business, higher interest rates will affect the cost of its debt. Moreover, this can also reduce company profits and the dividends it pays its shareholders. As a result, its share price may drop. Clearly, in times of higher interest rates, investments that pay interest tend to be more attractive to investors than stocks [10].

#### 4.2.5.3 Economic outlook

If it looks like the economy is going to expand, stock prices may rise. Investors may buy more stocks thinking they will see future profits and higher stock prices. If the economic outlook is uncertain, investors may reduce their buying or start selling [8].

#### 4.2.5.4 Inflation

Inflation means higher consumer prices and this often slows sales and reduces profits. Higher prices will also often lead to higher interest rates. For example, the Bank of Samba may raise interest rates to slow down inflation. These changes will tend to bring down stock prices. Commodities, however, may do better with inflation, so their prices may rise [10].

#### 4.2.5.5 Deflation

Falling prices tend to mean lower profits for companies and decreased economic activity. Stock prices may go down, and investors may start selling their shares and move to fixed-income investments like bonds. Interest rates may be lowered to encourage people to borrow more. Whereby the goal is to increase spending and economic activity.

#### 4.2.5.6 Changes in economic policy

If a new government comes into power, it may decide to make new policies. Sometimes these changes can be seen as good for business, and sometimes not. In addition, they may lead to changes in inflation and interest rates, which in turn may affect stock prices.

#### 4.2.5.7 Value of the US dollar (increase or decrease)

Many Saudi companies sell products to buyers in other countries. If the US dollar rises, their customers will have to spend more to buy US goods. This can drive down sales, which in turn can lead to lower stock prices. When the price of the US dollar falls, it makes it cheaper for others to buy our products, therefore making it possible for stock prices to rise [11].

## 5 Data Analysis

The researchers in this study have analysed Aljazira Capital reports which are divided into three sections: daily, weekly and monthly, where they contain all the events and news related to companies listed divided into 13 sectors on the Saudi stock market (Tadawul), and subsequently connected them with the stock of the company. This enabled

the researchers to determine the impact of the news or event on the share price immediately, through events mentioned report of the Aljazira Capital analysis, and observation the impact of those events on the behavior of the stock market through the size of the buying and selling as well as the level of the change on the share price on that day.

The table below (Table 1) shows a range of events as a sample, which included reports and their impact on the various sectors of the Saudi stock market (Tadawul).

Table 1: Sample of events' impact on sectors

Event	Effect			sector
	Up	Down	Normal	
Occurrence of limited fire in one of the reservoirs for oily waste		yes		Petrochemical Industries
Cash dividend to shareholders of company	yes			Industries
Increase company's capital through issuance of bonus shares to company shareholders	yes			Industries
Negotiate for acquisition of foreign partner's share			yes	Building & Construction
Entering third partner as an investor	yes			Petrochemical Industries
Transformation from limited liability company to closed joint stock company	yes			Retail
Signature to get roundabout loan agreement		yes		Petrochemical Industries
Signed agreement with global investment company for organisational restructuring	yes			Industrial Investment
Recommendation of Board of Directors to increase capital through share offering	yes			Petrochemical Industries

Use of funds obtained from issuance of shares from IPO Subscription Process	yes			Insurance
Expiration of Memorandum of Understanding and signing of new Memorandum of Understanding	yes			Transport
Stop production in order to conduct periodic maintenance	yes			Petrochemical Industries
Signing of Memorandum of Understanding to renting a piece of land and prefabricated buildings	yes			Agriculture & Food
Signing of sale of exclusive franchise agreement	yes			Retail
Experimental operation of plant equipment before starting actual production	yes			Industrial
Signing of agreement on the purchase and modernisation of a fleet of buses	yes			Transport
Signed agreement to provide automated insurance system services	yes			Insurance
Modified legal form of company and converted to limited liability company		yes		Retail
Suspension to request rehabilitation of company because of failure to meet eligibility requirements	yes			Insurance
Transmission company's main administration offices from old		yes		Industrial



place to new address				
Signing of long-term loan	yes			Industrial Investment
Announcement of company's strategy for the next five years	yes			Health
Signing of credit facility agreement to ensure compatible with provisions of Islamic Sharia law		yes		Industrial
Signing contract to buy factory for production of medical supplies	yes			Industrial
Signing of Memorandum of Understanding for sale of land in an industrial area	yes			Banks
Stop production of ovens (for clinker - essential ingredient for cement) on temporary basis until market conditions improve		yes		Cement
Fire in rubber belt conveyor in limestone reservoir		yes		Cement
Postponement of replacement of old cement mills due to market conditions		yes		Cement
Memorandum of Understanding to buy stake in one of the founding companies of the manufacturing industries		yes		Power
Renewal of agency's contract to exploit franchise brand		yes		Transport
Occurrence to seek electrical circuit breaker in the room.	yes			Retail

Receive payment under account of insurance company as result of insured accident	yes			Petrochemical Industries
Reschedule instalments for outstanding loan balance	yes			Petrochemical Industries
Signed agreement to acquire partner owned by another	yes			Petrochemical Industries
Signing of credit facility agreement compatible with the provisions of Islamic Sharia law	yes			Banks
To approve company's request to renew rehabilitated to provide health insurance services	yes			Insurance
Buy all shares of another partner		yes		Industrial
Announcement of completion rate achieved in company's projects	yes			Cement
Announcement of accumulated losses		yes		Insurance
Announcement of decreases in net losses		yes		Industries
Announcement of earnings before Zakat	yes			Insurance
Signed Memorandum of Understanding	yes			Building & Construction
Signature for Islamic financial loan	yes			Hotel & Tourism
Negotiate for acquisition of foreign partner's share	yes			Hotel & Tourism
Announcement of sale of part of the shares owned by the company	yes			Transport Sector

Announcement of purchase of part of shares owned by partner and attach to company	yes			Transport Sector
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## 5 Conclusions

Through the results that have been obtained from this research, it can be confirmed that there is a direct effect of the relationship between the direction of the stock price rise or fall, and all the events and news that exposed the facility.

Based on that and through follow-up news and events, an investor can decide to purchase or sell stocks at the right time.

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