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## The impact of newspaper economic content on stock anomalies in Palestine exchange market

أثر المحتوى الاقتصادي للصحف على أداء الأسبهم في بورصة فلسطين

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أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

## The impact of the economic content of newspapers on stock anomalies in Palestine exchange market

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## نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ مروان جميل محيسن محيسن لنيل درجة الماجستير في كلية التجارة/ قسم إدارة الأعمال وموضوعها:

> أثر المحتوى الاقتصادي للصحف على أداء الأسهم في بورصة فلسطين The Impact of Newspaper Economic Content on Stock Anomalies in Palestine Exchange Market

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والله ولي التوفيق ،،،

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#### Abstract

This study investigates the impact of newspaper content on stock returns and trading volume in Palestinian financial market. The researcher used the textual analysis approach to analyze the content of economic pages in three local newspapers, Al-Hayaa, Al-Ayyam, and Felesteen. To measure the tone of newspaper economic content, the researcher constructed two lists of words that have an economical denote; the first is positive and contains 188 words (50 roots and 138 derivatives), the second is negative and contains 155 words (50 roots and 105 derivatives). Then he counted the number of occurrence for each word on a daily base to calculate the weight of each word and the score for each day. The study analyzed the content of 8,666 economic pages in the three newspapers form 1 January 2011 to 31 December 2014, the content along this period contains about 16,143,197 words, while the positive and negative words repeated 411,702 times in the texts during the same period. The researcher collected the data about stock returns and trading volume for all listed companies from Palestinian stock market website on a daily base. Using a multivariable regression samples, he studied the impact of the media tone on publishing day and 3 days later. The study found that, form 49 listed companies, only 15 companies have a significant relationship between media tone and trading volume during the publishing day with 3 lagging days. In addition, it found that only 10 companies have a significant relationship between media tone and stock returns during the publishing day with 3 lagging days. In the two cases, some companies responded to the media quickly, in the publishing day, and the response of some companies is slow, came after 3 days of publishing.

**Keywords:** *behavioral finance, textual analysis, media tone, PEX, anomalies, newspaper economic content, investor sentiment.* 

#### الملخص

تبحث هذه الدراسة تأثير محتوى الصحف على عوائد الأسهم وحجم التداول في السوق المالي الفلسطيني، لقد استخدمنا في هذه الدراسة منهج التحليل النصبي ( textual analysis approach) لتحليل محتوى الصفحات الاقتصادية في ثلاث صحف محلية هي الحياة، الأيام، فلسطين. ولقياس النغمة التي كتب بها المحتوى الاقتصادي للصحف، أنشأنا قائمتين من الكلمات ذات الدلالة الاقتصادية، القائمة الأولى إيجابية وتتكون من 188 كلمة (50 جذر و138 مشتقة)، والثانية تتكون من 155 كلمة (50 جذر و105 مشتقة). ثم قمنا بإحصاء عدد مرات تكرار كل كلمة من الكلمات لإيجاد وزن كل كلمة ومقياس النغمة الإعلامية لكل يوم. ومن أجل ذلك، قمنا بتحليل 8,666 صفحة اقتصادية في الصحف الثلاث في الفترة ما بين 1 يناير 2011 إلى 31 ديسمبر 2014، وقد بلغ عدد الكلمات الإجمالي خلال هذه الفترة 16,143,197 كلمة، بينما ذُكرت الكلمات الإيجابية والسلبية 411,702 مرة في النصوص خلال تلك الفترة. أما البيانات المتعلقة بعوائد الأسهم وحجم التداول لكافة الشركات المدرجة فجمعناها من خلال الموقع الالكتروني للسوق. باستخدام نماذج الانحدار المتعدد، درسنا أثر النغمة الإعلامية في يوم النشر وفي الأيام الثلاثة التالية له. وتظهر نتائج الدراسة أنه من بين 49 شركة مدرجة في السوق، فقط 15 شركة يوجد تأثير للمحتوى الإعلامي على حجم تداول أسهمها خلال يوم النشر والأيام الثلاثة التالية له. كما وجدت الدراسة أن 10 شركات فقط يوجد تأثير للمحتوى الإعلامي على عوائد أسهمها خلال يوم النشر والأيام الثلاثة التالية له. وفي كلا الحالتين، هناك شركات ذات استجابة سريعة للمحتوى الإعلامي، أي خلال اليوم الأول، وهناك شركات ذات استجابة بطيئة، لا تستجيب إلا في اليوم الرابع فقط.

كلمات مفتاحية: التمويل السلوكي، التحليل النصب، النغمة الإعلامية، بورصة فلسطين، المحتوى الاقتصادي للصحف، عاطفة المستثمر.

[ق:16]

And We have already created man and know what his soul whispers to him, and We are closer to him than his jugular vein

### Epigraph

Even apart from the instability due to speculation, there is the instability due to the characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than on a mathematical expectation, whether moral or hedonistic or economic.

John Maynard Keynes The General Theory of Employment, Interest, and Money (1936)

#### Dedication

This thesis is dedicated to my father and mother, they have been waiting this moment for a long time, and their prayers were my support,

And to my wife, "Roba" for her eternal love and patience against fatigue and hardship,

And to my brothers and sisters, who provided me with support and encouragement,

And to my dear children, Lana, Lama, and Asem.

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#### List of Abbreviations

- **TV** The trading volume represented by traded shares.
- **r** The stock returns.
- **MT** The media tone.
- **PEX** The Palestinian Exchange.
- **MPT** Modern portfolio theory.
- **EMH** Efficient market hypothesis.
- **OK** Objective knowledge.
- **SK** Subjective knowledge.
- **BTA** Better than average.
- **OECD** Organization for Economic Co-operation and Development
- **IOSCO** International organization of securities commissions.
- **TNC** transnational corporations.
- **IDC** International Data Corporation.
- **WSJ** Wall Street Journal.
- **DJ** Dow Jones
- DJIA Dow Jones Industrial Averages

# Chapter 1 Introduction

## Chapter 1 Introduction

#### **1.1 Background**

Finance is a very distinct subject in social sciences. The huge amount of data and information published on the financial market enable researchers to test different hypotheses and theorems at a higher confidence levels than in other subjects in the social sciences. At the same time, the valuable information extracted from the financial data encourage them to rethink the foundations of many theories that are related to financial economics. In the last decades, capital market has passed through two different theories. Each theory has attempted to better explain the movement of market prices. The first and older theory is "traditional finance", and the currently rising theory called "behavioral finance".

Traditional finance, sometimes called "standard finance", assumes that investment agents (individuals or groups) are rational and the law of one price holds. Important aspects of agents' rationality are maximization of expected utility and Bayesian learning (Glaser, Nöth et al. 2004). This implies, for example, that choices are time-consistent. From a market perspective, traditional finance theory rests on the law of one price, which states that securities with the same payoff have the same price.

Traditional finance is based on the classical model of rational economic decision making. In general, standard finance assumes that all individuals are wealth maximizes. In other words, an investor is considered rational if that person selects the most preferred choice, customarily defined as maximizing an individual's utility or value function (Ricciardi 2008). This rational investment decision maker is assumed to maximize profits, possess complete knowledge, and capitalize on his or her own economic well-being.

The foundation of traditional finance is associated with the modern portfolio theory (MPT) and the efficient market hypothesis (EMH). (MPT) is a stock or portfolio's expected return, standard deviation, and its correlation with the other stocks or mutual funds held within the portfolio. With these three concepts, an efficient portfolio can be created for any group of stocks. An efficient portfolio is a group of stocks that has the maximum expected return given the amount of risk assumed, or on the contrary, contains the lowest possible risk for a given expected return.

Another main theme in traditional finance is (EMH). The (EMH) states the premise that all information has already been reflected in a security's price or market value, and that the current price the stock is trading for today is its fair value (Ricciardi and Simon 2000). Since stocks are considered to be at their fair value, proponents argue that active traders or portfolio managers cannot produce superior returns over time that beat the market.

Ricciardi (2008) summarizes (EMH) forms in the following brief description:

- 1. **The weak form:** The market is efficient with respect to the history of all past market prices and information is fully reflected in securities values.
- 2. **The semi-strong form:** The market is efficient in which all publicly available information is fully reflected in securities values.
- 3. **The strong form:** The market is efficient in that all information is fully reflected in securities prices.

Theoretical challenges to (EMH) appeared in the 1970s pioneering work of cognitive psychologists Amos Tversky and Daniel Kahneman raised questions about rationality of investors. As early as the mid-1980s economists speculated that many traders act not on information but on hunch and that, the market absorbs no more rationality of calculation than it does mere noise.

Because of the inability of efficient market theory to explain the persistence of some patterns in the financial markets, many new theories have emerged to understand these patterns. Most of these theories rely on some kind of human psychological biases and are generally grouped under the category of behavioral finance.

From the beginning of the 1980s, and more in the 1990s, new empirical studies of security prices have reversed some of the earlier evidence favoring the EMH. The traditional finance school named these observations anomalies, because they could not be explained in the neoclassical framework. In the response to a growing number of puzzles, a new approach to financial markets has emerged "behavioral finance". It focuses on investors' behavior and the decision making

process. In the contrary to the traditional theory, behavioral finance assumes that agents may be irrational in their reactions to new information and make wrong in investment decisions. As a result, markets will not always be efficient and asset pricing may deviate from predictions of traditional market models.

Behavioral finance as a sub discipline of behavioral economics is finance incorporating findings from psychology and sociology into its theories. It focuses on investors' behavior and the decision making process in order to understand anomalous pricing of assets and other puzzling observations taken empirically from capital markets. Behavioral finance models are usually developed to explain investor behavior or market anomalies when rational models provide no sufficient explanations.

Behavioral finance aims at improving the understanding of financial markets and its participants by applying insights from behavioral sciences (e.g. psychology and sociology) (Baltussen 2009). This in sharp contrast to the traditional finance theory, which seeks to understand financial decisions by assuming that markets and many of its participating people and institutions (called economic agents) are rational. That is, they should act in an unbiased fashion and make decisions by maximizing their self-interests. In essence, the economic concept of rationality means that economic agents make the best choices possible for themselves.

Szyszka (2007) defined behavioral finance as an area within the finance discipline that focuses on investors' behavior and the decision making process in order to understand anomalous pricing of assets and other puzzling observations taken empirically from capital markets.

Behavioral finance attempt to understand why financial markets react inefficiently to public information. One stream of behavioral finance examines how psychological forces induce traders and managers to make suboptimal decisions, and how these decisions affect market behavior.

Ricciardi and Simon (2000) defined the various disciplines of behavioral finance as the following:

1. **Psychology**: is the scientific study of behavior and mental processes, along with how these processes are affected by a human being's physical, mental state, and external environment.

- 2. **Sociology**: is the systematic study of human social behavior and groups. This field focuses primarily on the influence of social relationship on people's attitudes and behavior.
- 3. **Finance**: is a discipline connected with determining value and making decisions. The finance function allocates capital, including the acquiring, investing, and managing resources.



#### Figure (1.1): the various disciplines of behavioral finance.

Source: (Ricciardi and Simon 2000)

#### **1.2 Problem Statement**

Stock market prediction has attracted much attention from academia as well as business. But can the stock market really be predicted? Early research on stock market prediction was based on random walk theory and (EMH). According to the (EMH) stock market, prices are largely driven by new information, i.e. news, rather than present and past prices. Since news is unpredictable, stock market prices will follow a random walk pattern and cannot be predicted with more than 50 percent accuracy (Bollen, Mao et al. 2011). This study contributes to the growing literature on the role of the media in financial markets.

Evaluating the effect of the media on the stock market anomalies became difficult issues. A simple relation between media tone and stock market performance (for example, trading volume and returns) may result from unobserved news shocks, which create an omitted variable bias. Reality, if such shocks generate an unusual market reaction and are simultaneously reported in the press, then the market reaction and the media reports are correlated, but the media does not cause the unusual reaction. Even in the absence of news shocks, the press may report on the market activity itself, thereby inducing a correlation between the media and the market's response.

There is a large amount of evidence that stock prices are predictable. Chan (2003) raised an interesting question. "Is there a predictable difference between stock returns after public news announcements and returns after large price movements, but no public news? But Schumaker and Chen (2006) Saied that no method has been discovered to accurately predict stock price movement. The difficulty of prediction lies in the complexities of modeling human behavior.

Tetlock (2007) measured the interactions between the media and the stock market using content from a popular Wall Street Journal column. He found that high media pessimism robustly predicts downward pressure on market prices and that unusually high or low pessimism forecasts high market trading volume. Tetlock, Saar-Tsechansky et al. (2008) studied a wide selection of newspaper articles in the United States and analyze the relation between individual firms' accounting earnings and stock returns. They found that stock prices under react to negative information and that the predictive power of negative words is largest for stories that focus on fundamentals. Griffin, Hirschey et al. (2011) found that in most developed countries, a firm's stock is more volatile on days on which there is public news about the firm. In emerging markets, however, volatility does not respond to either news or no-news days. Fang and Peress (2009) found that the returns of stocks that have received high media coverage are lower than the returns of stocks receiving low media coverage. Engelberg and Parsons (2011) found that local press coverage significantly affects the daily trading volume of local retail investors.

News media publications play an important role in providing financial market participants with valuable information and aiding investors in forming their views on the stock market (Ferguson, Philip et al. 2014). In recent times, researchers have begun to analyze linguistic data contained in media articles using textual analysis in an attempt to capture hard-to-quantify firm-specific information in news media data and determine the impact on stock prices. The investment priority of a person is based on several factors like his/her awareness, environment, level of exposure, intensions, beliefs, responsibilities and so on. Every individual is unique because of the individuality of his/her behavioral traits. One of the related researches has been conducted in Italy found that "asset awareness might be of first order importance in determining portfolio selection"

Many previous studies found that stock's return change positively or negatively according to the amount of awareness that the investors have toward it. These Phenomena cannot be seen clearly in the emerging countries because of many reasons, in the other hand, major economies countries such as USA, Europe, Japan, Canada, there are active markets, stock market indices, and other financial media tools, so the relationships between the investor awareness toward a specific stock, and the return on that stock can be seen and traced easily in these countries.

When the investor awareness of a firm's stock increases, the base of the firm's investor will increase, this will lead to a lower required return and, lower cost of capital, and a higher stock price. To protect the interests of investors as well as educate them, the Ministry of Corporate Affairs in India had organized as many as 306 investor awareness programs across the country in November 2013, they are looking at ways to leverage mobile application technology and social media for its financial literacy and investor awareness campaigns.

The relationship between the newspaper content and stock return and trading volume has not been tested in the Palestinian stock market before. In this study, the researcher wants to investigate the impact of newspaper economic content on the stock market anomalies (return, trading volume). Abushammala (2011) found that the (PEX) is an inefficient in weak form by using the analysis of all daily time series of the (PEX) indices during the Period from January 1st, 2007 to December 31st, 2010; therefore, the effect of public media is expected to be larger.

Therefore, the study seeks to answer the following six questions:

- 1. Do the PEX activities have adequate media coverage in the local newspapers?
- 2. What is the relation between the firm size and the size of newspaper coverage toward it?
- 3. Is there a relationship between newspaper coverage and return on stocks listed on the PEX? If yes, what is the form of the relationship?

- 4. Is there a relationship between newspaper coverage and trading volume for stocks listed on the PEX? If yes, what is the form of the relationship?
- 5. Does newspaper content impact on stock returns extends for more than a day? Or limited on the publishing day only?
- 6. Is newspaper content impact on stock trading volume extends for more than a day? Or limited on the publishing day only?

#### **1.3 Variables**

The study aims to measure the effect of newspaper economic content on the stock return, and trading volume. Therefore, the study has one independent variable, it is the newspaper economic content represented by its tone. This variable affects two dependent variables, stock return and trading volume. Figure (1.2) show the relationship between the study variables. The researcher can define the variables as follow:

#### **1.3.1 Dependent variables**

#### 1.3.1.1 Trading volume (TV)

Trading volume, which represents the total number of traded shares in a particular day, is an important measure of stock performance, and it is also expected to be affected by media tone. Tetlock (2007) found "that high media pessimism predicts downward pressure on market prices followed by a reversion to fundamentals, and unusually high or low pessimism predicts high market trading volume. These results and others are consistent with theoretical models of noise and liquidity traders". Engelberg and Parsons (2011) found that local press coverage significantly affects the daily trading volume of local retail investors.

#### 1.3.1.2 Stock return (r)

A fundamental principle of financial economics that asset prices change in response to unexpected fundamental information. Boudoukh, Feldman et al. (2013) found that, when information can be identified and that the tone (i.e., positive versus negative) of this information can be determined, there is a much closer link between stock prices and information. Therefore, it is possible to predict the movement of

stock prices up and down in the short term, depending on the content of news articles.

The daily stock return is considered in this study, is based on the price change of a stock from the close of one trading day to the close of the next trading day. The closing price will be considered in all stock daily return calculations.



Figure (1.2): study variables relationships.

#### **1.3.2 Independent variable (media tone MT)**

Mass media outlets, such as newspapers, play an important role in disseminating information to a broad audience, especially to individual investors. Every weekday, some 55 million newspaper copies are sold to individual readers in the US, reaching about 20% of the nation's population (Fang and Peress 2009). To create a quantitative variable from text documents such as news stories, there are different approaches such as financial dictionaries, bag of word, and lists of words, which the researcher will use in this study. It is depending on construction of positive and negative word lists to represent the weight and score of the unstructured text.

The independent variable (media tone), denoted by "MT", will be measured by the score of daily documents; each document consists of all economic pages published in that day at the three newspapers in my sample. After construction of word lists, the researcher will calculate the weight of each word, the weight of the word in each document over the total period, and then, calculate the score of the document by finding the sum of the weight of the negative and positive words appeared in the document. The document score will be represented by a numerical value, positive or negative, depending on the good or bad news appeared in the newspaper economic pages.

#### **1.4 Hypotheses development**

Several studies analyze the general impact of news stories on financial markets. Engelberg & Parsons (2011) found that local press coverage significantly affects the daily trading volume of local retail investors. Das & Chen (2007) applied an algorithm to extract investor sentiment from stock message boards and found that tech-sector postings are related to stock returns. Other studies confirm that news stories are associated with considerable response by the financial sector.

Recent literature provides increasing evidence that the mass media's coverage of individual stocks can influence individual investors' trading behavior.

After reviewing the previous studies, the researcher can develop the following hypothesis:

H1: There is an adequate media coverage in the local newspaper about the Palestinian stock market.

H2: There is a significant positive relationship between media tone in the local newspapers and the trading volume of the stock listed in the market.

H3: There is a significant positive relationship between media tone in the local newspapers and the returns of the stock listed in the market.

H4: There is a significant correlation between media tone in the local newspapers and the stock anomalies (returns and trading volume).

H5: The impact of the media tone in local newspapers on stock trading volume extends for more than a day after the date of publishing.

H6: The impact of the media tone in local newspapers on stock returns extends for more than a day after the date of publishing.

#### **1.5 Study Objectives**

#### **1.5.1 Main objective**

The main objective of this study is to analyze whether quantitative measures of newspaper language predict stock market returns. Stock market prediction has attracted much attention in financial research. Popular predictors studied include economic and financial data such as past stock returns, macroeconomic variables, and time series of balance-sheet data. In addition to economic and financial data, daily newspapers also may contain relevant information for financial markets.

#### 1.5.2 Sub objectives

The sub objectives of the study are:

- 1. To Measure the extent of media coverage of shares traded in "PEX" through analyzing newspaper articles content.
- 2. To investigate the impact of newspaper coverage and media tone on the stock returns.
- 3. To investigate the impact of newspaper coverage and media tone on the stock trading volume.

#### **1.6 Study Significance**

The main importance of this study is using a quantizing model to measure the magnitude and direction of the news tone, and investigating the effect of that tone on the stock returns and trading volume. To my knowledge, it is the first study used the media tone to predict stock returns and trading volume in the Palestinian stock market. All the previous pricing models used standard finance variables such as earning announcements, financial ratios, financial statements and analysis, which are interesting for the professionals only, not for the normal investor. The study is important for three reasons:

- 1. The first reason, to the best of our knowledge, it is the first study in "PEX" that investigate the impact of media content on the stock return.
- 2. The second reason, it is introducing a new approach for predicting the stock return and trading volume.
- 3. The third reason, it expected results, which will be very helpful for all investment parties, firms, investors, analysts, and so on. Additionally, on a broader range, it will contribute to the growth of the national economy.

#### **1.7 Study limitations**

1. All newspaper documents were written in Arabic, and available in PDF format, in the same time, the software programs, which used in word counting, often do not support Arabic language.

- 2. The researcher found only one program software supporting the Arabic language, and in which he faced some problems, and beat it with difficulty.
- 3. The encoding system of newspaper documents is very volatile; there is no unique encoding system for all newspaper taken in the sample over the total period.
- 4. 49 is the number of listed companies in the financial market, in the first and second level of the market, which is a very limited number comparing with other financial markets.
- 5. Lack of trading days for some listed companies in the market, almost half of the listed companies have average of annual traded days less than 100 days.

# Chapter 2 Media tone predictability

#### Chapter 2

#### Media tone predictability

#### **2.0 Introduction**

This chapter presents a theoretical background about the most important concepts related to the subject of study, including some definitions and findings of the most important studies in this area, and critical elements for the healthy development of the financial market.

In general, the research examines the impact of media content tone on the performance of the stock (returns and trading volume). With respect to stock performance, the number of studies that deal with is very large. Therefore, there is no need to repeat it in my research. So that, this chapter focus on media content tone and how it is measured, and its effects on the individual behavior, decision-making process, and guiding public opinion.

If you have time to read a limited number of researches, why did you choose to read my one? When Investors have time to weigh the advantages of only a limited number of stocks, why do they consider some stocks and not others? In making a decision, the first step is selecting which options to consider, and then decide which of those options to choose. When there are many alternatives, options that attract attention are more likely to be considered, hence more likely to be chosen, while options that do not attract attention are often ignored. If the main properties of an option are critical to our utility, attention may serve us well. If not, attention may lead to sub optimal choices.

Many previous studies found that individual investors are more likely to buy rather than sell those stocks that catch their attention, this called attention Or sentiment affects, Barber and Odean (2008) found that attention affects buying, where investors search across thousands of stocks, more than selling, where investors generally choose only from the few stocks that they own. While each investor does not buy every single stock that grabs his attention, individual investors are more likely to buy attention-grabbing stocks than to sell them.

Public news announcements are a major mechanism for disseminating information to investors. Each day the financial media releases thousands of articles covering companies in markets worldwide. Investors use this news to estimate assets' fundamental values (Griffin, Hirschey et al. 2011). For individual investors, who typically lack the resources to learn about the vast universe of securities, media coverage can play a significant role in putting certain stocks on their radar screen (Fang, Peress et al. 2014).

Tetlock (2007) measured the interactions between the media and the stock market using content from a popular Wall Street Journal column. He found that high media pessimism robustly predicts downward pressure on market prices and that unusually high or low pessimism forecasts high market trading volume. Tetlock, Saar-Tsechansky et al. (2008) studied a wide selection of newspaper articles in the United States and analyze the relation between individual firms' accounting earnings and stock returns. They found that stock prices under react to negative information and that the predictive power of negative words is largest for stories that focus on fundamentals. Tetlock (2011) showed that stock market returns generally respond less to old (stale) than to new information about firms. Griffin, Hirschey et al. (2011) found that in most developed countries, a firm's stock is more volatile on days on which there is public news about the firm. In emerging markets, however, volatility does not respond to either news or no-news days. Fang and Peress (2009) found that the returns of stocks that have received high media coverage are lower than the returns of stocks receiving low media coverage. Engelberg and Parsons (2011) found that local press coverage significantly affects the daily trading volume of local retail investors

The subject now is how to measure the extent to which a stock attracts investors' attention? A direct measure would be to go back in time and, each day, ask the thousands of investors in the sample to which stocks they thought about that day. Because the daily attention paid to stocks cannot be measured directly, the researcher will measure it indirectly.

The study focuses on one observable measures that are likely to be associated with attention attracting, it is the news written in the daily newspapers which published nationwide. Although the news is not a perfect proxy for attention, but it is useful. An attention attracting is likely to be reported in the news. Investors' attention could be attracted through other means, such as chat rooms or word of mouth, but an event that attracts the attention of many investors is usually newsworthy. The rest of this chapter is consists of four parts as follows. Part 1 reviews the behavioral finance theory as a new approach for stock returns predicting. Part 2 defines and explains text mining and textual analysis process. Part 3 presents PEX and its listed company's details. And part 4 presents the local newspapers details.
# Part (1) behavioral finance theory

#### **2.1.1 Investor behavior**

Any person during his/her life takes many decisions; financial decisions are considered important and difficult decisions compared to daily life decisions such as eating, clothing and traveling. Many factors affect the financial decision of investor; one of the most important factors is disseminated information.

There is now a substantial debate over whether observed asset prices are determined purely rationality or also by behavioral characteristics of investors. In general, this debate centers on how investors react to information about a firm. If investors react only rationality, prices should, on average, adjust to news based on its content. Alternately, if investors have behavioral biases towards their private information, they will tend to overreact to public information they agree with and underreact to information they disagree with (Gadarowski 2002).

The decision to invest in the stock exchange also requires awareness of the available financial instruments, an assessment of the risk-return tradeoff as an act of trust, and the overall fairness of the system. Many potential investors do not invest in the stock market because of their limited information on stocks; they do not understand the operations and different pricing strategies of the stock market. Trust and awareness affect stock market participation via two different channels; firstly, Awareness serves to reduce barrier of knowledge of the available assets secondly, trust enhances the confidence level of investors in the stock market (Qureshi, Mehmood et al. 2014).

#### 2.1.1.1 Behavioral finance: a new approach for stock returns predicting

Although the "behavioral finance" is considered a relatively new theory in economic and finance field, it is expanding quickly during the last years. This theory aims at providing explanations for investors economic decisions by the linking between two related theories: behavioral and cognitive psychological theory, and conventional economics and finance. There is no doubt that the behavioral finance theory became more famous during the 1990s, but some studies such as Ricciardi and Simon (2000) have indicated that the beginning of this theory back more than 150 years, during the nineteenth century and early twentieth century. Originally

published in 1841, MacKay's Extraordinary Popular Delusions and The Madness of Crowds presents a chronological timeline of the various panics and schemes throughout history. This work shows how group behavior applies to the financial markets of today.

From the previous studies which defined the behavioral finance, the researcher choose the following definitions: first, Ricciardi and Simon (2000) considered that "behavioral finance attempts to explain and increase understanding of the reasoning patterns of investors, including the emotional processes involved and the degree to which they influence the decision-making process. Essentially, behavioral finance attempts to explain the what, why, and how of finance and investing, from a human perspective. For instance, behavioral finance studies financial markets as well as". Second, Glaser, Nöth et al. (2004) introduced two stream of behavioral finance, one stream examines how psychological forces induce traders and managers to make suboptimal decisions, and how these decisions affect market behavior, and the other stream examines how economic forces might keep rational traders from exploiting apparent opportunities for profit. Third, Szyszka (2007) defined behavioral finance as "an area within the finance discipline that focuses on investors' behavior and the decision making process in order to understand anomalous pricing of assets and other puzzling observations taken empirically from capital markets". It has emerged in the response to the difficulties faced by the traditional theory in explaining some financial phenomena". In the remaining part of this section, the researcher will discuss four themes of behavioral finance: overconfidence, financial cognitive dissonance, regret theory, and prospect theory.

#### 2.1.1.2 Overconfidence

Overconfidence is a developed psychology theory, which has a great value in behavioral finance field. Overconfidence in behavioral finance meaning that people think they know more than they really do, for example, the investors who achieve high stock returns attribute these returns to their experience in selecting the best stocks and their optimum utilization of the available information, and those investors often trading at a high frequency in the stock market. Many previous studies indicate that overconfidence theory partially able to interpret many of the financial market phenomena, which the traditional theories failed to interpret them, also it provided new interpretations for some phenomena, such as trading volumes and speculative bubbles. Overconfidence theory can be expressed in several faces, such as miscalibration, better than-average effect, illusion of control, and unrealistic optimism.

#### 1. Miscalibration

Miscalibration is one form of overconfidence. The phrase consists of two sections (mis, and calibration) which mean Incorrect or inaccurate calibration. Ben-David, Graham et al. (2010) defined miscalibration as "the systematic underestimation of the range of potential outcomes". Evidence from psychology experiments indicates that subjects are generally miscalibrated. This happens either because most overestimate their ability to predict the future, or because they underestimate the volatility of random events.

The investment decision-making process of investors is irrational and biased because investors make investment decision under certain constraints. These constraints may be associated with the investor, such as their limited capability and commitment, or come from the external environment, such as having access to limited information. Such constraints directly or indirectly, are likely to affect the knowledge structure of investors by influencing their calibration of self-knowledge. Knowledge calibration refer to the correspondence between objective knowledge (OK) and subjective knowledge of self-knowledge.

Because knowledge is an important factor in understanding investor behavior such as information search and information processing, researchers have distinguished between two types of investor knowledge, the first is objective knowledge (OK) that is, what is actually stored in memory, and the second is subjective knowledge (SK) that is, what individual perceive they know.

All of objective knowledge (OK) and subjective knowledge (SK) may be at high or low levels for any investor. Investor who holds accurate knowledge about investment product is considered have a high objective knowledge (high OK), and the investor who highly confident in his knowledge is considered have a high subjective knowledge (high SK), and vice versa. According to the (OK) and (SK) level, there are four probabilities of calibration as follow: High OK with high SK lead to proper calibration of self- knowledge.

- Low OK with low SK also leads to high calibration.
- High OK with a low SK leads to miscalibration arising from underconfidence.
- Low OK with a high SK leads to miscalibration arising from overconfidence.

We cannot do that if the two types of knowledge (OK and SK) are in the same level (high or low), the investors can be well calibrated because when they possess inaccurate knowledge, they are realistic in their assessment of the low level of knowledge that they possess. Miscalibration results from the lack of correspondence between OK and SK (Harrison and Estelami 2014). Figure (2.1) show the relationship between objective knowledge (OK) and subjective knowledge (SK).

#### 2. Better than-average effect

The better than average (BTA) effect is a kind of social comparison in which people evaluate themselves with reference to an average peer or the midpoint of a distribution, which is usually used as a normative standard. Research has consistently shown that people place themselves above this standard, and also above specific peers. Studies on the social comparison phenomena suggests that people have a tendency to believe they are better than others in different ways and that negative events in life are less likely to happen to them than their peers. And undoubtedly that the better than average (BTA) effect can affect investor decision-making process.





Source: (Pillai and Hofacker 2007)

#### 2.1.1.3 Illusion of control

The illusion of control refers to the tendency for human beings to think they can control or at least affect outcomes, which are clearly controlled by chance. In essence, people often fail to respond differently to controllable and uncontrollable events. A series of previous studies interprets the phenomenon of "illusion of control." Langer (1975) defined illusion of control as "an expectancy of a personal success probability inappropriately higher than the objective probability would warrant". This happens when people think that they have more control over events than objectively can be true. Ackert and Deaves (2009) cited this example to explain the phenomenon: one sees dice players acting as if they can control the outcome of the dice roll, and people actually believe that the risk of infection is partly a function of the character of the person that they are coming into contact with. It is sometimes argued that the illusion of control is beneficial because it can encourage people to take responsibility. It is like when a person is diagnosed with an illness; they want to take control through starting medication or changing their diet or other aspect of their lifestyle.

#### 2.1.1.4 Unrealistic optimism

Unrealistic optimism is a form of defensive attribution where people think that good things are more likely to happen to them than to their peers, and that bad things are less likely to happen to them than to their peers. It has important implications in many economic and managerial contexts. Many studies in social psychology found that people judge negative events as less likely to happen to themselves than to the average person, a behavior interpreted as showing that people are "unrealistically optimistic" in their judgments of risk concerning future life events (Harris and Hahn 2011).

The following are some example of such very positive events or very negative events listed in (Ackert and Deaves 2009) about unrealistic optimism: winning the lottery or dying of cancer, students expect to receive higher marks than they actually do receive, overestimate the number of job offers that they will receive, and despite high divorce rates, newlyweds almost universally expect that their marriages will succeed.

# 2.1.2 Financial cognitive dissonance

When a conflict occurs between new information that a human acquires, and what exists previously in his memory of the concepts and facts, the human becomes in a state of anxiety and lack of psychological satisfaction, this phenomenon is called "cognitive dissonance". For example, when people smoke (behavior) and they know that smoking causes cancer (cognition). In psychology, cognitive dissonance is the mental stress or discomfort caused by holding two or more conflicting beliefs at the same time, or from receiving new information conflicting with existing beliefs, ideas or values. Goetzmann and Peles (1997) defined cognitive dissonance in the context of investment decision making as "a psychological cost that investors seek to reduce by adjusting their beliefs about the efficacy of past investment choices".

#### **2.1.3 Regret theory**

Regret is the third theme of behavioral finance, which affects investor decision-making process. Michenaud and Solnik (2008) defined regret theory as "a cognitively mediated emotion of pain and anger when agents observe that they took a bad decision in the past and could have taken one with better outcome. In financial markets, agents will experience regret when their investment yields, ex post, a lower performance than an obvious alternative investment they could have chosen". Regret theory is closely related to the feeling of responsibility for the decisions that have been taken. Many studies support the hypothesis that regret theory influences the decision-making process in the case of uncertainty. Baker and Nofsinger (2010) found that "to the extent that regret theory guides investors, they are inclined to be more passive".

When talking about regret theory, it useful to indicate to regret aversion, the bias that is associated with risk aversion, it means that when people fear that their decision will be wrong in hindsight, they exhibit regret aversion. Seiler, Seiler et al. (2009) found that regret-averse people may fear the consequences of both errors of omission (e.g., not buying the right [optimal] investment property) and commission (e.g., buying the wrong [suboptimal] investment property).

#### **2.1.4 Prospect theory**

Prospect theory, which was developed by (Kahneman and Tversky 1979), is one of the most often quoted and best-documented phenomena in economic psychology. The theory states that we have an irrational tendency to be less willing to gamble with profits than with losses. The theory suggests that people often are interested in avoiding losses more than they are interested in achieving profits. According to prospect theory, losses have more emotional impact than an equivalent amount of gains. For example, in a traditional way of thinking, the amount of utility gained from receiving \$50 should be equal to a situation in which you gained \$100 and then lost \$50. In both situations, the end result is a net gain of \$50. However, despite the fact that you still end up with a \$50 gain in either case, most people view a single gain of \$50 more favorably than gaining \$100 and then losing \$50. A number of studies on loss aversion have given birth to a common rule of thumb: Psychologically, the possibility of a loss is on average twice as powerful a motivator as the possibility of making a gain of equal magnitude; that is, a loss-averse person might demand, at minimum, a two-dollar gain for every one dollar placed at risk. In this scenario, risks that do not "pay double" are unacceptable (Pompian 2011). Figure (2.2) show the level of joy and pain at the same amount of losing and gain situation.

#### **2.1.5** Awareness and financial literacy

Financial literacy and awareness are critical elements for the healthy development of the financial market. The two terms "Investor awareness" and "Financial literacy" are used interchangeably to denote the process by which investors improve their understanding of financial markets, products, concepts and risks. Many previous studies have defined the two terms. For example, Guiso and Jappelli (2004) defined the investor awareness as "The extent to which consumers are aware of available financial assets depends on the incentives of asset suppliers to spread information about the instruments they issue". Qureshi, Mehmood et al.(2014) found that "The word investor awareness has been used in investor communities regularly. It explains the investor literacy and information about the investor literacy and market". Atkinson and Messy (2011) defined financial literacy as "a combination of awareness, knowledge, skills, attitude and

behaviors necessary to make sound financial decisions and ultimately achieve individual financial wellbeing".



Figure (2.2) the level of joy and pain at the same amount of losing and gain situation.

Source: http://www.investopedia.com

Lusardi and Mitchell (2013) defined financial literacy as "peoples' ability to process economic information and make informed decisions about financial planning, wealth accumulation, pensions, and debt". The Task Force on Financial Literacy Report, December (2010) defined financial literacy as "having the knowledge, skills and confidence to make responsible financial decisions". The Financial Consumer Agency of Canada Conference report, 9-10 September (2008) defined financial literacy as "Consumers' acquisition of knowledge, skills and confidence to properly manage their personal finances".

The Organization for economic co-operation and development (OECD) Publishing (2005) defined financial education as "the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being". The International organization of securities commissions (IOSCO) Education and Training Team (IOSCO 2012 report) identified the concept of "investor literacy" as the "understanding ordinary investors have of market principles, instruments, organizations and regulations".

Hung, Parker et al. (2009) distinguished between financial literacy and financial education as follows: "Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial wellbeing." And "Financial education is the process by which people improve their understanding of financial products, services and concepts, so they are empowered to make informed choices, avoid pitfalls, know where to go for help and take other actions to improve their present and long-term financial well-being".

Moore (2003) considered Individuals are financially literate if they are competent and can demonstrate they have used knowledge they have learned. Financial literacy cannot be measured directly so proxies must be used. Literacy is obtained through practical experience and active integration of knowledge. As people become more literate, they become increasingly more financially sophisticated and it is conjectured that this may also mean that an individual may be more competent.

Mandell (2008) defined the financial literacy as "The ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests". Lusardi and Tufano (2009) focused on "debt literacy" an important component of overall financial literacy. They defined it as "The ability to make simple decisions regarding debt contracts, applying basic knowledge about interest compounding to everyday financial choices". Bank (2008) defined financial literacy as "The ability to make informed judgments and to take effective decisions regarding the use and management of money".

#### **2.1.6 Information dissemination and market efficiency**

Among the key elements in the development of financial markets are the quantity and quality of information provided to investors on financial assets and on their issuers. An efficient capital market is characterized as one in which security prices fully reflect all available information. The information about financial assets and issuers can be disseminated through many sources and channels. Such information can be classified into main two sources: the first is company-generated information, which include quarterly and annual reports. And the second is independently generated information, which include analyst created, news outlets, news wire services, and financial discussion boards. Table (2.1) describes these sources in more details.

The most common definition of market efficiency is (Fama 1970), he defined an efficient market as "one in which prices always 'fully reflect' available information". Jensen (1978) found that "A market is efficient with respect to information set  $\theta_t$  if it is impossible to make economic profits by trading on the basis of information set  $\theta_t$ ".

Stock market prediction has attracted much attention from academia as well as business. But can the stock market really be predicted? Early research on stock market prediction was based on random walk theory and (EMH). According to the (EMH) stock market prices are largely driven by new information, i.e. news, rather than present and past prices. Since news is unpredictable, stock market prices will follow a random walk pattern and cannot be predicted with more than 50 percent accuracy (Bollen, Mao et al. 2011).

Textual Financial Source	Types	Examples	Description		
Company Generated	Quarterly & Annual	8K	SEC-mandated report on significant company changes		
Sources	Reports	10K	SEC-mandated Annual reports		
Independently Generated Sources	Analyst	Recommendations	Buy/Hold/Sell based on expert assessment		
	Created	Stock Alerts	Alerts triggered by barriers such as support/resistance levels		
	News Outlets	Financial Times	Provides news stories on company activities		
		Wall Street Journal	Provides news stories on company activities		
	News Wire Services	PR News Wire	Provides breaking financia news articles		
		Yahoo Finance	Compilation of 45 independent financial new wire sources		
	Financial Discussion Boards	The Motley Fool	A forum for investors to share stock-related information		

Table (2.1) describes financial assets and issuers information channels.

Source: (Schumaker and Chen 2006)

The market efficiency hypothesis is one of the most famous investment theories in the last thirty years; it achieved a high level of acceptance all over the world. The market efficiency hypothesis (EMH) depends on the available information about the securities and their issuers. It assumes that the financial markets contain a large number of participants who competing on the determined number of securities, the cost of obtaining information is too small, and the cost of securities trading transactions is too small.

The previous empirical studies distinguished between three forms of the (EMH) which was discussed in chapter 1 and it was shown in figure (2.3). Our question here is about the relationship between the (EMH) and behavior finance theory. The answer now become more clearly, the common factor of the two theories is "the information" included inside the news about the firms and their stocks.



#### Figure (2.3): three forms of the market efficiency hypothesis (EMH)

The (MEH) deals with fundamental information like profit announcements, dividends, analysts' recommendations, and assume that the investors are rational and profit maximizer. In the case of behavioral finance, the base of the information that taken in account is wider, it includes the effects of public economic news on the investor decision making and psychology, and assumes that the investors are irrational.

There is now a substantial debate over whether observed asset prices are determined purely rationality or also by behavioral characteristics of investors. In general, this debate centers on how investors react to information about a firm. If investors react only rationality, prices should, on average, adjust to news based on its content. Alternately, if investors have behavioral biases towards their private information, they will tend to overreact to public information they agree with and underreact to information they disagree with. (Gadarowski 2002)

#### 2.1.7 Price and earnings momentum

Price momentum refers to the strategy that buys past winning stocks and sells past losing stocks (Lin 2013). Price momentum entails the observation that past winning stocks continue to deliver superior returns in the short run while past losing stocks subsequently continue to disappoint. Likewise, earnings momentum refers to the observation of momentum in stock prices following the direction of analysts' earnings forecast revisions (Leippold and Lohre 2012).

Ball and Brown (1968) and Bernard and Thomas (1989) found that buying NYSE/AMEX stocks with recent good earnings news, while simultaneously shorting stocks with bad earnings news, can generate positive profits for a holding period of 60 days after earnings announcements. One is that over short-term horizons of 3 to 12 months, future stock returns are positively related to past stock returns, this phenomenon is first documented by Jegadeesh and Titman (1993) and it's also known as the price momentum.

#### 2.1.8 Investment decision-making and investor behavior

The decision to participate in the stock exchange requires awareness of the available financial instruments, an assessment of the risk-return tradeoff as an act of trust, and the overall fairness of the system. Many potential investors do not invest in the stock market because of their limited information on stocks; they do not understand the operations and different pricing strategies of the stock market. Trust and awareness affect stock market participation via two different channels. Awareness serves to reduce barrier of knowledge of the available assets whereas trust enhances the confidence level of investors in the stock market. (Qureshi, Mehmood et al. 2014)

How does the investor behave? And how does he make his financial decision, as a reaction to the news? Do key elements exist in the behavioral finance theory? previous studies discussed the investor's decision-making process and the factors influencing it, for example Ali and Tariq (2013) found strong influence of self-image/firm-image coincidence, neutral information, and advocate recommendation on individual equity investor decision making. Whereas, no influences of factors like classic wealth maximization, accounting information and personal financial needs is found on individual equity investor's decision making in the context of Pakistan.

Landström (1998) showed that the decision-making criteria vary to a large extent among different informal investors. The criteria that one investor considers important may be considered less important by another informal investor. Embrey and Fox (1997) found that some investment decisions differ by gender, but gender did not appear to be a critical determinant of investment choice. Women were more likely to hold risky assets if expecting an inheritance, employed and holding higher net worth; while men invested in risky assets if they were risk seekers, divorced, older, and college educated.

#### **2.1.9 Investor feelings**

Feelings are the main component of human psychology, and they influence human decision-making process. Feelings may make the human optimistic or pessimistic. People in positive mode will be optimistic, and people in negative mode will be pessimistic. The two cases will affect the investment decision. Overall, there is an optimistic outlook toward the global business environment for 2012, as shown in figure (2.4).



Figure (2.4): Level of TNC Optimism for the 2010-2012 Global Investment Environment

#### 1: very pessimistic, 5: very optimistic

Source: World Investment Prospects Survey 2010-2012, UNCTAD

Griffin, Hirschey et al. (2011) believed that the differences in market reactions across countries may be driven by variation in (1) pre-announcement public news dissemination; (2) insider trading; (3) the quality of the news transmission mechanism; and (4) accounting quality.

# Part (2) Text mining and textual analysis

# 2.2.1 Text mining and textual analysis: an approach to measure media tone

#### 2.2.1.1 What is the text?

Although the text is the most common vehicle for the formal exchange of information. But the main challenge in using the newspaper articles in financial researches is the qualitative nature of the included information, while the data about the stock's price, return, trading volume are all quantitative. So, many previous studies depended on converting the qualitative information included in newspaper articles to quantitative information can be matched to the stock quantitative information in order to measure their impact. These process called "textual analysis" or "text mining". Growing body of finance and accounting research uses textual analysis to examine the tone and sentiment of corporate 10-K reports, newspaper articles, press releases, and investor message board (Loughran and McDonald 2011).

This is what motivates us to highlight the nature of the text and ask ourselves, what is the text? To answer this question, it can be seen that the text is "a piece of spoken or written language". A text may be considered from the point of view of its structure and/or its functions, e.g. warning, instructing, and carrying out a transaction. A full understanding of a text is often impossible without reference to the context in which it occurs.

All texts are about something (i.e., they have content); and the most direct way of taking account of this is through content analysis. Content analysis was first used to measure the objective features (article length, size of headline, etc.) of newspaper stories (Bazerman and Prior 2003). Text data is everywhere, books, news, articles, financial analysis, blogs, social networking, etc. According to estimates, 80% of world's data is in "unstructured text format" as shown in figure (2.5). Therefore, researchers need methods to extract, summarize, and analyze useful information from unstructured/text data. Text mining seeks to automatically discover useful knowledge from the massive amount of data.

#### 2.2.1.2 Structured and unstructured data

Every day, the world produces huge amount of data and information in various fields, previous studies found that the amount of information doubled almost every 18 months, and, as previously noted, roughly 80% of the data considered unstructured data. Researchers cannot process unstructured data. Therefore, they use some techniques, such as text mining to convert unstructured data into structured forms.

#### • Structured data

- Loaded into "spreadsheets"
- Arranged into rows and columns
- Each cell could be filled
- Managed by a database system
- Getting data easily
- Unstructured data
- Microsoft Word, HTML, PDF documents, PPTs
- Usually converted into XML  $\rightarrow$  semi structured
- Not structured into cells
- Managed via a search engine due to the lack of structures
- Variable record length, notes, free form survey-answers
- Text is relatively sparse, inconsistent and not uniform
- Include images, video, music etc.



Figure (2.5): the percentage of structured to unstructured data.

Source: IDC 2011 digital universe study.

The common examples of unstructured data are: Emails, insurance claims, news articles, Web pages, patent portfolios, customer complaint letters, contracts, transcripts of phone calls with customers, and technical documents. These forms of data can become structured through 5 stages as follows:

#### 1. Information retrieval

Information retrieval (IR) is finding unstructured data source (email, pdf document, and articles) related to the needed information. Cambridge University defined Information retrieval as "finding material (usually documents) of an unstructured nature (usually text) that satisfies an information need from within large collections (usually stored on computers)".

#### 2. Information extraction

Automatically extracting structured information from unstructured and/or semi-structured machine-readable documents is called Information extraction process. In most of the cases, this activity concerns processing human language texts by means of natural language processing (NLP).

#### 3. Semantic metadata

Haase (2004) defined Semantic metadata as "which links related terms to one another", also it can be defined as "the process of attaching semantic descriptions to Web resources by linking them to a number of classes and properties defined in Ontologies" (Scerri, Abela et al. 2005). Meta data that describes contextually relevant based on an industry-specific Meta data model which known as semantic Meta data. For example, if the content is from the business domain, the relevant semantic Meta data could be company name, ticker symbol, industry, sector, executives, etc.

#### 4. Semantic search

Semantic search seeks to improve search accuracy by understanding searcher intent and the contextual meaning of terms as they appear in the searchable data space, whether on the Web or within a closed system, to generate more relevant results. Intent, which comes from the user, explicitly states what he or she is looking for. And context could be understood as everything that surrounds a search and makes this go in either direction, i.e., what gives it meaning. Thus, by understanding and connecting intention and context, search engines are able to understand the different queries, both what motivates and what is expected of them.

#### 5. Knowledge discovery

Knowledge discovery is the process of discovering useful knowledge from a collection of data. This process includes data preparation and selection, data cleansing, incorporating prior knowledge on data sets, and interpreting accurate solutions from the observed results.



Figure (2.6) converting unstructured data into structured data.

Source: <u>www.slideshare.net</u>

#### 2.2.1.3 Text mining and textual analysis

The two terms "text mining" and "textual analysis" have been mentioned very frequently in many research and studies in the last 10 years. One of the main things that helped the emergence and growth of this area is the development of computer science and software applications. The results of text mining and analysis become very helpful to a wide range of humanitarian studies such as predicting stock market, sentiment analysis (twitter, Facebook), predicting churn, customer influence, customer service, and help desk. The two terms share in converting the text into structured form that can be used in an advanced stage. Let us now review the two term definitions to extract the difference between them. The previous studies defined the terms "textual analysis" and "text mining" as follow: Botan, Frey et al. (2000) defined textual analysis as "the method communication researchers use to describe and interpret the characteristics of a recorded or visual message". Jegadeesh and Wu (2013) found that content analysis aims to "objectively characterize the message conveyed by descriptive information in various documents". Chen (2001) defined text mining as "a newer field, performs various searching functions, linguistic analysis, and categorizations". Zorn, Emanoil et al. (1999) found that text mining "offers powerful possibilities for creating knowledge and relevance out of the massive amounts of unstructured information available on the Internet and corporate intranets".

Sullivan (2000) defined text mining as "the study and practice of extracting information from text using the principles of computational linguistics". LUCAS (1999) defined text mining as "a way to examine a collection of documents and discover information not contained in any individual document in the collection". Sebastiani (2002) defined text mining as "increasingly being used to denote all the tasks that, by analyzing large quantities of text and detecting usage patterns, try to extract probably useful (although only probably correct) information". Witten (2005) found that text is unstructured, amorphous, and difficult to deal with algorithmically. He defined text mining as "a burgeoning new field that attempts to glean meaningful information from natural language text. Text mining is the process of analyzing text to extract information that is useful for particular purposes". Biggs (2000) defined text mining as "ideal to inspect changes in the market, or to identify ideas to pursue".

Lucas (2000) defined text mining as "a way to examine a collection of documents and discover information not contained in any individual document in the collection". Hearst (1999) defined text mining as exploratory data analysis as "a method of building and using software systems to support researchers in deriving new and relevant information from large text collections". It is a partially automated process in which the researcher is still involved, interacting with the system. 'The interaction is a cycle in which the system suggests hypotheses and strategies for investigating these hypotheses, and the user either uses or ignores these suggestions and decides on the next.

Through previous definitions of both terms, the researcher found that they generally aim to extract valuable and significance information from unstructured data, this information can be used in various research, but he can distinguish between the two terms according to the nature and the format of extracting information. Text mining aims to put the text in specific templates with no focusing on the text tone, emotion and sentiment. But the textual analysis focuses on these aspects in order to study its effects and relation on the human behaviors. The difference between text mining and textual analysis locks like the difference between the mining and manufacturing in industry sector. Mining generates raw material such as steel, but manufacturing produces products depending on the production procedures and process. Text mining generate mineral, while textual analysis produce products.

Now the researcher can define the two terms as follow:

#### **Text mining:**

"The process of converting the unstructured text into structured usable format stored in specific templates"

#### **Textual analysis:**

"The process of understanding the content of the unstructured text, and measuring its tone, emotion, sentiment"

#### 2.2.1.4 Textual analysis

Textual information processing has become a growing part of empirical finance research. Subsequent studies have applied similar techniques with a variety of news sources, dictionaries, and methodologies. (Heston and Sinha 2014). The purpose of textual analysis is to describe the content, structure, and functions of the messages contained in texts. The important considerations in textual analysis include selecting the types of texts to be studied, acquiring appropriate texts, and determining which particular approach to employ in analyzing them". Text mining is to prospect for nuggets of new knowledge in the mountains of text which have become accessible to computer-based research thanks to the information and internetworking revolution.

There is a growing literature in finance that uses textual analysis to try and convert qualitative information contained in news stories and corporate announcements into a quantifiable measure by analyzing the positive or negative tone of the information (Boudoukh, Feldman et al. 2013). One area of limited success in Stock Market prediction comes from textual data. Information from quarterly reports or breaking news stories can dramatically affect the share price of a security (Schumaker and Chen 2006).

With the large increase in the amount of daily news content on companies over the past decade, it should be no surprise that the finance literature has turned to textual analysis as one way to understand how information both arrives to the marketplace and relates to stock prices of the relevant companies. (Boudoukh, Feldman et al. 2013). Schumaker and Chen (2006) found that "most existing literature on financial text mining relies on identifying a predefined set of keywords and machine learning techniques. These methods typically assign weights to keywords in proportion to the movement of a share price".

#### 2.2.1.5 Data mining and text mining

The text is unstructured form of data, so the text mining is more difficult process than data mining, which may deal with structured or semi-structured data. Text mining begins from the text, which may be in document form (doc, pdf, html, etc.), the following table compares between text mining and data mining steps.

data mining	text mining			
<ul> <li>Identify data sets</li> <li>Select features</li> <li>Prepare data</li> <li>Analyze distribution</li> </ul>	<ul> <li>Identify documents</li> <li>Extract features</li> <li>Select features by algorithm</li> <li>Prepare data</li> <li>Analyze distribution</li> </ul>			

Table (2.2): steps of data mining and text mining.

Figure (2.7) explains the locations of the text mining and data mining based on the data type (structured or unstructured) and the information extraction type (search or discover).



Figure (2.7): locations of text mining and data mining

#### 2.2.1.6 Advantages of using news stories to predict firms' earnings and returns

Tetlock, Saar-Tsechansky et al. (2008) called attention to two significant advantages to using the language in everyday news stories to predict firms' earnings and returns:

- First, by quantifying language, researchers can examine and judge the directional impact of a limitless variety of events, whereas most studies focus on one particular event type, such as earnings announcements, mergers, or analysts' recommendations. Analyzing a more complete set of events that affect firms' fundamental values allows researchers to identify common patterns in firm responses and market reactions to events.
- 2. Second, linguistic communication is a potentially important source of information about firms' fundamental values. Because very few stock market investors directly observe firms' production activities, they get most of their information secondhand. Their three main sources are analysts' forecasts, quantifiable publicly disclosed accounting variables, and linguistic descriptions of firms' current and future profit-generating activities. If analyst and accounting variables are incomplete or biased measures of firms' fundamentals, linguistic variables may have incremental explanatory power for firms' future earnings and returns.

# 2.2.2 Media tone

In particular, the tone, in which news is written, is a critical factor in shaping public opinion, and thus, its effect on beliefs is an important subject to investigate. A growing body of finance and accounting research uses textual analysis to examine the tone and sentiment of newspaper articles. Broadly, content analysis uses algorithms that have two important components. The first component is a word list or the algorithms lexicon, where each word is categorized as positive or negative (or as bullish or bearish, etc.). The second component of a content analysis algorithm is how each word in the lexicon should be weighted, which along with its lexicon enables the algorithm to map descriptive content of any document into a quantitative score. (Jegadeesh and Wu 2013). Fang, Peress et al. (2014) found that media tone could be viewed as a proxy for the positive or negative content in the articles, and whether managers buy or sell in accordance with it. Heston and Sinha (2014) found that "positive news stories increase stock returns quickly, but negative stories have a long-delayed reaction". Griffin, Hirschey et al. (2011) found that "If journalists are more sophisticated in certain countries, one might expect news coverage in countries with sophisticated journalists to provide a more precise signal and lead to larger market reactions".

#### 2.2.2.1 Media and public opinion shaping

The media is considered as a communication that reaches a large number of people via different distribution channels such as (newspapers, Internet, TV, Radio, Magazines, etc.) Media is a powerful tool for shaping public opinion nowadays. A source of information and education that will shape the daily choices in people's lives. The media affects public opinion because it disseminates the facts and information about key topics that the public should be aware of. Inaccurate reporting means that people have the wrong information about various issues and may make uneducated decisions. Through newspapers, books, magazines and sound recordings, the mass media has been influencing public opinion for more than 500 years. In the 21st century, technology has made it easier to access the messages from the mass media.

For about the last ten years, time series analyses of the links between media reporting and audience behavior have been conducted with increasing frequency. Kepplinger, Donsbach et al. (1989) explained four investigative approaches have been undertaken:

1. Analysis of selected topics and of opinion changes in media reporting. Trends and influences within the media are investigated.

- 2. Analysis of changes in norms and behavior based on media reporting. Media coverage is viewed as an indicator of overall social change.
- 3. Analysis of the relationship between the course of events and media reporting. The correspondence between the reality of events and the reality presented by the media or the disparity between them is investigated.
- 4. Analysis of the interaction between media reporting and public opinion. This essentially deals with the influence of the media on opinion or the influence of the population on the media content.

#### 2.2.2.2 Financial journalism

Mass media outlets, such as newspapers, play an important role in disseminating information to a broad audience, especially to individual investors. Famous previous studies such as Tetlock, Saar-Tsechansky et al. (2008) and Tetlock (2007) demonstrated that news stories contain information relevant to predicting both earnings and stock returns. Stock market prediction has attracted much attention in financial research. Popular predictors studied include economic and financial data such as past stock returns, macroeconomic variables, and time series of balance-sheet data. In addition to economic and financial data, daily newspapers also may contain relevant information for financial markets (Ammann, Frey et al. 2014).

Fang and Peress (2009) found that "Every weekday, some 55 million newspaper copies are sold to individual readers in the US, reaching about 20% of the nation's population". Many previous studies used newspaper articles to measure the volume, the tone, and the sentiment of disseminated information. For example, Tetlock (2007) focused on the immediate influence of the Wall Street Journal's (WSJ's) "Abreast of the Market" column on U.S. stock market returns over the 16year period. Ammann, Frey et al. (2014) Used articles published in the Handelsblatt, a leading German financial newspaper, from July 1989 to March 2011.

Fang, Peress et al. (2014) and Fang and Peress (2009) Collected articles from four daily newspapers with nationwide circulation: USA Today, The Wall Street Journal, The New York Times, and The Washington Post. Gadarowski (2002) collected a count of Dow Jones News Service documents using a ticker search on Dow Jones News/Retrieval for the twelve-month period prior to the return period (July to June). Griffin, Hirschey et al. (2011) collected a large sample of articles about international stocks from the Factiva news archive which includes major business news publishers such as The Wall Street Journal, Financial Times, Dow Jones, and Reuters. Ferguson, Philip et al. (2014) used news articles from national newspapers that are globally recognized, namely, The Financial Times (FT), The Times, The Guardian and Mirror. Chan (2003) used the Dow Jones Interactive Publications Library of past newspapers, periodicals, and newswires.

#### 2.2.2.3 Media coverage

"The media is often modeled as a faceless institution, but its main output news content- is generated by specific people".(Dougal, Engelberg et al. 2012). Previous literature has provided mixed views on the role of press coverage on market efficiency. Chen, Pantzalis et al. (2009) introduced two opposite sides to media coverage, on the positive side, it can function as an external disciplinary mechanism that improves corporate governance or as an information intermediary that provides relevant information to a wide audience. On the negative side, media coverage may be inherently biased or a source of judgment biases and sentiment. Bushee, Core et al. (2010) showed variety roles the press might play in financial markets, including "broad dissemination of information, packaging information from multiple sources, and creating new information through journalism practices".

#### 2.2.2.4 Word lists and financial dictionaries

In order to measure the tone of the news, many previous studies began with the word level; they classified the word into three categories, positive, negative, and natural, each word has a specific weight, natural word has no weight. Then, the tone of any news documents can be measured by summing the weight of the negative and positive words appear in it. The major part of literature uses two sources of word lists to measure the tone of media contents, these two sources is:

#### 1. Financial dictionaries

A commonly used source is the Harvard Psychosociological Dictionary, specifically, the Harvard-IV-4 TagNeg (H4N) file. One positive feature of this list for research is its composition that is beyond the control of the researcher. That is, the researcher cannot pick and choose which words have negative implications (Loughran and McDonald 2011).

#### 2. Financial word list:

A commonly used source is the Loughran and McDonald word lists. They create a list of 2,337 words that typically have negative implications in a financial sense. Some of these words also appear on the H4N list, but others, such as (felony, litigation, restated, misstatement, and unanticipated) do not.

#### 2.2.2.5 Word Count Indices

Word-count indices are one technique for summarizing and quantifying text content. Word-count indices count the number of articles mentioning a specific word (Ammann, Frey et al. 2014). Word-count indices are potentially uncorrelated with other predicting variables, such as, macroeconomic data. This makes them a valuable source of additional information which cannot be exploited by common predictors (Ammann, Frey et al. 2014). Text mining is similar to data mining; they aim at finding patterns in unstructured text documents. Word-count indices are one technique for summarizing and quantifying text content. Word-count indices count the number of articles mentioning a specific word. A well-known word-count index is the "R-Word Index" constructed by The Economist (The Economist (1998)). (Ammann, Frey et al. 2014).

# Part (3) Palestinian stock market

#### **2.3.1** Palestinian stock market (Palestine Exchange "PEX")

The Palestine Exchange "PEX" was established in 1995 to promote investment in Palestine as a private shareholding company and transformed into a public shareholding company in February 2010 responding to principles of transparency and good governance. The "PEX" was fully automated upon establishment- the first fully automated stock exchange in the Arab world and the only Arab exchange that is publicly traded and fully owned by the private sector. The "PEX" operates under the supervision of the Palestinian Capital Market Authority. The "PEX" strives to provide an enabling environment for trading that be characterized by equity, transparency and competence, serving and maintaining the interest of investors. The "PEX" is very appealing in terms of market capitalization; it is financially sound, and well capitalized to maintain a steady business in a volatile world, as it passed with the minimum level of impact of the global financial crisis compared to other MENA Exchanges. There are 50 listed companies on "PEX" as of 29/02/2016 with market capitalization of about \$3,339 billion across five main economic sectors; banking and financial services, insurance, investments, industry, and services. Most of the listed companies are profitable and trading in Jordanian Dinar, while others trade in US Dollars (PEX 2015).

#### 2.3.1.1 Trading

The first trading session was held at the "PEX" on 18/02/1997. Since its launching, the "PEX" depends on electronic trading and clearing, depository, and settlement systems. In this sense, the "PEX" is considered the pioneer securities market in the region that adopted the automation of all its processes related to trading, and clearing, depository and settlement. At present, the "PEX" is adopting the horizon system supplied by OMX company as a trading system. In addition, it is adopting surveillance system called "Smarts" system (PEX 2015).



Figure (2.8): Number of listed companies & Market Capitalization from 1997-2015.

# 2.3.1.1.1 Characteristics of Electronic Trading System

Orders are being executed according to the following criteria (PEX 2015):

- Price
- Time
- Remote trading is being conducted through brokerage firms and their branches.
- Trading is being conducted in more than one currency. Currently, trading is executed by the Jordanian dinar (JD) and United Stated Dollar (USD).
- The system saves data electronically, which enables to retrieving and looking into all movements that were carried out on that date.
- Trading is directly linked, tightly coupled, with the Clearing, Depository and Settlement Center (CDS) System. All trades are reflected directly on the investors' accounts, verify that their shares balances are available before any sell order is entered and to make sure that ownership ratio is not exceeded.

## 2.3.1.1.2 Trading Days and Times

- Trading is carried out daily from Sunday until Thursday every week.
- Trading is not carried out on: weekends (Friday and Saturday), official holidays.
- Scheduled trading session will be cancelled if the ratio of member firms is unable to connect and trade for 35% or more of the total number of member firms.
- Trading session starts at 09:45 and finishes at 13:30 (PEX 2015).

## 2.3.1.1.3 Trading Rules

Price limits, up and down, are (7.5%) for shares listed in the first market, and

(5%) for shares listed in the second market and bonds (PEX 2015).

#### 2.3.1.1.4 Trading Unit

The minimum limit of the number of shares and bonds allowed for trading (buy/sell) at "PEX" is one for all traded shares and bonds (PEX 2015).

#### 2.3.1.1.5 Trading Surveillance

Trading Surveillance is based on regulations related to securities, which are applicable in Palestine; these are Securities Law No. (12) of the year 2004, Companies Law No. (12) of the year 1964, Securities Trading Regulation, rules, instructions issued in their accordance, and instructions issued by the Capital Market Authority. The SMARTS System is adopted to carry out the functions of trading surveillance. The Trading Surveillance System monitors the trading session instantly to detect any unusual behaviors of prices or trading volumes by making comparisons between the electronic information of the trading session and the standards adopted by the system so that an alert triggered when any standard is violated. Any violation is subject to the adopted charter of penalties and fines (PEX 2015).



# . Figure (2.9): Number of transactions, traded volume and traded value from 1997-2015

#### 2.3.1.2 Al Quds Index

In July 1997, "PEX" adopted a record for measuring stock prices levels and determining the general direction of these prices known as "Al Quds Index". The closing prices of 7/7/1997 were adopted to be the basis to set the value of the base for Al Quds Index of 100 points. The adjusted list of companies to be included in its Al-

Quds index for the year 2015. "PEX" raised the number of companies included from 12 to 15 to reflect the increase in the number of listed companies. Al-Quds sample for the year 2015 is as follows (PEX 2015):

- Palestine Development & Investment PADICO (Investment)
- Palestine Industrial Investment PIIC (Investment)
- Palestine Real Estate Investment PRICO (Investment)
- Arab Islamic Bank AIB (Banking & Financial Services)
- Bank of Palestine BOP (Banking & Financial Services)
- Palestine Islamic Bank ISBK (Banking & Financial Services)
- The National Bank TNB (Banking & Financial Services)
- Al-Quds Bank QUDS (Banking & Financial Services)
- National Insurance NIC (Insurance)
- Palestine Telecommunications PALTEL (Services)
- Palestine Electric PEC (Services)
- Wataniya Palestine Mobile Telecommunications WATANIYA (Services)
- Birzeit Pharmaceuticals BPC (Industry)
- Jerusalem Cigarettes JCC (Industry)
- Jerusalem Pharmaceuticals JPH (Industry)



Figure (2.10): Daily average turnover transaction, daily average turnover volume and daily average turnover value from 1997-2015

At the end of every year, the companies that are included in Al Quds Index are assessed since the sample is modified in accordance with the trading statistics of that year. The following criteria are adopted (PEX 2015):

- Trading volume.
- Trading Value.
- Number of trades.
- Number of trading days.
- Market Value.
- Average of share Turnover.





# 2.3.2 PEX at a Glance (PEX 2015)

#### Table (2.3): Palestine Exchange milestones

YEAR	EVENT
2014	Adding Palestine to FTSE indices "Watch List".
	Listing the first corporate bond since inception.
2013	December: S&P created a stand-alone index for Palestine.
	September: The highest trading value in one session of 48.5m USD.
	June: MSCI created a stand-alone index for Palestine.
2012	Listed Company.
2011	Listed a record seven new companies in one year.
2010	Public Shareholding Company New Corporate Identity.
2008	Ranked 33rd amongst International Stock Exchanges and second in
	the region in terms of investor protection.
2007	Launch of E-Trade Service.
2006	Launch of the Investor Education Program.
2005	Al-Quds Index increased by 306% compared to 2004, recording the
	highest amongst the world stock exchanges.
1997	First trading session (18 February).
1995	Established as a private shareholding company.

# 2.3.3 Development of Palestine Exchange Activity

The "PEX" has developed from 1997 to 2015. Table (2.6) shows the total yearly activity figures of 19 years' period from 1997 to 2015 in "PEX". The first trading session was held at the "PEX" on 18/02/1997 with 19 listed companies while the number of listed companies in 2015 is 50. The number of trading sessions increased from 66 in 1997 to 246 in 2015. In addition, the trading volume increased from 10,000,526 shares in 1997 to 175,229,463 shares in 2015 while

Year	No of Listed Companies In 31 Dec.	No. of Trading sessions	Volume	Value (US\$)	No. of Transactions	Daily Average Turnover Volume	Daily Average Turnover Value (US\$)	Daily Average Turnover Transactions	Market Capitalization (US\$)	Al-Quds Index	Al-Quds Index Growth (%)
1997	19	66	10,000,526	25,181,030	1,957	151,523	381,531	30	510,036,142	139.13	39.13%
1998	20	100	16,746,845	68,531,587	7,639	167,468	685,316	76	600,496,739	154.98	11.39%
1999	22	146	68,788,626	150,092,262	10,625	471,155	1,028,029	73	735,936,934	236.76	52.77%
2000	25	211	93,190,283	188,964,084	20,143	441,660	895,564	95	768,190,283	207.62	-12.31%
2001	25	161	33,424,798	74,496,050	8,205	207,607	462,708	51	727,270,525	195	-6.08%
2002	28	100	18,663,494	45,081,693	4,579	186,634	450,817	46	581,826,876	151.16	-22.48%
2003	27	223	40,304,432	58,280,758	10,552	180,737	261,349	47	655,463,931	179.81	18.95%
2004	27	244	103,642,845	200,556,709	27,296	424,766	821,954	112	1,096,525,380	277.56	54.36%
2005	28	246	369,567,295	2,096,178,223	166,807	1,502,306	8,521,050	678	4,457,227,305	1128.6	306.61%
2006	33	237	222,689,351	1,067,367,951	150,592	935,670	4,484,739	633	2,728,811,088	605	-46.39%
2007	35	247	299,422,814	813,469,090	157,300	1,207,350	3,280,117	316	2,474,679,018	527.26	-12.85%
2008	37	242	339,168,807	1,185,204,211	152,319	1,390,036	4,857,394	624	2,123,057,098	441.66	-16.23%
2009	39	246	238,877,373	500,393,398	88,838	971,046	2,034,120	361	2,375,366,531	493	11.62%
2010	40	249	230,516,370	451,208,529	82,625	925,768	1,812,082	331	2,449,901,545	489.6	-0.69%
2011	46	248	184,544,375	365,648,216	61,928	744,131	1,474,388	250	2,782,469,900	476.93	-2.59%
2012	48	249	147,304,208	273,440,441	41,442	591,583	1,098,154	166	2,859,140,375	477.59	0.14%
2013	49	241	202,965,939	340,774,269	44,425	842,182	1,414,001	184	3,247,478,385	541.45	13.37%
2014	49	245	181,545,154	353,917,125	41,257	741,000	1,444,560	168	3,187,259,624	511.77	-5.48%
2015	50	246	175,229,463	320,388,213	31,014	705,304	1,302,391	126	3,339,196,379	532.73	4.10%

 Table (2.4): Total annual activity from 1997 to 2015

the highest figure was in 2005 with 369,567,295 shares. The Trading value rose from 25,181,030 in 1997 to 320,388,213\$ in 2015 while it peaked the greatest number in 2005 with 2,096,178,223\$. The numbers of transactions were 1,957 and 31,014 in 1997 and 2015 respectively, during that time the highest record was in 2005 with 166,807. The daily average turnover volume was 151,523 and 705,304 in 1997 and 2015 respectively while it peaked 1,502,306 in 2005. The daily average turnover transactions were 30 in 1997 and 126 in 2015, once again, and the 2005 was highest with 678. The market capitalization increased from 510,036,142\$ (in 1997) to 3,339,196,379 \$ (in 2015). Al-Quds Index was 139.13 in 1997 and 532.73 in 2015 while it was 1128.6 in 2005. The Growth of Al-Quds index was 39.13%, 306.61%, and 4.10% in 1997, 2005, and 2015 respectively (PEX 2015).

#### **2.3.4 macroeconomic and stock market relation**

The change in macroeconomic variables can significantly impact stock price return, many studies found a significant relationship between macroeconomic variables and stock market performance. Talla (2013) found that inflation and currency depreciation have a significant negative influence on stock prices. In addition, interest rate is negatively related to stock price change. Pathan and Masih (2013) reconfirmed the traditional belief that the real economic variables continue to affect the stock market in the post-reform era in India and also highlights the insignificance of certain variables with respect to stock market. Humpe and Macmillan (2009) found that stock prices are influenced positively by industrial production and negatively by the money supply.

# Part (4) Palestinian local newspapers

#### **2.4.1 Palestinian local newspapers**

The emergence of the Palestinian press associated with the emergence of the press in other Arab countries, but the Palestinian press did not develop during the second half of the nineteenth century, so The Palestinians rely on the Syrian, Lebanese and Egyptian newspapers, which preceded Palestinian newspapers.

Most of the studies about the history of the Palestinian press found that the beginning of the Palestinian press was in 1876, where Al-Quds Al-Sharif newspaper was published for a first time in this year in Arabic and Turkish because Palestine was under the supervision of the Ottoman government. It was the first official newspaper, and could be considered a government representative and published on a monthly basis.

Since its inception, the Palestinian press passed through many different phases which affected by political, social, military, and various successive conditions on Palestine. Therefore, the dominant feature of the Palestinian press is mass mobilization, incitement and defending the land. The Palestinian press has gone through five stages starting from the Ottoman era to the present day:

- 1. The first stage: the stage of growing up under the Ottoman government, and extends from 1876 to 1918.
- 2. The second stage: The British Mandate period, and extends from 1918 to 1948.
- 3. The third stage: West Bank and Gaza Strip undergo to the supervision of Jordan and Egypt, and extends from 1948 to 1967.
- 4. The fourth stage: the stage of the Israeli occupation, and extends from1967 to 1994.
- 5. The fifth stage: the stage of the Palestinian National Authority, and extends from 1994 until now.

Because the study extends from 2011 to 2014, and this period lays completely inside the fifth stage "the stage of the Palestinian National Authority", in addition there was no stock market in Palestine before this stage. Therefore, the study will focus here on this stage in the following paragraph, and neglect the remaining stages.

With the coming of the Palestinian National Authority to the homeland, in 1994, the Palestinian people moved to a new stage of their history, the Palestinian National Authority beliefs in the role of the media and the press in the liberation struggle and survival, so it work for regulate press and publications law, which regulates the relationship between Authority and the press organizations. The press idea began to shape under the Palestinian Authority, which began to give licenses for the issuance of newspapers; the first issued newspaper was "Palestine", which was issued on 23 September 1994 by "Tahir Shuraiteh". But it did not stay long; only 14 issues were published and then stopped. In 10 November 1994, "Al-Hayaa Al-Jadeda" newspaper has been issued, which were close to the government, the chief editor was "Hafez Barghouthi", and the director "Nabil Amr", and it began a weekly and then turned daily. In 8 December 1994 "Al-Watan" newspaper has been issued, but the authority, for political reasons, closed it, "Al-Esteqlal" newspaper was established in 1995. At the end of 1995, two newspapers were established, "Al-Belad" and "" and were daily published, but "Al-Belad" turned weekly later. In that time interval, the Palestinian Authority issued several newspapers and magazines, such as "Al-Aqsa", "Al-Sahel", "Al-Zaytona", "Al-Ray", "Al-Sabah" and other newspapers that need mentoring and training.

#### 2.4.2 Al-Hayaa newspaper

"Al-Hayaa Al-Jadeda" Newspaper was established on 10 September 1994, at the beginning, it was published as a weekly political newspaper, and since 19 August 1995, it was turned to daily newspaper. The researcher will use the short name "Al-Hayaa" to denote the newspaper for more ease.

"Al-Hayaa Al-Jadeda" represents the authority to some extent, and this situation is clear in the founding statement of the newspaper which states that "We are with the authority to success the historical opportunity of building a society and independent national entity, but we will not stand silent with what we see negligence or breach in the structure, views, and will address issues related to authority with a high degree of sensitivity and responsibility in order to development, not Obstruction and drag the cart to the back."

"Nabil Amr" established "Al-Hayaa Al-Jadeda", and he was a general manager of the newspaper before its ownership transferred to the Palestine
Investment Fund. The newspaper relies on the advantage of the creative skills from outside the newspaper owners, to enrich the daily issues and various articles and comments content.

"Al-Hayaa Al-Jadeda" is usually issued in 28 page, it issued with many of the supplements, including:

- Life issues supplement, issued on Saturday.
- Sport supplement, issued on Tuesday.
- Cultural supplement, issued on Thursday.

Some of these supplements stopped, and some appears from time to time. The number of "Al-Hayaa Al-Jadeda" newspaper staff is (60) employees officially distributed among reporters, editors, and administrators.

### 2.4.3 Al-Ayyam newspaper

It is an independent political daily newspaper published by organization for Press, Printing, Publishing, and Distribution" in Ramallah. organization is a private owned company. The first issue of newspaper was published on 25 December 1995. newspaper was launched by the efforts of staff from the energies youth and promising, and competencies of the brightest group of diaspora journalists and writers, who returned home after the signing of the Oslo agreement. The writer "Akram Haniyeh" is the chief editor, and "Ghassan Al-Damen" is the chair of board of directors.

The number of pages ranges from 20 to 40 classified, distinct, and output dynamic pages, they include economic, sporting, cultural topics; and cover national, regional and international news, and sometimes, there is selected topics from the Hebrew press.

### 2.4.4 Felesteen newspaper

"Felesteen" is a daily comprehensive political newspaper, which issued in Gaza City by "Al-Wasat" company for media and publishing (LTD Co.). The newspaper got the license from the Ministry of media on 16 September 2006. The first issue of the "Felesteen" newspaper was published on 3 May 2007. "Felesteen" newspaper aims to achieve a set of objectives, including:

- Providing the press service for the first time in the Gaza Strip.

 Contribute to raising the level of thinking and knowledge of the Palestinian people through the study of the Palestinian situation in a scientific manner.

The contents of "Felesteen" newspaper depends on the following determinants and features:

- Respect others' opinions and avoid offending to individuals and institutions.
- Reliance on evidence and documentation proof, and do not charge the lump without evidence.
- Taking into account assets, ethics, the rules of journalistic work and the Palestinian press laws.
- Consolidating on the meanings of the Palestinian national unity, dialogue and mutual respect.
- The defense of the legitimate rights of the Palestinian people, and their national constants.

In this study, the researcher will take three of main local newspapers, Al-Hayaa, Al-Ayyam, and Felesteen. Although Al-Quds newspaper is the most important one, but the difficult of getting soft copied prevented the researcher form inserting it into the sample. In addition, although Felesteen newspaper is considered emerging newspaper, and it is distributed in Gaza strip only, but the researcher inserted it into the sample in order to make a balance between the two side of the country, because it's the most widespread in Gaza strip, in the same time, Al-Hayaa was prevented in Gaza strip because of political division.

#### **2.4.5** Main parts of newspapers content

The study has already mentioned that, in this study, the researcher will analyze the economic content of local newspapers, but it is a good idea before focusing on the economic content, to take an overview on the content of newspapers in general. In general, there is a kind of stereotype that can be tracked in the basic components of the newspapers, but this does not mean lack of some additions or modifications that occur from time to time on the content, with the stability of the main components in the long term. the following paragraphs explains the feature and main elements in the full issuance of each newspaper.

#### 2.4.5.1 Al-Hayaa newspaper:

In the majority of days, the total number of pages ranging from 20 to 28 pages, but in a few cases, the number drops to reach 16 pages only, or rises up to reach 44 pages, so the researcher excluded these few cases, and focused on the vast majority, which ranging between 20 to 28 pages. When the number of pages is about 20 pages, it is often on Saturday and Sunday, a couple of days that no trading on the previous day, and therefore there is no economic pages on them, and in those days, the content of the newspaper consists of the following sections:

- Cover page: Contain the most important events of the previous day and include (News, comments, national activities and events, receiving representatives and diplomatic visits,) include all levels, local, Arab and international, and it fails to address the economic side. The page often contains part of the article or news stories, and the sequel comes in an inside dedicated page.
- 2. Local section: Often consists of 8 pages contain political news, events, and comments, and national issues, such as: Citizens arrested by the Israeli occupation forces, Injures in confrontations with Israeli occupation forces, and Attacks by Settlers against Palestinian people and their farms. Advertisements for government agencies, organizations, and sometimes, trading companies, permeates these pages at the bottom part.
- **3.** *Arabian and International section:* Often it consists of two pages encompass the Arab and international political news.
- 4. Sequel page: to complete the articles and news that has been referred to in the cover page.
- 5. *Opinion page:* One page often contains some caricature drawings that reflect the current situation, as well as some press articles about topical issues.
- 6. Sport section: Often this section consists of four pages containing the local, Arab and international sports news.

The remaining pages include entertainment topics such as fashion, health and beauty, new technologies, art and cultural news, and commercial advertising. In the other days, except Saturday and Sunday, the number of pages are often 24 or more, and the following sections are added to the above:

- 1. *Economic section*: Usually consists of 2 to 4 pages and contain economic news and articles and this section content will be explained in detail later.
- 2. Israeli affairs: It consists of a page to two pages and contains selected articles from Israeli newspapers such as (Haaretz, Yediot, Maariv) translated to the Arabic language.

The remaining pages contain more of commercial advertisements, more of entertainment which include (crossword, happened on this day, horoscope and luck, some entertaining games), and the number of sports pages may increase up to 6 in some cases.

#### 2.4.5.2 Al-Ayyam newspaper:

Although, there is a similarity, to some extent, between and Al-Hayaa newspaper in the main parts of content, the total number of pages is larger in the case of Al-Ayyam. The total number of pages ranging from 32 to 36 pages, but in a few cases, the number drops to reach 20 or 24 pages only, especially on Fridays, or rises up to reach 40 pages. At the majority of days, the content of the newspaper consists of the following sections:

- 1. Cover page: It similar to Al-Hayaa newspaper, contain the most important events of the previous day from all levels, local, Arab, and international, and it fails to address the economic side. The cover page often contains part of the article or news stories, and the sequel comes in an inside dedicated page.
- 2. *Local section:* Often consists of 10 pages contain political news, events, and comments, and national issues.
- **3.** *Arabian and International section:* Often it consists of 2-3 pages encompass the Arab and international political news.
- **4.** *Press panorama:* from 2-3 pages contains selected articles from Arab and international newspapers translated to the Arabic language.
- 5. *Sequel page:* from 1-2 pages to complete the articles and news that has been referred to in the cover page.
- 6. *Economic section:* Usually consists of 2 to 4 pages and contain economic news and articles and this section content will be explained in detail later.

- 7. *Miscellany and entertainment:* this section comes under (Al-Dewan) and "Shababeek" titles, and consists of 2-3 pages contain fashion, health and beauty, new technologies, art and cultural news.
- 8. *Sport section:* Often this section consists of 4-6 pages containing the local, Arab and international sports news.

When the number of pages increases, it the additional pages contain commercial advertisements, caricature drawings and opinion pages, and sometimes a page or two for cultural topics.

#### 2.4.5.3 Felesteen newspaper:

Felesteen newspaper is considered the most stability one in terms of the total number of daily pages, where the number is constant to a large extent throughout the study period, and has not changed except only once after the Israeli aggression on Gaza Strip (July and August 2014). The newspaper headquarters was bombed by Israeli warplanes during the aggression resulting in a massive destruction in it. Since the beginning of 2011 until the Israeli aggression on 7 July 2014, the number of daily page was, to a large extent, constant at 32 pages a day, but after the end of the aggression, it has become, to a large extent, constant at 28 pages a day.

The content of Felesteen is similar to the content of the other two newspapers the in several sections, such as cover page, local section, Arab and international section, sequel page, economic section, and sport section, but with some differences in the number of pages in each section (11 pages for local section, 4 pages for Arab and international section, 1-2 pages for economic section, 4 pages for sport section, and 2-3 pages for opinion and dialogue. In addition, there are two sections do not exist in the other two newspapers:

- 1. *Family and community section:* consists of 2 to 3 pages that discuss family and community issues, such as child rearing, safe nutrition, health, and social issues.
- 2. *Religious section:* consists of a single page containing some religious issues and answers to readers' questions.

From the previous indicators, it can be seen that the media coverage to the economic sector is limited and weak in the three newspapers. The total number of economic pages in the three newspapers reached to 8,666 pages only throughout the study period which extends to 1,461 days, this means that economic sector has an

average of less than 6 pages per day in the three combined newspapers, and less than 2 pages per day in each newspaper alone, while the sport sector up to 4 and sometimes 6 pages a day in each newspaper alone, in addition, entertainment and games up to 2 pages a day also.

#### 2.4.6 Main parts of newspapers economic content

This section provides a descriptive analysis to the content of the economic pages in the three newspapers, which is likely to be representative of most of the coverage of the corporate sector. In each newspaper, the researcher explains and comments on the detailed statistics, describe the common fixed topics, and show the tone by which the pages were written.

#### 2.4.6.1 Al-Ayyam newspaper

newspaper characterized with the highest rate of economic pages and covered days between the three newspapers in the sample. The total number of covered days during the four years is 1,440 days, which represent 98.56% of the total days, and it is almost equally distributed between the four years. At the same time, the number of economic pages increases from 686 pages in 2011 to 973 pages in 2014.

The content of Al-Ayyam is somewhat similar to Al-Hayaa; the main parts of the daily content of the two newspapers are as the following:

#### 1. Trading bulletins:

Trading bulletins is a table contains all the quantitative information about the previous trading day for all listed companies. Such information includes prices, trading volume and value, exchanging currency, change percentage, and the number of transactions.

Under this table, there are two small tables. The first table contains four overall statistics on the market during the previous day, these statistics are:

- Number of companies, which stock has been traded
- Number of companies that share prices, have risen
- Number of companies that share prices have declined
- Number of companies that share prices have not changed

The second table contains numerical data about the seven indices, Al-Quds index, General index, and one index for all economic sector.

In the bottom of this section, there is a qualitative description essay about the market and the index's performance with some percentage statistics and rate.

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Figure (2.12) a sample of daily bulletins at newspaper.

### 2. Local economic news:

This section includes news, articles, press reports and investigations about the local economy. These news and articles may be categorized into the main following scopes:

 Listed company's news, including disclosure of information, shareholder meetings, Dividends to shareholders, Launch new services, marketing and promotional campaigns.

- Projects that have an Economic influence such as hospital and school building, roads and Infrastructure, and development of the agricultural and industrial sector.
- Variables of the local macroeconomic such as inflation, poverty and unemployment rates, exports and imports, foreign funds and aid, and living expense.
- Economic events such as conferences, exhibitions, seminars and workshops, signing of agreements to implement projects, and visiting of foreign delegations.
- Laws and regulations related to the economy, such as taxes, customs, and unions and labors.
- Present results of some economic researches and studies.

#### 3. Regional economic news:

Its amount is less than local news and it includes:

- Information about some of the Arabian stock market indices, especially in Kuwait, Saudi Arabia, Jordan, Egypt, Qatar, United Arab Emirates.
- Oil and natural gas prices, supply, demand, and production quantities of them.
- Trade exchange among Arab countries.
- Political events that influence the economy, such as strikes and protests.
- Foreign investments in Arab countries.
- Debt and loans for countries and the Arab governments.

#### 4. Global economic news:

Such news centered on imports and exports, economic growth, debt, and news about international companies in the areas of technology, automotive industry, and energy.

#### 2.4.6.2 Al-Hayaa newspaper

The total number of covered days during the four years is 1,029 days, which represent 70.43% of the total days, and it is almost equally distributed between the four years. 2014 has the largest number of economic pages compared to the previous three years.

The content of Al-Hayaa economic pages is quite similar to those of newspaper. The most important differences between them can be summarized in the following points:

 Often there was no economic pages in the days that following the non-trading days, Saturday and Sunday, while in Al-Ayyam newspaper, there were economic pages, but without trading bulletin.

- 2. Bulletin of Currency exchange rates, Precious metals prices, the currencies included in the table are US dollar, Jordan dinar, euro, and Sterling pound, and the metals are gold and silver. Figure (2.13) show a sample of this bulletin.
- 3. Weekly business supplement was published during the period from 18 April 2011 to 20 November 2011. The newspaper published 29 volumes from the supplement under the title of "life and market". The supplement often consists of 10-16 page and covers economic field only.

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	0,7200	0,7075	دينار - دولار اميركـي								
	1,3350	1,3050	يــورو - دولار اميركـي								
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Figure (2.13): bulletin of Currency exchange rates and Precious metals prices sample.

#### 2.4.6.3 Felesteen newspaper

The total number of covered days during the four years is 1,293 days, which represent 88.50% of the total days. It is noted that the number of covered days increases from 291 days in 2011 to 360 days in 2013, then significantly decreased to 307 days in 2014 Due to stop publishing the newspaper during the period of the Israeli aggression on Gaza Strip summer of 2014. The number of economic pages also increased from 519 pages in 2011 to 689 pages in 2013, and then significantly decreased to 601 pages in 2014 because of the same reason.

As I explained earlier, the economic content of the two previous newspapers is similar, at the same time, the economic content of Felesteen newspaper differs from them dramatically. The manner of discussing the economic issues tends to be general and descriptive rather than quantitative. In any case, the researcher can summarize the most important differences between Felesteen and the two previous newspapers in the following points:

- 1. The absence of trading bulletin shows the numerical trading data for all listed companies in the market through the previous days.
- 2. Focusing on the Israeli siege of Gaza Strip, this issue occupies a large part of the daily economic content of the newspaper, such news includes subjects as opening and closing crossings, the effects of the Israeli attacks and reconstruction projects, and service projects implemented by municipalities and local government bodies, and emergency crises such as fuel, gas, and electricity.
- 3. Focusing on local news in comparison to other newspapers.
- 4. As Felesteen newspaper during the study period issued only in Gaza without the West Bank, the news focused on the economy of the Gaza Strip more than the West Bank.

## **Chapter 3 Literature Review**

### Chapter 3

### **Literature Review**

### **3.1 Introduction**

This chapter reviews 30 previous studies, which are related to the study. 18 of them have been conducted in USA financial market, 3 in Germany, 1 in UK, France, Argentina, New Zealand, and Netherlands, and 3 in two or more countries. Figure (3.1) shows the distribution of the reviewed studies on the different markets.

The reviewed literature varies in the covered period, the media sources, the covered firms, the frequency of measurements, the methodology, and the results. They can be classified in more than category such as the period of the study, the type of media, the covered firms, the frequency of measurements, and the media tone measurements approach. The longest time series in the literature extends for 100 years, when Garcia (2014) analyzed the newspapers content from 1905 to 2005. The shortest time series extends for 4 days only, Chung and Liu (2011) analyzed the twitter content from 29 November 2011 to 2 December 2011. Except Sprenger and Welpe (2011) and Bollen, Mao et al. (2011) which are extend for less than one year, the remain studies of literature varies from 4 to 37 years. Figure (3.2) segments the studies according to the duration period of each study into 6 categories as follow: less than on year, from 1 to 5 years, from 6 to 10 years, from 11 to 15 years, from 16 to 20 years, and more than 20 years. The figure also shows the number of studies in each category.



Figure (3.1) show the number of study in each country





The main media sources can be categorized into three main sources: newspaper articles, annual reports required by the U.S. Securities and Exchange Commission (SEC) such as 10-K, and social media articles and comments. 25 studies in the literature use newspaper articles in different formats, hardcopies, soft copies and online news. 3 studies use twitter content, one study uses Seeking Alpha (SA), one of the biggest investment-related social-media websites in the United States, and one study uses 10-K annual report. Chen, De et al. (2014) combined between articles from Dow Jones newspaper and Seeking Alpha (SA) articles. Schmitz (2007) used 7 TV news in addition to articles from 5 large daily newspapers. The most newspapers that has been analyzed in the literature is Wall Street Journal (WSJ) and Dow Jones (DJ).

Most important works of literature study the effect of media content on a set of firms listed in a specific index/ indices.

Some studies depend on stocks form one index, For example, Tetlock (2007) depended on Dow Jones Industrial Averages (DJIA) and Ferguson, Philip et al. (2014) depended on FTSE 100 firms (the Financial Times Stock Exchange 100 Index). Some studies depended on stocks from two or more indices, such as Akbas, Kocatulum et al. (2008) which depended on all stocks traded on NYSE, AMEX and NASDAQ indices, and Kerl, Schürg et al. (2014) which depended on German DAX, MDAX and SDAX indices. Some studies selects a set of stock such as Chen,

Pantzalis et al. (2009) which depended on top gainers and top losers of ten companies in the technology sector.

The researcher means by the frequency the period of observing the value of variables, the major of the literature used daily or monthly base. Some studies analyzed the variable relations at a daily base; in this case, they used high frequency measurements. Other studies analyzed the variable relations at a monthly base; in this case, they used low frequency measurements. Just Sinha (2010) used weekly base, Fang, Peress et al. (2014) and Chen, De et al. (2014) used quarterly base, Some studies combine between two bases, analyzed each variable at one base such as Jegadeesh and Wu (2013) which used annually base in addition to monthly base.

The table is classified into four panels, the first is fore USA studies and contains 19 studies, the second is for Europe and contains 6 studies, the third is for emerging countries and contains 2 studies, and the last panel for international and contains 3 studies.

				<i>,</i>	5								
#	name	authors	time period	media source	stock data	interval	tone measurement						
	USA studies												
1	Giving content to investor sentiment	Tetlock, P. C. (2007)	1984-1999	Wall Street Journal's (WSJ's) "Abreast of the Market" column	Dow Jones Industrial Averages	daily	Counting the words in all 77 predetermined GI categories from the Harvard psychosocial dictionary.						
2	More than words: Quantifying language to measure firms' fundamentals	Tetlock, P. C., et al. (2008)	1980-2004	Wall Street Journal (WSJ) and Dow Jones News Service (DJNS)	Center for Research on Security Prices (CRSP) for S&P index stocks	daily	Bag-of-Words scheme Harvard-IV-4 psychosocial dictionary						
3	Does Media Coverage of Stocks Affect Mutual Funds' Trading and Performance?	Fang, L. H., et al. (2014)	1993-2002	four daily newspapers: USA Today, The Wall Street Journal, The New York Times, and The Washington Post	Nexis Lexis for all NYSE stocks and 500 randomly selected NASDAQ stocks	quarterly	count the total number of articles about each firm in the sample						
4	Underreaction to news in the US stock market	Sinha, Nitish Ranjan (2010)	2003-2010	wire service from the Thomson Reuters NewsScope dataset	Center for Research in Security Prices (CRSP) tapes provided through the Wharton research data services (WRDS)	weekly	Analyzing a document at the sentence level						
5	Financial Press Coverage and Expected Stock Returns	Christopher Gadarowski (2002)	1980-1995	Dow Jones News Service	New York Stock Exchange (NYSE) and American Stock Exchange (AMEX) nonfinancial firms	annually and monthly	count of Dow Jones News Service documents using a ticker search						

 Table (3.1): brief summary about the literature study.

#	name	authors	time period	media source	stock data	interval	tone measurement
6	Word Power: A New Approach for Content Analysis	Narasimham Jegadeesh, Di Wu (2011)	1995-2008	10-Ks filed from SEC's EDGAR database using a customized web crawling algorithm	almost 2,914 every year in the period	annually	negative and positive word lists constructed by Loughran and McDonald (2011)
7	Media Coverage and the Cross- section of Stock Returns	Fang, L. and J. Peress (2009)	1993-2002	Four daily newspapers: New York Times (NYT), USA Today (USAT), Wall Street Journal (WSJ), and Washington Post (WP). obtained from LexisNexis	(CRSP) for all companies listed on the NYSE and 500 randomly selected companies listed on the NASDAQ	monthly	eighted sum of articlespublished about each company in each month
8	Journalists and the Stock Market	Casey Dougal, Joseph Engelberg, Diego Garcia, and Christopher A. Parsons	1970-2007	Wall Street Journal	Dow Jones Industrial Average (DJIA)	daily	Loughran and McDonald (2009)
9	Media and Investment Management	Gideon Ozik and Ronnie Sadka (2012)	1999-2008	Three main categories: General (daily newspapers); Specialized (investment magazines); and Corporate communication (PR Newswire and Business Wire).	774 unique funds includes both operating, "Live" funds and "Graveyard" funds	monthly	Textual analysis to the title of each news item to measure news item sentiment. classifies each word into positive, negative, or undefined, according to the Harvard IV-4 Psychosocial Dictionary
10	Mispricing following public news: Overreaction for loser, underreaction for winners	Ferhat Akbas, Emre Kocatulum, and Sorin M. Sorescu	1980-2006	news items obtained from Dow Jones Interactive Publications Library of past newspapers	all stocks traded on NYSE, AMEX and NASDAQ	monthly	Chan (2003)

#	name	authors	time period	media source	stock data	interval	tone measurement
11	News versus sentiment: Comparing textual processing approaches for predicting stock returns	Steven L. Heston, and Nitish Ranjan Sinha	2003-2010	Thomson-Reuters neural network.	tagged firm identifiers from the Thomson-Reuters news system over the calendar years	daily and weekly	Harvard psychosocial dictionary used by Tetlock, Saar- Tsechansky, and Macskassy (2008), the financial dictionary of Loughran and McDonald (2011), and a proprietary Thomson- Reuters neural network
12	Predicting Stock Market Fluctuations from Twitter	Sang Chung & Sandy Liu	2011 (November 29, to December 2)	tweets in XML format	Top gainers and top losers of ten companies in the technology sector Google stock prices	daily	Hu and Liu's sentiment list contains about 6800 words that reflect either positive or negative sentiment
13	Press Coverage and Stock Prices' Deviation from Fundamental Value	CW Chen, C Pantzalis, JC Park	1995-2004	major U.S. newspapers (Wall street Journal, New York Times, Washington Post, and Los Angeles Times)	CRSP) where NYSE, AMEX, and Nasdaq stocks are listed	monthly	count of the number of newspaper articles on a particular firm
14	Stock price reaction to news and no- news: drift and reversal after headlines	Wesley S. Chan	1980-1999	Dow Jones Interactive Publications Library	A subset of CRSP stocks randomly selected approximately 1=10th of all stocks that existed at any time	monthly	For each company, he select all dates when the stock was mentioned in the headline or lead paragraph of an article
15	The causal impact of media in financial markets	Joseph Engelberg Christopher A. Parsons	1991-2007	articles from newspapers: Boston (Globe), Denver (Post), Detroit (News), Houston (Chronicle), Las Vegas (Review Journal), New York (Times), etc	S&P 500 Index firms	daily	database of newspaper articles linked by GVKEYs to S&P 500 firms

#	name	authors	time period	media source	stock data	interval	tone measurement					
16	The kinds of financial journalism	Diego Garcia	1905-2005	Wall Street Journal and New York Times	DJIA returns	daily	positive and negative word counts using the word dictionaries provided by Bill McDonald					
17	News or noise? The stock market reaction to different types of company- specific news events	Timm O. Sprenger Isabell M. Welpe	January 1st and June 30th, 2010	microblogging platform Twitter	S&P 500 stock prices	daily	Naïve Bayesian classification method, the most widely used algorithms for supervised text classification					
18	Wisdom of crowds: the value of stock opinions transmitted through social media	Hailiang Chen, Prabuddha De, Yu (Jeffrey) Hu, and Byoung-Hyoun Hwang	2005-2012	Seeking Alpha (SA) articles, SA commentaries, and DJNS articles	IBESCOMPUSTAT CRSP	quarterly	negative words list compiled by Loughran and McDonald (2011)					
19	Twitter mood predicts the stock market	Johan Bollen; Huina Mao ,Xiao- Jun Zeng.	February 28 to December 19th, 2008	Twitter	Dow Jones Industrial Average (DJIA)	daily	two mood tracking tools, OpinionFinder and GPOMS					
	Europe studies											
20	Do Newspaper Articles Predict Aggregate Stock Returns?	Manuel Ammann, Roman Frey, and Michael Verhofen (2011)	1989-2011	articles published in the Handelsblatt a leading German financial newspaper	main stock market index DAX	monthly	word-count indices, a list of words frequently used in newspaper articles					

#	name	authors	time period	media source	stock data	interval	tone measurement
21	Market and Individual Investors Reactions to Corporate News in the Media	Philipp Schmitz (2007)	1998-2006	5 large daily newspapers and 7 TV news	125 large (DAX) and medium-sized (MDAX)companies	daily	Media Tenor, a media research institute that screens the opinion leading daily newspapers and TV news with the help of 240 media analysts.
22	The impact of Financial Times Deutschland news on stock prices – post announcement drifts and inattention of investors	Alexander Kerl1 Carolin Schürg Andreas Walter	2006-2010	Financial Times Deutschland (FTD) news	German DAX, MDAX and SDAX companies	daily	Every single article is read by two of the authors and, classified as either positive or negative. Otherwise, they classify it as neutral
23	Media content and stock returns: The predictive power of press	Ferguson, N. J., et al. (2014)	1981-2010	national newspapers: The Financial Times (FT), The Times, The Guardian and Mirror	FTSE 100 firms	daily	The words in each article are compared to Loughran and McDonald's (2011) positive and negative financial word lists
24	Media-Driven High Frequency Trading	Bastian von BeschwitzDonald B. KeimMassimo Massa	2004-2012	RavenPack (Dow Jones Newswire)	CRSP	monthly	computer algorithm and delivers article- level relevance and sentiment metrics
25	The "Tone Effect" of News on Investor Beliefs: An Experimental Approach	Ronald Bosman, at al. (2014)	1990-2010	New York Times (NYT) or the Financial Time (FT)	selected twelve U.S. company stocks that were listed on the S&P 500 index	monthly	80 Master and Bachelor students from the Faculty of Economics and Business Administration at the VU University Amsterdam
				<b>Emerging studies</b>			

#	name	authors	time period	media source	stock data	interval	tone measurement						
26	Media news and the stock market: evidence for Argentina	J. Daniel Aromí - IIEP-Baires	1997-2012	La Nacion, a major newspaper published in Buenos Aires	Merval Index, the main index reflecting stock prices in the Bolsa de Comercio de Buenos Aires	daily	lists of words with positive and negative valence, and use two categories from the Harvard IV-4 dictionary: Pstv and Ngtv.						
27	Media Sentiment, Investor Sentiment, and Stock Price Sensitivity to Earnings	Steven F. Cahana, Chen Chena, Nhut H. Nguyenb	2003-2011	Thomson Reuters News Analytics	125 portfolios returns as the benchmark following Daniel, Grinblatt, Titman, and Wermers (1997)	monthly	TRNA database of news items where each news item has been scored on three sentiment dimensions, positive, negative, and neutral						
	International studies												
28	The role of media in the credit crunch: the case of the banking sector	Tomasz Piotr Wisniewski Brendan Lambe	2005-2010	all English language news contained in the LexisNexis database	FTSE Banks indices downloaded from DataStream	monthly	recorded the number of articles mentioning negatively charged phrases						
29	The impact of the media in financial markets: evidence from newspaper strikes	Joel Peress	1989-2010	Newspaper articles	the media sector	daily	indicator variable which equals one if a newspaper strike occurs on day t zero otherwise						
30	How important is the financial media in global markets?	Griffin, J. M., et al. (2011)	2003-2009	Factiva news archive which includes major business news publishers such as The Wall Street Journal, Financial Times, Dow Jones, and Reuters.	CRSP for the United States and from Thomson Financial's Datastream for the rest of the world	daily	Ratio of the number of articles in the earnings- event window relative to the number of articles in the pre-event window						

### **3.2** Newspapers based studies

In this section, the researcher will begin with the studies, which used newspaper articles to measure the tone, because it is similar to our study, and it represents the big size of the literature.

### 1. (Akbas, Kocatulum et al. 2008)"Mispricing following public news: Overreaction for loser, underreaction for winners."

This study examines the interaction of momentum and short-term reversal. The main dataset include all stocks traded on NYSE, AMEX and NASDAQ during the period from 1980 to 2006. The authors employ a news dataset assembled by Chan (2003), which covers a random sample of approximately one-quarter of all CRSP stocks over the period from 1980 to 2000. The authors divided stocks into two groups: Stocks that were mentioned in the headlines (the news group) based on Chan's dataset, and stocks that were not (the no-news group). They repeat their previous analysis with these two sub-samples. The study found under reaction to public news. These findings present opportunities for earning abnormal returns of a magnitude never before documented in the literature.

### 2. (Ammann, Frey et al. 2014) "Do newspaper articles predict aggregate stock returns?"

The goal of this study is to investigate the predictive power of newspaper contents toward stock market's future returns in Germany. The data about newspaper content was collected from articles published in the Handelsblatt, a leading German financial newspaper, from July 1989 to March 2011. These data were summarized and quantified by constructing word-count indices. The stock market data was collected from the main stock market index, the DAX price levels. The main finding of the study is that the predictive power of newspaper content has increased over time, particularly since 2000. In addition, a cluster analysis approach increases the predictive power of newspaper articles substantially. The analysis shows that newspaper content is a valuable predictor of future DAX returns in and out of sample. Finally, the study extended by analyzing the relation between newspaper articles and the development of Germany's real economy.

### 3. (Aromí-IIEP-Baires 2013) "Media news and the stock market: evidence for Argentina."

This study provides evidence on the relationship between information flows and stock prices. it evaluates the relationship between media content and stock returns using daily data from Argentine press from 1997 through 2012. The author implements a quantitative analysis of information flows that provides new evidence for an emergent market. The measure of information flow is taken from the economic section of La Nacion, a major newspaper published in Buenos Aires. The author identified lists of words with positive and negative valence, and use two categories from the Harvard IV-4 dictionary: Pstv and Ngtv. The analysis shows that a high faction of positive words and a low fraction of negative words predict higher returns for the following market session. The results are consistent with the presence of market participants that overreact to information flows and limits to arbitrage.

### 4. (Bosman, Kräussl et al. 2014)"The "tone effect" of news on investor beliefs: An experimental approach."

The study investigates the effect of the tone of news on investor stock price expectations and beliefs. In an experimental study, subjects were asked to estimate a future stock price for twelve real listed companies. The sample consists of 80 Master and Bachelor students from the Faculty of Economics and Business Administration at the VU University Amsterdam. The students were provided with historical stock prices and extracts from real newspaper articles. The authors selected twelve U.S. company stocks that were listed on the S&P 500 index and that complied with their pre-specified performance requirements. The main results show that subjects on average seem to expect a significantly higher (lower) future return after reading positive (negative) tone news. The effect appears to be driven mainly by stocks with the poor past performance. Subjects, who tend to expect a higher (lower) next period stock return, also tend to describe their sentiment as more optimistic (pessimistic). Subjects are more likely to choose to buy (sell) additional shares after reading positive (negative) than negative (positive) tone news.

### 5. (Cahan, Chen et al. 2013)"Media sentiment, investor sentiment, and stock price sensitivity to earnings."

The study examines media optimism and pessimism in firm-specific news rather than focuses on market-wide investor sentiment. The authors construct a measure of firm-specific media sentiment (MediaSent) using data from TRNA. To examine the effect of media sentiment on the ERC from January 2003 to December 2011, they adapt MS's model and regress the CAR on indicators for good and bad earnings news, interactions between the good/bad earnings news indicators and firm-specific media sentiment in the month prior to the earnings announcement, investor

sentiment, and control variables. The findings show that the optimism (after controlling for firm fundamentals) in stories written by the business press can lead investors to overreact (underreact) to positive (negative) unexpected earnings, while pessimism can lead investors to overreact (underreact) to negative (positive) unexpected earnings.

### 6. (Chan 2003)"Stock price reaction to news and no-news: drift and reversal after headlines."

This study examines returns to a subset of stocks after public news about them is released. This subset of stocks is compared to other stocks with similar monthly returns, but no identifiable public news. The author collected all stocks in a given month that had an event of interest (in this case, at least one news story). Then he ranked all such stocks by raw returns and select the top and bottom thirds. Then he referred to these two sets as "news winners" and "news losers". Then he examined cumulative raw and abnormal returns for up to 36 months after the initial headline month. He also did the same for no-news stocks. The study found evidence of postnews drift, which supports the idea that investors underreact to information. This is strongest after bad news. The study also found some evidence of reversal after extreme price movements that are unaccompanied by public news.

### 7. (Chen, Pantzalis et al. 2009) "Press coverage and stock prices' deviation from fundamental value."

The study examines the potential link between abnormal press coverage and several mispricing measures. It tests the relation of press coverage with measures of risk associated with the information environment of the firm. The authors measure the extent of press coverage for a large sample of publicly traded U.S. firms by counting the number of news articles about every firm that appeared each calendar year from 1995 to 2004 in the four major U.S. newspapers (Wall street Journal, New York Times, Washington Post, and Los Angeles Times). The final sample includes 12789 firm-years during the sample period. They read each article to make sure whether it is about the particular firm and when it is reported. The empirical tests provided evidence against the information intermediary and corporate governance hypotheses. In particular, the study found that a) mispricing significantly positive related to abnormal news coverage. These two pieces of evidence, combined with the

fact that abnormal news coverage is also associated with greater trading volume, are consistent with the predictions of both the biased media and the media-induced sentiment hypotheses.

#### 8. (Dougal, Engelberg et al. 2011)"Journalists and the stock market."

The main objective of this study is to investigate the relation between the writing of specific journalists and aggregate market outcomes. Two main data sources used in this study are the Abreast of the Market (AOTM) column from the Wall Street Journal, and the Dow Jones Industrial Average (DJIA) price and dividend series. The sample period spans January 1, 1970 to December 31, 2007. The results suggest that financial journalists have the potential to influence investor behavior, at least over short time horizons. Adding journalist fixed effects to a daily return regression significantly increases explanatory power, and when these fixed effects are interacted with recent returns, the implied return predictability is even more dramatic. Overall, the study results suggest that the interpretation of public news is important, as the uncovered effects are strongest when journalists write about significant market moves.

### 9. (Engelberg and Parsons 2011) "The causal impact of media in financial markets."

The study aims at solving the problem of separating the causal impact of media reporting and the impact of the events being reported by comparing the behaviors of investors with access to different media coverage of the same information event. The authors use zip codes to identify 19 mutually exclusive trading regions, corresponding to 19 large U.S. cities and local newspapers. The data divides into three types: earnings announcements, local media coverage, and trading of retail investors. The authors collect all earning announcements dates from S&P 500 firms between January 1991 and December 2007. The main result is that for an earnings announcement by a given S&P 500 Index firm, trading in each of the nineteen local markets is strongly related to whether the local paper covers the announcement. All else equal, local press coverage increases the trading volume of local retail investors by nearly 50%. Although somewhat stronger for buying activity, the local media-local trading effect remains significant for selling as well.

### 10. (Fang, L., & Peress, J. 2009)"Media coverage and the cross section of stock returns."

This study investigates if the mass media can alleviate informational frictions and affect security pricing even if it does not supply genuine news by studying the cross-sectional relation between media coverage and expected stock returns. This study counts articles in mass-circulation newspapers and focuses on coverage. The sample consists of all companies listed on the NYSE and 500 companies were randomly selected and listed on the NASDAQ between January 1, 1993 and December 31, 2002. The main finding are: stocks not covered by the media earn significantly higher future returns than stocks that are heavily covered, even after accounting for widely accepted risk characteristics. The return difference is particularly large among small stocks, stocks with low analyst coverage, stocks primarily owned by individuals, and stocks with high idiosyncratic volatility. In particular, the media effect is strong among small stocks and stocks with high bidask spreads. Also the study found that the no-media premium is particularly large among stocks that face the most severe information problems, i.e. stocks with low analyst coverage, a high fraction of individual ownership, and high idiosyncratic volatility.

### 11. (Fang, Peress et al. 2014)"Does media coverage of stocks affect mutual funds' trading and performance?"

The study examining whether mutual funds' trading in the aggregate is influenced by media coverage of stocks. A comprehensive media coverage data was collected from Nexis Lexis for all NYSE stocks and 500 randomly selected NASDAQ stocks for the period 1/1/1993–12/31/2002. The data set include articles published about the sample stocks in four daily newspapers with nationwide circulation: USA Today, The Wall Street Journal, The New York Times, and The Washington Post, together, they account for 11% of the average weekday newspaper circulation in the United States. The main findings are as follows. First, in the aggregate, funds tend to buy more of those stocks that receive heavy media coverage. This result holds even after a control for size, liquidity, and several other stock characteristics that have been shown to influence funds' trades. The study found that funds' sells, in contrast, are not significantly affected by stocks' media coverage. Second, a negative relation between funds' propensity to buy stocks covered by the media and their performance in the cross-section.

### 12. (Ferguson, Philip et al. 2014)"Media content and stock returns: The predictive power of press."

This study examines whether tone (positive and negative) and volume of firm-specific news media content provide valuable information about future stock returns, using UK news media data from 1981–2010. By studying both positive and

negative measures of media content, the study uses the overall distribution of news to gain insight into the information embedded in news articles. The study is conducted using a large news media dataset from the UK market. The sample consists of 264,647 firm-specific UK news media articles covering FTSE 100 firms over the period 1981 to 2010. The sources of news articles are national newspapers that are globally recognized, namely, The Financial Times (FT), The Times, The Guardian and Mirror. The words in each article are compared to Loughran and McDonald's (2011) positive and negative financial word lists to identify the number of positive and negative words in a financial context. Specifically, the study found that positive as well as negative words in firm-specific news media content significantly predict higher returns in the next trading period, while negative words in firm-specific news media content significantly predict lower next trading period returns.

#### 13. (Gadarowski 2002) "Financial press coverage and expected stock returns."

This study investigates whether the level of recent news coverage on a firm can predict differences in subsequent returns and whether this predictive power is more consistent with behavioral than rational asset pricing. While many studies investigate potential behavioral pricing using specific news events, this study examines whether the quantity of news can predict returns in a manner consistent with behavioral pricing biases. The sample in this study is based on NYSE stands for New York Stock Exchange (NYSE) and American Stock Exchange (AMEX) nonfinancial firms that have a history of returns for at least two years ending in June of each year. The main results of the study are as follow: First, a count of recent Dow Jones News Service stories, adjusted for equity capitalization, predicts differences in returns of about 4% per year for the average firm. Second, the predictive power of news counts is concentrated among firms with low book-to-market ratios, with the highest news-count firms among low book-to-market firms earning returns 10% below those with the lowest news counts. Third, adjusting for potential systematic risk related to the market, Fama-French factors, and factor mimicking portfolios based on news counts cannot explain the poor performance of low book-to-market firms with high news counts. Fourth, a non-systematic return effect potentially associated with market incompleteness with respect to information also cannot

explain the predictive power of news counts among low book-to-market firms. Fifth, this predictive power persists for up to two years beyond identification but diminishes in the third year. Lastly, the time-series of this concentrated news count effect is negatively related to lagged changes in macroeconomic conditions.

#### 14. (Garcia 2014)"The kinds of financial journalism"

This study focuses on the content of financial news as a function of past market returns. As a proxy for media content, the authors used positive and negative word counts from general financial news columns from the Wall Street Journal and the New York Times. The study includes the content of over seventy thousand columns on financial affairs from the New York Times and the Wall Street Journal from 1905 to 2005. The study has established a strong non-linearity between lagged market returns and the content of financial news. The shape of the relationship is present in all subsamples that have studied, and holds not just for the last trading day, but also even for returns 2-4 days before publication. The evidence is conclusive: negative market returns taint the ink of typewriters, while positive returns barely do.

### 15. (Griffin, Hirschey et al. 2011)"How important is the financial media in global markets?"

The study investigates the differences in the information content of public news announcements in international equity markets. It quantified how the market react to these announcements varies across countries and examined potential explanations for these differences. The main data in this article consist of firm stock returns, news articles, earnings and takeover announcements, and country-level descriptive variables. The sample of general news articles from January 2003 to June 2009 covers 2,593 firms, with 572,987 news articles in 26 developed markets and 298,614 in 30 emerging markets. The study found that volatility on event days varies substantially both between developed and emerging markets and within each category. Stock price moves range from 50% more than normal volatility in a number of developed markets (Denmark, the United Kingdom, Sweden, the Netherlands, the United States, Finland, Hong Kong, and Germany) to less than 5% more than normal in several emerging markets (Thailand, Turkey, Mexico, and Indonesia). Additionally, even among developed or emerging markets, there are large differences in the extent to which stock prices respond to news.

### 16. (Heston and Sinha 2014) "News versus sentiment: Comparing textual processing approaches for predicting stock returns."

This study tests whether news can predict stock returns. The authors used the "bag of words" dictionary approach and compare it with a neural network approach on identical data. The empirical analysis uses 900,754 articles tagged with firm identifiers from the Thomson-Reuters news system over the calendar years 2003-2010. The authors match the sentiment data with the text data using the timestamp and story id for all the items in the sentiment data and obtain a dataset that contains the text as well as the probabilities of the article being positive, negative and neutral. The basic unit of analysis is a sentence. They measure the sentiment for a given firm as the average positive minus negative sentiment on all stories about that firm in a formation period. The study found that news tone indeed has an effect on stock returns. Positive news predicts positive returns for only about one week, but negative news predicts negative returns for up to a quarter.

### 17. (Kerl, Schürg et al. 2014)"The impact of financial times Deutschland news on stock prices –post announcement drifts and inattention of investors."

This study analyzes the impact of Financial Times Deutschland (FTD) news on stock prices and trading volumes. The study based on a sample of all news on German DAX, MDAX and SDAX companies published within the news section of the FTD between 2006 and 2010. The main two questions in the study are: first, to what extent news, which are published by the German major financial newspaper Financial Times Deutschland (FTD) impact stock prices? Second, what is the speed of price adjustment? The results show that articles that contain positive (negative) information are associated with significantly positive (negative) abnormal returns and abnormal trading volumes around their publication.

#### 18. (Ozik and Sadka 2012) "Media and investment management."

The aim of this study is to find the relation between the media coverage of funds and their future performance. The authors focus on the media coverage of the investment management industry, specifically equity hedge funds. The study asked the following four questions: Do different media sources systematically differ in the manner in which they cover hedge funds? Are they overly negative or too lenient? Do media contain information about future fund performance? And, do investors understand this information and act upon it? The authors classify news items about

equity hedge funds over 1999 to 2008 into three source groups: General newspapers, specialized magazines, and Corporate Communication. The study found that Corporate-covered funds outperform and General-covered funds underperform, with a performance difference of about 11% annually.

### **19.** (Peress 2011)''The impact of the media in financial markets: evidence from newspaper strikes.''

This study investigates the causal impact of the media in financial markets by exploiting exogenous media blackouts resulting from national newspaper strikes in several countries. Over the period 1989-2010, the author found 52 eligible national newspaper strikes, lasting on average 1.7 business days and amounting to 88 strike days in total. They are concentrated in four countries: France, Greece, Italy and Norway. The author collected data on newspaper strikes that prevent readers from receiving news, either because newspapers are not written (a journalists' strike), not printed (a printers' strike) or not distributed (a distributors' strike). The study found only weak evidence of a matching reduction in stock return volatility. Together, these findings suggest that the media are not essential to the informational efficiency of stock prices, even though they play an important role in propagating information among investors.

### 20. (Schmitz 2007) "Market and individual investor's reactions to corporate news in the media."

The study aims at answering the question: how is precise and new information is reflected in prices of securities? Analysis is based on roughly 300,000 corporate news on 125 large and medium-sized companies in 5 large daily newspapers and 7 TV news shows from Germany between July 1998 and October 2006. The author analyzed every report in the leading nationwide daily newspapers and the main TV news and evaluate whether it is good, neutral or bad news for the respective company. For good news, he found an economically and statistically important reaction on the event day. The returns of the stocks are on average 1.12% higher than on other days. In addition, there exists a significant post event drift of 0.28% in the same direction as the initial reaction on the next day, indicating at an initial under reaction to the information. The results also indicate that individual investors do indeed react slightly slower to new information than the average investor, whereas warrant investors react faster than stock traders do.

#### 21. (Sinha 2010) "Underreaction to news in the US stock market."

The study aims at measuring the tone of news articles by constructing a weekly measure of qualitative information. The score is derived from the words and phrases. In contrast to previous research, the author used news articles from a wire service. The news data were obtained from the Thomson Reuters NewsScope dataset between 2003-2010, it consists of 9.4 million firm-specific news items. The study followed the text-processing engine method which analyzing an article at the sentence level rather than the word level. The main results of the study are: First, the market underreacts to the tone of news articles. The under reaction is not limited to small stocks, stocks with few analysts, and stocks with few institutional holdings. Second, the portfolio resulting from the long-short WQI-based trading strategy is highly correlated with the UMD factor. Third, the news provides a simple explanation for the short-term reversal of stock returns.

### 22. (Tetlock 2007) "Giving content to investor sentiment: The role of media in the stock market."

The study attempts to characterize the relationship between the content of media reports and daily stock market activity, focusing on the immediate influence of the Wall Street Journal's (WSJ's) "Abreast of the Market" column on U.S. stock market returns. The collected data consists of time series of daily returns from January 1, 1984, to September 17, 1999, from the Wharton Research Data Services' access to the historical Dow Jones Industrial Averages. The author used General Inquirer (GI), a well-known quantitative content analysis program, to analyze daily variation in the WSJ "Abreast of the Market" column over the 16-year period. The study reached to three main results; First and foremost, it found that high levels of pessimistic media predict more pressure on market prices, followed by a reversion to fundamentals. Second, pessimistic media forecast unusual high or low values of market trading volume. Third, low market returns lead to more pessimistic media. These findings suggest that the measures of media content serve as a proxy for investor sentiment or non-informational trading.

### 23. (Tetlock, Saar-Tsechansky et al. 2008) "More than words: Quantifying language to measure firms' fundamentals."

The study analyzes the impact of negative words in all Wall Street Journal (WSJ) and Dow Jones News Service (DJNS) stories about individual S&P 500 firms from 1980 to 2004 in an effort to predict the earnings of firms accounting and stock returns. The three main sources are analysts' forecasts, quantifiable publicly

disclosed accounting variables, and linguistic descriptions of firms' current and future profit-generating activities. A news story was included in the analysis only if it occurs while the firm is a member of the S&P index and is within 25-year period. The first result is that negative words convey negative information about firm earnings beyond stock analysts' forecasts and historical accounting data. The second result is that stock market prices respond to the information embedded in negative words with a small, one-day delay.

#### 24. (Von Beschwitz, Keim et al. 2013) "Media-driven high frequency trading."

The study investigates whether coverage in RavenPack increases the speed at which the market reacts to news. The data used in this study was derived from three sources: Data on news releases came from RavenPack; intraday stock market data came from TAQ; and daily stock market data come from CRSP. RavenPack provides real-time news analytics based on the Dow Jones Newswire. This service analyzes all the articles on the Dow Jones Newswire with a computer algorithm and delivers article-level relevance and sentiment metrics to its users. The study found that the market's speed of reaction, defined both in terms of absolute stock returns and trading volume concentrated in the first 5 seconds compared to the total reaction over 120 seconds, is positively and significantly greater for relevant articles that were released as highly relevant (HRH) than for those that the old technology labeled as having no relevance or a low relevance (HRL).

### 25. (Wisniewski and Lambe 2013)"The role of media in the credit crunch: the case of the banking sector."

This study investigates the dynamic relationship between the intensity of negative media speculation and the market performance of financial institutions. The authors derive the measures of pessimistic media attention by focusing on all English language news contained in the LexisNexis database. More specifically, they recorded the number of articles mentioning negatively charged phrases over monthly intervals. The study covered three countries with established capital markets, where English is an official language (US, UK, Canada). The study used the value-weighted FTSE Banks indices downloaded from DataStream. The sample period extends from the end of January 2005 to the end of May 2010. Granger causality test results demonstrate that media reports can influence the future movements of stock prices,

while the evidence that journalists simply echo previous months' market developments is somewhat weaker. According to the simulations, an increase in negative coverage induces a statistically significant response in the future returns on banking stocks.

### 3.3 Annual reports and social media based studies

There is only one study in the literature used approach to quantify the tone of 10-K filings; an annual report required by the U.S. Securities and Exchange Commission (SEC), and four studies used financial media content.

#### 1. (Bollen, Mao et al. 2011)"Twitter mood predicts the stock market."

This study investigates whether measurements of collective mood states derived from large-scale Twitter feeds are correlated to the value of the Dow Jones Industrial Average (DJIA) over time. To analyze the text content of daily Twitter feeds, the authors used two mood tracking tools, namely OpinionFinder that measures positive vs. negative mood and Google-Profile of Mood States (GPOMS) that measures mood in terms of 6 dimensions (Calm, Alert, Sure, Vital, Kind, and Happy). They obtained a collection of public tweets that was recorded from 28 February to 19 December 2008 (9,853,498 tweets posted by approximately 2.7 million users). The results show that changes in the public mood state can indeed be tracked from the content of large-scale Twitter feeds by means of rather simple text processing techniques and that such changes respond to a variety of socio-cultural drivers in a highly differentiated manner. Among the 7 observed mood dimensions only some are Granger causative of the DJIA; changes of the public mood along these mood dimensions match shifts in the DJIA values that occur 3 to 4 days later.

### 2. (Chen, De et al. 2014) "Wisdom of crowds: the value of stock opinions transmitted through social media."

This study investigates the extent to which investor opinions transmitted through social media predict future stock returns and earnings surprises. It conducts textual analysis of articles published on one of the most popular social-media platforms for investors in the United States. The authors consider the readers' perspective as inferred via commentaries written in response to these articles. They extract user-generated opinions from Seeking Alpha (SA) (http://seekingalpha.com).

From August 2013, SA had between 500,000 to 1 million unique visitors per day and, as such, was one of the biggest investment-related social-media websites in the United States. The study found that the opinions revealed on this site strongly predict future stock returns and earnings surprises. The predictability holds even after controlling for the effect of traditional advice sources, such as financial analysts and newspaper articles. Together, this findings point to the usefulness of peer-based advice in financial markets.

#### 3. (Chung and Liu 2011) "Predicting stock market fluctuations from Twitter."

The study attempts to examine Twitter's predictive potential of consumer purchasing by observing the relationship between societal Twitter trends in the technology sector and hourly stock prices of the top gainers and top losers of ten companies in the technology sector for the period from November 29, 2011 to December 2, 2011. To quantify the data collected from Twitter.com, the authors carried out what is called sentiment analysis, a quantitative way of measuring positive or negative sentiment of the selected Twitter community of their interest. The study concludes that the twitter sentiment score may predict the movement of stocks if the sentiment score is trending positive, not negative. However, stock price movements are more strongly predictive of twitter sentiment movements. There is no significant predictive power of trending negative sentiment scores on stocks relating to the subject.

### 4. (Jegadeesh and Wu 2013) "Word power: A new approach for content analysis."

This study presents a new approach for content analysis to determine the impact of various words in conveying positive or negative tone. The authors obtained all 10-Ks filed in the 1995 through 2008 sample period from SEC's EDGAR database using a customized web crawling algorithm. The final sample contains 40,789 filings and 8,633 unique firms. For most of tests, they used the negative and positive word lists constructed by Loughran and McDonald (2011) (LM). In some tests, they used the word list from Harvard-IV-4- Psychosociological Dictionary 5 that has been previously used by Tetlock (2007) and others. The study found that measure of tone is significantly related to filing date returns after controlling for additional factors such as earnings announcement date returns, accruals and

volatility. In addition, it found that the accuracy and completeness of the underlying lexicon is secondary to the term weighting scheme. In other words, with the term weighting method, useful information can be extracted even if the underlying word lists contain extraneous words or when they are incomplete.

### 5. (Sprenger and Welpe 2011) "News or noise? The stock market reaction to different types of company-specific news events."

This study presents a novel approach to identify stock-related news events from an investor perspective as an alternative to traditional media sources. It investigates the market impact of different types of company-specific news events (e.g., news related to corporate governance, operations, or legal issues) on S&P 500 stock prices in order to discern real news that moves the market from insignificant noise without market reaction. It uses computational linguistics methods to distinguish between good and bad news by controlling for the sentiment (i.e. the positive vs. negative tone) of different news stories. The study focuses on the S&P 500 to adequately reflect a wide spectrum of US equities. Ranging from 845 to 7,729 daily postings, this represents an average of 3,548 tweets per trading day. The results show that the absolute value of cumulative returns prior to a news event are more pronounced for positive news than they are for negative news, suggesting more widespread information leakage before good news. The market reaction differs substantially across various types of news events.

#### **3.4 Summary**

The common objective of the studies is to convert the tone of textual form into numerical value. It's considered positive if there is good news, and negative one if there is bad news. The studies use different methods to do that. Some studies analyze the content of media at article level; for example Kerl, Schürg et al. (2014) every single article is read by two of the authors and classified as either positive or negative. Otherwise, they classify it as neutral. Some studies analyze the content of media at sentence level such as (Sinha 2010). The remaining studies use a word base analysis, the most famous approach in textual analysis. The approach depends on counting the occurrence of positive and negative word in the text, giving each word a specific weight according to its importance and frequency of occurrence, and measuring the tone of the text using the weight of the words. The studies, which used the word level analysis, differ in the word lists used. There are two main word lists used in the literature, Harvard psychosocial dictionary, and Loughran and McDonald negative and positive word lists.

As the study mentioned earlier, more than 60% of the literature belongs to the USA financial market, and the remaining 40% distributed into other regions. To the best of researcher knowledge, there is no study related to Arabic or local financial markets. The studies bout Arabic or local financial markets did not take the public media effect into the accounts. So, the researcher sees that there is a literature gap in the researches which take the public media tone as a variable affects stock performance.

The researcher benefited from literature in his methodology by many points: first, he used the textual analysis that used by the most of the studies in the literature. Second, he used (Ammann, Frey et al. 2014) word lists with some modifications, in order to become suitable for the reality of the local market, to measure the tone of the content. Third, he used the scheme that used by (Jegadeesh and Wu 2013) to find the weight of each word and the score of each documents.

# Chapter 4 Methodology and data collection
# **Chapter 4**

# Methodology and data collection

# **4.1 Introduction**

This chapter defines the study variables and derive the relation by which the questions can be answered. It also defines how the researcher measured the value of each variable, and how he collected the data about it. Then it explains the research design, and in more details, the methodology of choosing the sample, time period, and the data collection and analyzing methods.

As introduced in chapter 1, the study aims at measuring the effect of newspaper economic content on the stock return and trading volume. Therefore, the study has one independent variable; it is the media tone, which reflects the sentiment of the content in the newspaper economic pages. This variable affects two dependent variables, stock returns and trading volume. All variable in the study will be measured on a daily base, the closing price will be taken into account in calculating stock returns, and the total number of traded shared will be taken into account in calculating trading volume.

The two dependent variables are financial, and have a quantitative nature, while the independent variable is media, and has a qualitative nature, so the researcher used a three-step method to convert it into a quantitative form in order to apply the regression analysis with the two financial variables. He used the word list approach to measure the tone by which the texts were written. This process formed the biggest challenge in the research, because doing it pushed us to count the number of occurrence of all words in each day within the four years' period. This means that about 340 word (roots and derivatives) through 1,461 days, this mean (340\*1,461=496,740 data cells).

To convert the media tone from qualitative to quantitative form, the researcher used a three stages process. The first stage is the sampling, which include choosing a sample of words that represent the text, and then counting the frequency of each word. The second stage is weighting the words, which the researcher chose in the sample, and the third stage is calculating the score of each document. In counting stage, the researcher used a software program called "General Architecture for Text Engineering GATE"

Then he developed a multiple linear regression samples for the two model: trading volume (TV) and returns (r). Each sample extends from the publishing day to the third day after publishing day.

The remaining part of the chapter describes in details the main sections of the economic pages in the three newspapers. There are common parts exist in two or three of them, such as trading bulletins.

Newspapers, which were taken into account in the study, are not specialized in the field of economics such as *Financial Times* and *Wall Street*. They mostly contain two pages of economic news. In some newspapers, these pages do not exist on the days that following the non-trading days, often (Saturday, and Sunday). Therefore, in order to get more accurate results, the study will analyze the content of the economic zones "only two pages", and they will be considered as a single document, and the content tone of the document will be measured, as the study will explain it later.

#### 4.2Variables and research design

The daily stock return is considered in this study; it is based on the price change of a stock from the close of one trading day to the close of the next trading day. The daily stock return can be calculated as:

$$\mathbf{r_t} = \frac{\mathbf{P_t} - \mathbf{P_{t-1}}}{\mathbf{P_{t-1}}} \qquad \text{Equation (4.1)}$$

Where:
(rt): the stock return in day t
(Pt): the stock price in the same day
(Pt-1): the stock price in the previous day.
The closing price will be considered in all stock daily return calculations.
Equation (4.1) can be written as:

$$\mathbf{r_t} = \mathbf{ln} \frac{\mathbf{P_t}}{\mathbf{P_{t-1}}}$$
 Equation (4.2)

Trading volume, which represents the total number of traded shares in a particular day, is an important measure of stock performance, Tetlock (2007) found

"that high media pessimism predicts downward pressure on market prices followed by a reversion to fundamentals, and unusually high or low pessimism predicts high market trading volume". These results are consistent with theoretical models of noise and liquidity traders. Engelberg and Parsons (2011) found that "local press coverage significantly affects the daily trading volume of local retail investors".

The researcher collected the data about stock trading volume for all listed companies (49 companies) by downloading them from the market website (<u>www.pex.ps</u>). The excel form that available from the market website contain three columns for trading volume for each stock, trading volume by number of traded shares, trading volume by dollars' amount, and the number of contract. The first column will be taken in account in analyzing the relation between media tone and trading volume.

# 4.3 Data collection

The data in the study is dividing into two sources: The first source is the historical data published by the PEX about stock price, trading volume and value, and number of contracts for each listed stock. The researcher downloaded these data about 49 listed companies from the market website (<u>www.pex.ps</u>) in excel format from 1 January 2011 to 31 December 2014. The companies vary in the number of trading days. Bank of Palestine has the most number of trading days during the period; its stocks have been traded in 982 days in four years, with average 245.5 day per year.

The second resource is the economic pages of three of the main local newspaper, Al-Hayaa, Al-Ayyam, and Felesteen. These newspapers contain many sections such as political news and articles, sports, health and beauty, and entertainment. Therefore, the study depended on analyzing the content of the financial or economic pages only.

The researcher collected the electronic copies for the three newspapers over the period from 1 January 2011 to 31 December 2014 as PDF format. Then he filtered the files to choose the economic pages. Some days, some newspapers do not contain any economic pages, especially on Saturday and Sunday, the two days that follow the non-trading days. The newspaper that has the most number of covered days with economic pages is with total of 1,440 covered days, then Felesteen with total of 1,293 covered days, and finally Al-Hayaa with total of 1,029 covered days.

There are two period gaps in the time series of Felesteen newspaper, the first gap extended from 1 January to 28 February 2011. Although the newspaper was published in these two months, but the electronic copies are not available, and they are using the hard copies. To analyze the content is too difficult and take much time, therefore the researcher assumed the content as a missing data. The second gap extended from 9 July to 28 August 2014 and due to the Israeli war on Gaza, the newspaper stopped publishing in this period, and as the pervious case, the researcher assumed the content as a missing data.

# 4.4 Methodology and research design

The two sources of data mentioned in the previous paragraph are differ in their nature, while the stock data is fully quantitative; the media content is fully qualitative. The main challenge in this study is how to match between quantitative and qualitative data and find the market reaction to media tone? The solution lies in converting the newspaper content from qualitative form to quantitative form, by other word, quantifying the textual content. The researcher will quantify the language used in financial and economic news stories in an effort to predict stock prices returns. This approach has many names in the modern financial research, such as textual analysis, linguistic analysis, and data mining. Textual information processing has become a growing part of empirical finance research. Tetlock's pioneering studies Tetlock, Saar-Tsechansky et al. (2008) and Tetlock (2007) demonstrated that news stories contain information relevant to predicting both earnings and stock returns. Subsequent studies have applied similar techniques with a variety of news sources, dictionaries, and methodologies.

The tone in which news is written, is a critical factor in shaping public opinion, and thus, its effect on beliefs is an important subject to investigate. To measure the newspaper tone, the text content must be converted into numerical values represent the weight and direction of the tone, transforming the text form into numerical values looks like converting analog data to digital form. Converting analog data to digital form passing through three main stages: sampling, quantizing, and encoding. Therefore, the text transforming process can be divided into three separated stages: sampling and word counting, word weighting, and scoring. Figure (4.1) show the sequence of these three stages.



Figure (4.1): stages of transforming text to numerical values process.

#### 4.4.1 Sampling and word counting

Most existing literature on financial text mining relies on identifying a predefined set of keywords, this set is the sample of the total words the text consisted of; this method typically assigns weights to keywords in proportion to the movement of a share price. To implement this stage, the researcher followed these steps:

1. He constructed two word lists, each list contains fifty words. In word selection process, he depended on the word lists used by (Ammann, Frey et al. 2014) with some modifications in order to become suitable for the reality of the local market. For example, the researcher added "strategy" and "fund" to the positive list since the local economy depends strongly on the external funds and donation, which need efficient strategies to be rightly directed. In the same manner, he added " occupation", "closing", and "damages" to the negative list since they have a great impact on the local economy

the first list contains most common positive used words, and the second contains the most common negative used words, and for more accurate results, the researcher inserted most common derivatives for each root word, the total number of words in the two lists is 343 words, 50 roots and 138 derivatives in positive list, and 50 roots and 105 derivatives in negative list. Table (4.1) and (4.2) show the positive and negative lists of words and derivatives respectively.

#	English	EnglishArabicderivatives							
1	growth	نمو	النمو، نما، ينمو، النامية، تنمية، التنمية، تنموية						
2	organizing	تتظيم	ينظم، تنظم، منظمة، نظام، النظام						
3	support	دعم	الدعم، يدعم، مدعوم، المدعوم، داعم						
4	increase	ازدياد	زيادة، الزيادة، يزيد، زاد، زادت						
5	raise	رفع	ارتفاع، مرتفع						
6	development	تطور	التطور ، تطوير ، التطوير						
7	building	بناء	البناء، تبني						
8	cooperation	تعاون	التعاون، إعانة						
9	opportunity	فرصة	الفرصة، فرص، الفرص						
10	abundance	توفير	التوفير ، وفرة ، متوفر						
11	agreement	اتفاق	اتفق، توافق، اتفاقية، اتفاقيات						
12	progress	تقدم	التقدم، متقدمة، المتقدمة						
13	best	أفضل	الأفضل						
14	finance	تمويل	التمويل، تمول						
15	quality	جودة	الجودة، جيد						
16	protection	حماية	الحماية، يحمي						
17	funds	منحة	المنحة، منح، المنح، يمنح، تمنح، المانحة						
18	solutions	حلول	الحلول، حل، الحل						
19	profit	ربح	يربح، أرباح، ربحية						
20	income	دخل	الدخل						
21	opening	افتتاح	الافتتاح، افتتح، يفتتح						
22	continue	واصل	يواصل، مواصلة، تواصل، متواصل						
23	able	قادر	يقدر ، قدرة، مقدرة						
24	Launch	إطلاق	أطلق، يطلق، انطلاق						
25	force	قوة	القوة، قوي، أقوى						
26	employment	تشغيل	التشغيل						

Table (4.1): the positive list of words and derivatives

#	English	Arabic	derivatives
27	construct	أنشأ	ينشئ، إنشاء
28	trust	ثقة	الثقة، يثق، موثوق، واثق
29	stability	استقرار	الاستقرار، استقر، يستقر، مستقر، مستقرة
30	strategy	استراتيجية	الاستراتيجية، استراتيجي، الاستراتيجي
31	contributory	اسهام	يسهم، يساهم، مساهمة
32	rehabilitation	تأهيل	التأهيل، مؤهل
33	return	عائد	العائد، عوائد، عائدات، العائدات
34	allowance	السماح	سمح، يسمح، تسمح
35	encouragement	تشجيع	يشجع، تشجع
36	success	نجح	ینجح، ناجح، نجاح
37	efficiency	كفاءة	الكفاءة
38	easy	سىھل	سھولة، تسھيل، تسھيلات
39	establish	أسس	يۇسس، تأسىس
40	clarity	وضوح	الوضوح، واضح، توضيح
41	safe	آمن	آمنة، أمان، الأمان
42	dividend	توزيعات	التوزيعات، وزعت، توزع
43	appropriate	مناسب	يناسب، مناسبة
44	positive	إيجابي	ايجابي، موجب
45	expansion	توسع	التوسع
46	transparency	الشفافية	شفافية
47	optimism	تفاؤل	التفاؤل
48	boom	ازدهار	الازدهار
49	innovation	ابتكار	الابتكار ، مبتكر
50	satisfaction	رضا	الرضى

#	English	Arabic	derivatives				
1	less	أقل	الأقل، قليلة				
2	risks	مخاطر	المخاطر ، خطر ، الخطر				
3	decline	انخفاض	الانخفاض، انخفض، انخفضت، منخفض، منخفضة، خفض				
4	cost	تكلفة	التكلفة، تكاليف، التكاليف				
5	delay	تأخير	التأخير ، تأخر ، متأخر ، متأخرة				
6	decline	هبوط	الهبوط، هبط، هبطت				
7	debt	ديون	الديون، الدين				
8	conflict	صراع	الصراع، الصراعات				
9	fear	خوف	الخوف، مخاوف، المخاوف				
10	occupation	الاحتلال	المحتلة				
11	retreat	تراجع	التراجع، تراجعت				
12	shortage	نقص	النقص				
13	needs	احتياجات	الاحتياجات، الحاجة، يحتاج، تحتاج				
14	loss	خسارة	الخسارة، خسائر، الخسائر				
15	worry	قلق	القلق				
16	competition	منافسة	المنافسة، التنافس، التنافسية				
17	monopoly	احتكار	الاحتكار				
18	damages	تدمیر	دمرت، المدمرة، الدمار				
19	tax	ضريبة	الضريبة، ضرائب، الضرائب				
20	recession	ركود	الركود				
21	crisis	أزمة	الأزمة، أزمات، الأزمات				
22	Unemployment	بطالة	البطالة				
23	disaster	كارثة	الكارثة، كارثية، الكارثية، الكوارث				
24	deficit	عجز	العجز				
25	discontinued	توقف	التوقف، إيقاف				
26	closing	إغلاق	اغلاق، الإغلاق				

Table (4.2): the negative list of words and derivatives<sup>i</sup>

#	English	Arabic	derivatives						
27	suffering	معاناة	المعاناة، يعاني، تعاني						
28	restriction	قيود	القيود، تقييد						
29	nonperforming	متعثرة	المتعثرة، تعثر						
30	rights	حقوق	الحقوق						
31	critical	حرج	حرجة، الحرجة						
32	adversely	سلبا	سلبي						
33	collapse	انھيار	الانهيار						
34	restructuring	إعادة هيكلة	اعادة هيكلة						
35	bad	سوء	السيئة، أسوأ، الأسوأ						
36	judgment	قضية	القضية، قضايا، القضايا						
37	problems	المشاكل	مشاكل						
38	challenges	تحديات	التحديات						
39	difficult	صعب	الصعب، صعوبة، صعوبات، الصعوبات						
40	poverty	الفقر	الفقيرة، الفقراء						
41	boycott	مقاطعة	المقاطعة						
42	failure	فشل	الفشل						
43	termination	إنهاء	انهاء						
44	prevent	منع	يمنع، تمنع						
45	weakness	ضعف	الضعف، ضعيفة						
46	inflation	التضخم	تضخم						
47	deflation	انكماش	الانكماش، انكمش						
48	bankruptcy	إفلاس	الإفلاس						
49	corruption	فساد	الفساد						
50	defect	خلل	الخلل						

*Note*: In the previous two tables, the researcher inserted the Arabic and English meaning that is because the study is written by English language and the analyzed text is in Arabic. But in

the remain part of the study, all the positive and negative lists will be represented by the English meaning of the root word.

2. The researcher used a "General Architecture for Text Engineering" or "GATE" software for word counting. GATE is a Java suite of tools originally developed at the University of Sheffield beginning in 1995 and now used worldwide by a wide community of scientists, companies, teachers and students for many natural language processing tasks, including information extraction in many languages. It can be free downloaded from (<u>https://gate.ac.uk/</u>). The researcher used this software because it supports Arabic language and it's easy to use.

The researcher faced a big problem in word counting step with Gate software, this problem was in Al-Hayaa and Felesteen newspapers especially. The PDF files were saved by encoding the used software did not recognize. It was impossible to overcome this problem except by opening the files by the software and search for the word to be queried, and then copy and paste it into the search box in the software interface. These process takes a lot of time, especially when talking about two newspapers for four years, and 340 words, and in the case of daily analysis, the enquiries number is too large.

In order to accelerate the word counting process, the college provided us with a team of assistants consists of four students from the fourth level in Business Administration department, the researcher highlighted them by using the software and doing word enquiries, and then divided the period, each student takes one year.

the researcher collected the data about word counting which indices separately according to newspapers and years for each newspaper. Each word in the list has been counted in all years separately (from 2011 to 2014), then they have been counted in each day of 1,641 days in our period.

#### 4.4.2 Word weighting

Many papers in this literature used a proportional weighting scheme, where the tone is measured by the ratio of negative or positive words to the total number of words in the document. This weighting scheme implicitly assumes that all words within a category are equally important.

Jegadeesh and Wu (2013) proposed a weighting scheme, where the weights for words are inversely proportional to the number of documents in the sample that the word found. This weighting scheme assumes that words that are found in fewer documents are more impactful than words that occur in more documents. Therefore, the researcher used (Jegadeesh and Wu 2013) scheme. The scheme is interpreted by determining the weight of all word in the list according to the number of occurrence by using the following relation:

$$W_j = log \frac{N}{d_{fi}}$$
 Equation (4.3)

#### Where:

 $W_i$  Is the weight of word j.

N is the total number of documents in the sample.

 $df_i$  Is the number of documents where word j occurs at least once.

In the sample, the researcher assumed that all the economic pages were published in the same day as a one document. For example, on the first day of the series, 1 January 2011, the published economic pages were zero page in Al-Hayaa, one page in Al-Ayyam, and zero page in Felesteen. Similarly, on the last day of the series, 31 December 2014, the published economic pages were three pages in Al-Hayaa, four pages, and two pages in Felesteen. The document of the first day consists of one page only, while the last day consists of nine pages, and these nine pages will be assumed as one document in the analysis of its content.

According to the previous assumption, the time series consists of 1,461 documents, 365 documents at all of 2011, 2013, and 2014, and 366 documents at 2012. So the value of (N) at equation (4.3) is equal to 1,461. On some days, such as religious holidays, there were not any economic pages published on any one of the

three newspapers. These days were assumed as a dummy document to maintain the balance of the series, and the total number of dummy documents is 20 along the four years.

In order to calculate  $(df_j)$  in equation (4.3), the number of documents where word j occurs at least once. In addition to the four students from the fourth level in Business Administration department, the researcher recruited three fresh graduated volunteers in collaboration with alumni affairs department at the university to distribute the HTML files generated by Gate software on the time series. This process is the most difficult step in the collection of data. In addition, it consumed much time and effort, it takes about 12 months.

# 4.4.3 Scoring

In the majority of days, there were pages from the three newspaper, in some days there were pages from one or two newspaper only, in a few days, there were no pages at all, these few days are feasts days.

To construct series of daily newspaper content tone, the researcher grouped all economic pages published in the same day and assumed them as a one document. All word counting was conducted depending on this base.

After calculating the two variable of equation (4.3) (N) and  $(df_j)$  in the previous section, the weight of all word in the lists can be calculated directly by substituting in the equation. Now the score of document can be calculated by using the word weights as:

**Score**<sub>i</sub> = 
$$\frac{1}{(1+\log a_i)} \sum_{j=1}^{J} W_{i,j}$$
 Equation (4.4)

#### Where:

 $\mathbf{a}_i$  Is the total number of words in document i.

**j** is the total number of positive or negative words in the list. The functional form for the score for document i can be written as:

Score<sub>i</sub> = 
$$\sum_{j=1}^{J} (W_j F_{i,j}) \frac{1}{a_i}$$
 Equation (4.5)

#### Where

 $\mathbf{W}_{\mathbf{i}}$  Is the weight for word j

 $\mathbf{F}_{i,j}$  Is the number of occurrences of word j in document i. The term  $\frac{1}{a_i}$  reflects the fact that the score is negatively related to the total number of words in the document.

To calculate the total number of words in each document  $(a_i)$ , the researcher converted all documents from PDF format into DOC format, and he used the property that Microsoft office word program provides to count the number of words in any document. He converted the PDF files directly through a specialist website <u>http://pdf2doc.com/</u>, which provides a free converting service to many document formats such as (DOCX, Text, JPG, and PDF).

It should be noted here that the converting process includes the text only and does not include images. This means that, if the image contains some words, they are not taken into account in calculating the total number of word in the documents  $(a_i)$ , whether those words were positive or negative. So ignoring them will not affect the media tone of the economic pages' content.

By the same manner, the images included words were neglected in positive and negative words counting by using Gate software<sup>(1)</sup>

1 -To facilitate the data analysis process, the researcher multiplied the score of all days by a constant factor (10,000) to make the independent variable (Mt) values more usable, because the results of equation (4.5) will be a low value.

# 4.6 Trading volume predictability of news media content

As the study mentioned earlier, trading volume (TV) is measured by the total number of traded shares. The relation between the media content (media tone) and the stock return can be measured as follow:

1. Computing the correlation coefficients between the media tone (MT) and the trading volume:

$$\rho$$
 (MT , TV) Equation (4.6)

2. Using the following regression equation:

$$TV = \alpha + \beta MT + C$$
 Equation (4.7)

#### Where:

- **TV** Denotes the trading volume represented by traded shares.
- $\alpha$  the intercept of the regression.
- **β** the regression coefficient of the media tone (MT).
- **C** Denotes the zero-mean normally distributed residual.

Using the 3 days' lag rule for trading volume, equation (4.7) can be written as follow:

$$TV_t = \alpha + \beta_0 MT_t + \beta_1 MT_{t-1} + \beta_2 MT_{t-2} + \beta_3 MT_{t-3} + C \qquad \text{Equation (4.8)}$$

Where:

TVt	Denotes the stock trading volume at the publishing day.
α	The intercept of the regression.
MT <sub>t</sub>	The media tone at the publishing day.
MT <sub>t-1</sub>	The media tone at the next day of publishing.
MT <sub>t-2</sub>	The media tone after 2 days of publishing.
MT <sub>t-3</sub>	The media tone after 3 days of publishing.
С	Denotes the zero-mean normally distributed residual.

# 4.5 Return predictability of news media content

The basic factor in studying the relations between newspaper articles and stock market behavior is stock return. After quantifying the tone of newspaper content, the second and the third hypotheses can be tested by a correlation and regression tests between media tone represented by  $\mathbf{Score}_i$  and the daily return separately to every listed company. Stock return can be predicted through two methods:

1. Computing the correlation coefficients between the media tone (MT) and the variation in the stock daily return (r):

$$\rho$$
 (MT, r) Equation (4.9)

2. Using the following regression equation:

$$\mathbf{r} = \boldsymbol{\alpha} + \boldsymbol{\beta} \mathbf{MT} + \mathbf{C}$$
 Equation (4.10)

#### Where:

**r** Denotes the stock return.

 $\alpha$  The intercept of the regression.

 $\boldsymbol{\beta}$  The regression coefficient of the media tone (MT).

**C** Denotes the zero-mean normally distributed residual.

Because the effect of media tone extends for more than one day, and the investors may take a time to react to the tone, many previous studies investigate the relation between media tone and stock anomalies in the publishing day and other lags days. For example, Tetlock (2007) used 5 days lags for return, and Peress (2011) used 2 days lag for turnover. So the study will use 3 days' lag for the two dependent variables (return and trading volume). Thus, equation (4.10) can be written as follow:

$$\mathbf{r}_{t} = \alpha + \beta_{0} \mathbf{M} \mathbf{T}_{t} + \beta_{1} \mathbf{M} \mathbf{T}_{t-1} + \beta_{2} \mathbf{M} \mathbf{T}_{t-2} + \beta_{3} \mathbf{M} \mathbf{T}_{t-3} + \mathbf{C} \qquad \text{Equation (4.11)}$$

# Where:

r <sub>t</sub>	Denotes the stock return at the publishing day.
α	The intercept of the regression.
MT <sub>t</sub>	The media tone at the publishing day.
MT <sub>t-1</sub>	The media tone at the next day of publishing.
MT <sub>t-2</sub>	The media tone after 2 days of publishing.
$MT_{t-2}$	The media tone after 3 days of publishing.

# Chapter 5 Data analysis and results

# Chapter 5

# Data analysis and results

#### **5.1 Introduction**

This chapter explains the descriptive and empirical analysis and results. In all of them, the researcher used "R" language. R is a programming language and software environment for statistical computing and graphics supported by the R Foundation for Statistical Computing. The R language is widely used among statisticians and data miners for developing statistical software and data analysis. Polls, surveys of data miners, and studies of scholarly literature databases show that R's popularity has increased substantially in recent years.

The total number of economic pages is 8,666 pages. Al-Ayyam newspaper is the first with total of 3,386 pages, and average of 2.35 pages per day. Then Al-Hayaa with 2,857 pages and average of 2.78 pages per day. Finally, Felesteen with 2,423 pages and average of 1.87 pages per day. Table (5.1) explains the detailed statistics for the three newspapers segmented into four separately years and then show the average over the total period.

The descriptive analysis begins with positive and negative word frequencies, the results show the frequency for each word (the root and its derivatives), in each year and each newspaper separately and then as a total. The researcher used tables and clockwise charts to display the result. Clockwise chart is a way of summarizing a set of categorical data or displaying the different values of a given variable, and to the best of our knowledge, ours is the first locally study to use it. In addition, the researcher presents the percent and daily rate for all the words in each newspaper and in each year through the period from 2011 to 2014. The percent denotes the proportion of a word occurrence compared to the occurrence of all words, the summation of all percent is equal 100%. Daily rate denotes the average daily occurrence for each word. Finally, he presents monthly rate, daily maximum, and monthly maximum and monthly minimum results for all words as a whole, separated into positive list and negative list. In addition, the researcher counted the number of occurrence for each listed company and each economic sector in each of the three newspaper, and in each year. The researcher has been keen to mention some comments to explain the anomalous values in those results.

Then he applied equation (4.3) to find the weight of each word, here he restricted himself to the roots only, by including each derivatives frequency in its root.

After calculating the weight of each word in the list, the researcher applied equation (4.5) to find the tone of each day, which equal to the summation of the weights of all words which occurred in that day, taking into account the sign of summation, positive for positive words, and negative for negative words. Then he found the number of positive, negative, and natural days in each newspaper and each year within the period 2011 to 2014.

Then he described independent and dependent variables by calculating the number of observation, mean, standard deviation, median, min and max score of media tone through the period of the study.

In the empirical analysis, the study applied a correlation test between media tone (MT) and trading volume (TV), and between media tone (MT) and return (r). The researcher explained the significant values, which statistically indicate that a relationship between the two variables is exist.

Then he applied multiple linear regression analysis for the two models, trading volume (TV) and return (r). The F-Test calculated to examine the appropriateness of the model as a whole, the R Square analysis, the Multicollinearity test and autocorrelation test. he also presented the results of the best regression model with independent variables that determined using stepwise method.

newspaper	year	number of economic pages	number of covered days	average number of pages per day	percentage of covered days
	2011	686	361	1.90	98.90%
	2012	791	361	2.19	98.63%
Al-Ayyam	2013	936	358	2.61	98.08%
	2014	973	360	2.70	98.63%
	total	3,386	1,440	2.35	98.56%

 Table (5.1): statistics for the three newspapers economic pages and covered days.

newspaper	year	number of economic pages	number of covered days	average number of pages per day	percentage of covered days
	2011	1,070	274	3.90 <sup>(2)</sup>	75.07%
	2012	550	252	2.18	68.85%
Al-Hayaa	2013	584	249	2.35	68.22%
	2014	653	254	2.57	69.59%
	total	2, 857	1,029	2.78	70.43%
	2011	511	291	1.76	79.73%
	2012	620	335	1.85	91.53%
Felesteen	2013	688	360	1.91	98.63%
	2014	604	307	1.97	84.11%
	total	2,423	1,293	1.87	88.50%

Source: author, 2016.

-The high percentage of number of pages per day is due to a weekly supplement was published during 2011





Source: author, 2016.



Figure (5.2): Al-Hayaa newspaper statistics.

Source: author, 2016.



Figure (5.3): Felesteen newspaper statistics.

Source: author, 2016.

# **5.2 Descriptive results**

#### **5.2.1 Positive and negative word frequencies**

Table (5.2) shows the frequency, percent and daily rate for each positive word in Palestinian economic media (Al-Hayaa, Al-Ayyam and Felesteen) through the period of study (2011-2014), whereas the positive words that have the highest frequency were *Growth*, *Organizing*, *Support*, *Raise* and *Increase* with daily rate **5.0**, **3.97**, **3.51**, **3.32** and **3.21** respectively. The positive words, which have the lowest frequency, were *Transparency*, *Optimism*, *Innovation*, *Satisfaction* and *Boom* with daily rate **0.12**, **0.10**, **0.09**, **0.08** and **0.07** respectively. In general, the table shows that there are **252,112** positive words in media content through the period of study with daily rate of 58 positive words per day. In addition, the following clockwise chart represents the daily rate for each positive word.

The following clockwise chart explains the frequency of the positive words on an index divided from 0 to 9, 0 is the lowest frequency and 9 is the highest. The circular curve donates the value of frequency for each corresponding word. In this chart and all following similar charts, the red line represents Al-Hayaa values, black line represents Al-Ayyam values. And green line represents Felesteen values.



Figure (5.4): Daily Rate of Positive Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) through period 2011 to 2014.

Positive	A	l-Hayaa	ı	A	l-Ayyam		F	elesteen			Total	
Words	F	P	RD	F	P	RD	F	Р	RD	F	Р	RD
Growth	6506	7.20	4.45	12779	10.71	8.75	2622	6.18	1.79	21907	8.69	5.00
Organizing	6516	7.21	4.46	8026	6.73	5.49	2863	6.74	1.96	17405	6.90	3.97
Support	5621	6.22	3.85	7651	6.41	5.24	2111	4.97	1.44	15383	6.10	3.51
Raise	4428	4.90	3.03	7317	6.13	5.01	2785	6.56	1.91	14530	5.76	3.32
Increase	4297	4.76	2.94	7080	5.93	4.85	2687	6.33	1.84	14064	5.58	3.21
Development	5410	5.99	3.70	5868	4.92	4.02	1654	3.90	1.13	12932	5.13	2.95
Building	4401	4.87	3.01	4617	3.87	3.16	2579	6.07	1.77	11597	4.60	2.65
Cooperation	4939	5.47	3.38	5236	4.39	3.58	1113	2.62	0.76	11288	4.48	2.58
Opportunity	3908	4.33	2.67	5415	4.54	3.71	1636	3.85	1.12	10959	4.35	2.50
Abundance	3461	3.83	2.37	3961	3.32	2.71	1791	4.22	1.23	9213	3.65	2.10
Agreement	3100	3.43	2.12	4478	3.75	3.07	1247	2.94	0.85	8825	3.50	2.01
Progress	1972	2.18	1.35	3112	2.61	2.13	2111	4.97	1.44	7195	2.85	1.64
Best	1856	2.05	1.27	3415	2.86	2.34	941	2.22	0.64	6212	2.46	1.42
Finance	1642	1.82	1.12	3087	2.59	2.11	1269	2.99	0.87	5998	2.38	1.37
Quality	2252	2.49	1.54	2261	1.90	1.55	1080	2.54	0.74	5593	2.22	1.28
Protection	2638	2.92	1.81	2095	1.76	1.43	801	1.89	0.55	5534	2.20	1.26
Solutions	1783	1.97	1.22	2029	1.70	1.39	1418	3.34	0.97	5230	2.07	1.19
Funds	1748	1.93	1.20	2326	1.95	1.59	1155	2.72	0.79	5229	2.07	1.19
Profit	1728	1.91	1.18	2499	2.09	1.71	241	0.57	0.16	4468	1.77	1.02
Income	1643	1.82	1.12	1894	1.59	1.30	617	1.45	0.42	4154	1.65	0.95
Opening	1917	2.12	1.31	1633	1.37	1.12	327	0.77	0.22	3877	1.54	0.88
Continue	1100	1.22	0.75	1678	1.41	1.15	430	1.01	0.29	3208	1.27	0.73
Able	984	1.09	0.67	1519	1.27	1.04	651	1.53	0.45	3154	1.25	0.72
Launch	1077	1.19	0.74	1619	1.36	1.11	388	0.91	0.27	3084	1.22	0.70
Force	817	0.90	0.56	1592	1.33	1.09	491	1.16	0.34	2900	1.15	0.66
Employment	1021	1.13	0.70	915	0.77	0.63	898	2.11	0.61	2834	1.12	0.65
Construct	978	1.08	0.67	926	0.78	0.63	805	1.90	0.55	2709	1.07	0.62
Trust	873	0.97	0.60	1535	1.29	1.05	283	0.67	0.19	2691	1.07	0.61
Stability	885	0.98	0.61	1313	1.10	0.90	422	0.99	0.29	2620	1.04	0.60
Strategy	1288	1.43	0.88	889	0.75	0.61	417	0.98	0.29	2594	1.03	0.59
Contributory	1130	1.25	0.77	827	0.69	0.57	412	0.97	0.28	2369	0.94	0.54
Rehabilitation	844	0.93	0.58	941	0.79	0.64	484	1.14	0.33	2269	0.90	0.52
Return	542	0.60	0.37	1292	1.08	0.88	390	0.92	0.27	2224	0.88	0.51
Allowance	560	0.62	0.38	831	0.70	0.57	754	1.78	0.52	2145	0.85	0.49
Encouragement	869	0.96	0.59	677	0.57	0.46	407	0.96	0.28	1953	0.77	0.45
Success	687	0.76	0.47	776	0.65	0.53	278	0.65	0.19	1741	0.69	0.40
Easy	620	0.69	0.42	610	0.51	0.42	274	0.65	0.19	1504	0.60	0.34
Efficiency	651	0.72	0.45	624	0.52	0.43	146	0.34	0.10	1421	0.56	0.32
Establish	713	0.79	0.49	474	0.40	0.32	196	0.46	0.13	1383	0.55	0.32
Clarity	553	0.61	0.38	591	0.50	0.40	204	0.48	0.14	1348	0.53	0.31
Safe	421	0.47	0.29	412	0.35	0.28	266	0.63	0.18	1099	0.44	0.25
Dividend	293	0.32	0.20	552	0.46	0.38	137	0.32	0.09	982	0.39	0.22
Appropriate	343	0.38	0.23	253	0.21	0.17	234	0.55	0.16	830	0.33	0.19
Positive	230	0.25	0.16	365	0.31	0.25	113	0.27	0.08	708	0.28	0.16
Expansion	312	0.35	0.21	327	0.27	0.22	62	0.15	0.04	701	0.28	0.16
Transparency	245	0.27	0.17	199	0.17	0.14	91	0.21	0.06	535	0.21	0.12
Optimism	149	0.16	0.10	261	0.22	0.18	49	0.12	0.03	459	0.18	0.10
Innovation	171	0.19	0.12	168	0.14	0.11	40	0.09	0.03	379	0.15	0.09
Satisfaction	121	0.13	0.08	176	0.15	0.12	51	0.12	0.03	348	0.14	0.08
Boom	98	0.11	0.07	190	0.16	0.13	39	0.09	0.03	327	0.13	0.07
Total	90341	100.0	62	119311	100.0	82	42460	100.0	29	252112	100.0	58

Table (5.2): Frequency, Percent and Daily Rate for positive words in eachnewspaper through period 2011 to 2014.

Table (5.3) shows the frequency, percent and daily rate for each negative word in Palestinian economic media (Al-Hayaa, Al-Ayyam and Felesteen newspapers) through the period of study (2011-2014), whereas the negative words

that have the highest frequency were *Decline*, *occupation*, *Retreat*, *Crisis* and *Needs* with daily rate of **3.70**, **2.30**, **2.14**, **2.13** and **2.01** respectively. The negative words, which have the lowest frequency, were *Restructuring*, *Defect*, *Failure*, *Bankruptcy* and *Critical* with daily rate **0.09**, **0.08**, **0.08**, **0.05** and **0.04** respectively. In general, the table shows that there are **159,590** negative words in media content through the period of study with daily rate of 36 negative words per day. In addition, the following clockwise chart represents the daily rate for each negative word.



Figure (5.5): Daily Rate of Negative Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) through period 2011 to 2014.

Negative	Negative Al-Hayaa		Al-Ayyam			Felesteen			Total			
Words	F	P	RD	F	P	RD	F	Р	RD	F	Р	RD
Decline	4354	9.05	3.23	9091	11.83	6.22	2299	6.64	1.59	15744	9.87	3.70
Occupation	3123	6.49	2.32	2267	2.95	1.55	4405	12.72	3.05	9795	6.14	2.30
Retreat	2489	5.17	1.85	5587	7.27	3.82	1019	2.94	0.71	9095	5.70	2.14
Crisis	2194	4.56	1.63	4613	6.00	3.17	2255	6.51	1.56	9062	5.68	2.13
Needs	2957	6.15	2.20	3851	5.01	2.64	1756	5.07	1.22	8564	5.37	2.01
Tax	3034	6 31	2.25	4007	5.22	2.74	1028	2.97	0.71	8069	5.06	1.90
Debt	1824	3.79	1.36	3881	5.05	2.66	1165	3.36	0.81	6870	4.30	1.62
Unemployment	1711	3.56	1.27	2685	3.49	1.84	1735	5.01	1.20	6131	3.84	1.44
Judgment	2395	4.98	1.78	2133	2.78	1.46	1536	4.43	1.06	6064	3.80	1.43
Cost	1502	3.12	1.12	2349	3.06	1.61	1104	3.19	0.76	4955	3.10	1.17
Less	1240	2.58	0.85	2645	3.44	1.81	956	2.76	0.66	4841	3.03	1.10
Deficit	1055	2.19	0.78	2906	3.78	1.99	825	2.38	0.57	4786	3.00	1.13
Suffering	1505	3.13	1.12	1882	2.45	1.29	1336	3.86	0.92	4723	2.96	1.11
Rights	2046	4.25	1.52	1981	2.58	1.36	642	1.85	0.44	4669	2.93	1.10
Loss	1470	3.05	1.09	1366	1.78	0.93	1496	4.32	1.04	4332	2.71	1.02
Risks	1177	2.45	0.87	2077	2.70	1.42	440	1.27	0.31	3694	2.31	0.87
Closing	755	1.57	0.56	1663	2.16	1.14	852	2.46	0.59	3270	2.05	0.77
Poverty	1055	2.19	0.78	1295	1.69	0.89	781	2.25	0.54	3131	1.96	0.74
Difficult	835	1.74	0.62	1637	2.13	1.12	483	1.39	0.33	2955	1.85	0.70
Inflation	668	1.39	0.50	1895	2.47	1.30	268	0.77	0.19	2831	1.77	0.67
Competition	1180	2.45	0.88	1153	1.50	0.79	342	0.99	0.24	2675	1.68	0.63
Drop	787	1.64	0.58	1527	1.99	1.05	219	0.63	0.15	2533	1.59	0.60
Weakness	732	1.52	0.54	1307	1.70	0.89	450	1.30	0.31	2489	1.56	0.59
Fear	705	1.47	0.52	1244	1.62	0.85	205	0.59	0.14	2154	1.35	0.51
Shortage	462	0.96	0.34	1060	1.38	0.73	485	1.40	0.34	2007	1.26	0.47
Prevent	535	1.11	0.40	694	0.90	0.48	715	2.06	0.49	1944	1.22	0.46
Discontinued	396	0.82	0.29	814	1.06	0.56	700	2.02	0.48	1910	1.20	0.45
Problems	772	1.60	0.57	720	0.94	0.49	371	1.07	0.26	1863	1.17	0.44
Challenges	709	1.47	0.53	913	1.19	0.62	240	0.69	0.17	1862	1.17	0.44
Boycott	679	1.41	0.50	451	0.59	0.31	482	1.39	0.33	1612	1.01	0.38
Damages	344	0.71	0.26	560	0.73	0.38	511	1.48	0.35	1415	0.89	0.33
Recession	226	0.47	0.17	732	0.95	0.50	437	1.26	0.30	1395	0.87	0.33
Restriction	288	0.60	0.21	745	0.97	0.51	205	0.59	0.14	1238	0.78	0.29
Delay	303	0.63	0.23	535	0.70	0.37	361	1.04	0.25	1199	0.75	0.28
Worry	262	0.54	0.19	459	0.60	0.31	449	1.30	0.31	1170	0.73	0.28
Disaster	218	0.45	0.16	348	0.45	0.24	507	1.46	0.35	1073	0.67	0.25
Termination	304	0.63	0.23	366	0.48	0.25	204	0.59	0.14	874	0.55	0.21
Deflation	139	0.29	0.10	616	0.80	0.42	85	0.25	0.06	840	0.53	0.20
Collapse	148	0.31	0.11	439	0.57	0.30	172	0.50	0.12	759	0.48	0.18
Bad	262	0.54	0.19	313	0.41	0.21	155	0.45	0.11	730	0.46	0.17
Adversely	249	0.52	0.19	285	0.37	0.20	158	0.46	0.11	692	0.43	0.16
Corruption	174	0.36	0.13	226	0.29	0.15	216	0.62	0.15	616	0.39	0.14
Nonperforming	125	0.26	0.09	358	0.47	0.25	64	0.18	0.04	547	0.34	0.13
Conflict	146	0.30	0.11	327	0.43	0.22	62	0.18	0.04	535	0.34	0.13
Monopoly	139	0.29	0.10	115	0.15	0.08	178	0.51	0.12	432	0.27	0.10
Restructuring	105	0.22	0.08	253	0.33	0.17	45	0.13	0.03	403	0.25	0.09
Defect	146	0.30	0.11	127	0.17	0.09	79	0.23	0.05	352	0.22	0.08
Failure	119	0.25	0.09	147	0.19	0.10	74	0.21	0.05	340	0.21	0.08
Bankruptcy	23	0.05	0.02	100	0.13	0.07	70	0.20	0.05	193	0.12	0.05
Critical	53	0.11	0.04	82	0.11	0.06	22	0.06	0.02	157	0.10	0.04
Total	48119	100.0	33	76827	100.0	53	34644	100.0	24	159590	100.0	36

Table (5.3): Frequency, Percent and Daily Rate for negative words in eachnewspaper through period 2011 to 2014.

Table (5.4) shows the frequency, percent and daily rate for positive words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspapers) in each year 2011, 2012, 2013 and 2014, whereas the five positive words that have the

highest frequency were *Growth*, *Organizing*, *Support*, *Raise* and *Increase* in 2011,2012 and 2013 but in 2014 there were *Growth*, *Organizing*, *Support*, *Raise* and *Building*. The five positive words, which have the lowest frequency, were *Transparency*, *Optimism*, *Innovation*, *Satisfaction* and *Boom*.

In general, the researcher notes that the daily rate of positive words in 2011 is 58 words per day, in 2012, there are 55 words per day, in 2013 there are 59 words per day and in 2014 there are 58 words per day; the following clockwise chart represents the daily rate for each positive word according to each year.



# Figure (5.6): Daily Rate of Positive Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) for each year.

Positive		2011			2012			2013			2014	
Words	F	Р	RD	F	Р	RD	F	Р	RD	F	Р	RD
Growth	5435	8.51	4.96	5083	8.47	4.63	5487	8.54	5.01	5902	9.22	5.39
Organizing	4279	6.70	3.91	4042	6.74	3.68	4803	7.48	4.39	4281	6.69	3.91
Support	3616	5.66	3.30	4021	6.70	3.66	3455	5.38	3.16	4291	6.70	3.92
Raise	4218	6.61	3.85	3552	5.92	3.23	3338	5.20	3.05	3422	5.34	3.13
Increase	4059	6.36	3.71	3640	6.07	3.32	3539	5.51	3.23	2826	4.41	2.58
Development	2958	4.63	2.70	3132	5.22	2.85	3398	5.29	3.10	3444	5.38	3.15
Building	2669	4.18	2.44	2722	4.54	2.48	2930	4.56	2.68	3276	5.12	2.99
Cooperation	2382	3.73	2.18	2586	4.31	2.36	3066	4.77	2.80	3254	5.08	2.97
Opportunity	2829	4.43	2.58	2659	4.43	2.42	2796	4.35	2.55	2675	4.18	2.44
Abundance	2119	3.32	1.94	1775	2.96	1.62	2796	4.35	2.55	2523	3.94	2.30
Agreement	2196	3.44	2.01	2199	3.67	2.00	2050	3.19	1.87	2380	3.72	2.17
Progress	2280	3.57	2.08	1478	2.46	1.35	2054	3.20	1.88	1383	2.16	1.26
Best	1237	1.94	1.13	1092	1.82	0.99	1685	2.62	1.54	2198	3.43	2.01
Finance	1727	2.71	1.58	1334	2.22	1.21	1550	2.41	1.42	1387	2.17	1.27
Quality	1441	2.26	1.32	1242	2.07	1.13	1313	2.04	1.20	1597	2.49	1.46
Protection	1579	2.47	1.44	1303	2.17	1.19	1375	2.14	1.26	1277	1.99	1.17
Solutions	1374	2.15	1.25	1312	2.19	1.19	1499	2.33	1.37	1045	1.63	0.95
Funds	1256	1.97	1.15	1277	2.13	1.16	1416	2.20	1.29	1280	2.00	1.17
Profit	1127	1.77	1.03	1000	1.67	0.91	990	1.54	0.90	1351	2.11	1.23
Income	1244	1.95	1.14	1135	1.89	1.03	872	1.36	0.80	903	1.41	0.82
Opening	1012	1.59	0.92	868	1.45	0.79	1000	1.56	0.91	997	1.56	0.91
Continue	851	1.33	0.78	726	1.21	0.66	765	1.19	0.70	866	1.35	0.79
Able	936	1.47	0.85	690	1.15	0.63	788	1.23	0.72	740	1.16	0.68
Launch	693	1.09	0.63	711	1.19	0.65	808	1.26	0.74	872	1.36	0.80
Force	843	1.32	0.77	631	1.05	0.57	699	1.09	0.64	727	1.14	0.66
Employment	484	0.76	0.44	759	1.27	0.69	885	1.38	0.81	706	1.10	0.64
Construct	603	0.94	0.55	747	1.25	0.68	995	1.55	0.91	364	0.57	0.33
Trust	781	1.22	0.71	622	1.04	0.57	627	0.98	0.57	661	1.03	0.60
Stability	710	1.11	0.65	632	1.05	0.58	580	0.90	0.53	698	1.09	0.64
Strategy	607	0.95	0.55	807	1.35	0.73	498	0.78	0.45	682	1.07	0.62
Contributory	618	0.97	0.56	819	1.37	0.75	489	0.76	0.45	443	0.69	0.40
Rehabilitation	437	0.68	0.40	468	0.78	0.43	600	0.93	0.55	764	1.19	0.70
Return	667	1.04	0.61	526	0.88	0.48	513	0.80	0.47	518	0.81	0.47
Allowance	536	0.84	0.49	546	0.91	0.50	633	0.99	0.58	430	0.67	0.39
Encouragement	469	0.73	0.43	551	0.92	0.50	487	0.76	0.44	446	0.70	0.41
Success	205	0.84	0.49	402	0.67	0.37	302	0.50	0.33	441	0.69	0.40
Easy	305	0.48	0.28	349	0.58	0.32	3/0	0.59	0.34	474	0.74	0.43
Efficiency	320	0.51	0.30	411	0.69	0.37	390	0.01	0.30	294	0.46	0.27
Clarity	226	0.00	0.33	220	0.03	0.34	307	0.46	0.20	312	0.49	0.28
Sofo	285	0.33	0.31	220	0.33	0.30	302	0.50	0.33	255	0.30	0.29
Dividend	203	0.43	0.20	180	0.37	0.20	269	0.32	0.31	305	0.40	0.23
Appropriato	217	0.34	0.20	238	0.32	0.17	200	0.42	0.23	157	0.40	0.20
	188	0.29	0.21	143	0.40	0.13	181	0.31	0.10	196	0.25	0.14
Expansion	184	0.29	0.17	167	0.24	0.15	163	0.25	0.17	187	0.29	0.17
Transparency	174	0.27	0.16	136	0.20	0.12	132	0.25	0.12	93	0.15	0.08
Ontimism	128	0.20	0.12	94	0.16	0.09	103	0.16	0.09	134	0.21	0.12
Innovation	94	0.15	0.09	105	0.18	0.10	97	0.15	0.09	83	0.13	0.08
Satisfaction	92	0.14	0.08	90	0.15	0.08	82	0.13	0.07	84	0.13	0.08
Boom	83	0.13	0.08	59	0.10	0.05	95	0.15	0.09	90	0.14	0.08
Total	63843	100.0	58	60000	100.0	55	64235	100.0	59	64034	100.0	58
The	nain re	ason o	f raisi	ing the	word '	'build	ing" to	the to	p five	in 201	4 was	the

 Table (5.4): Frequency, Percent and Daily Rate for positive words in newspapers for each year.

Israeli war on the Gaza Strip in that year, which caused, according to the

governmental statistics, total and partial damage for nearly 20,000 housing units. This was followed by a daily news in the local newspapers about building and reconstructing.

Table (5.5) shows the frequency, percent and daily rate for negative words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspapers) in each year 2011, 2012, 2013 and 2014. Whereas the five negative words that have the highest frequency were *Decline*, *occupation*, *Retreat*, *Crisis* and *Needs* in 2011 and 2014, but in 2012 there were *Decline*, *occupation*, *Tax*, *Crisis* and *Needs*, and in 2013 there were *Decline*, *occupation*, *Retreat*, *Tax* and *Needs*. The five negative words that have the lowest frequency in 2011 were *Monopoly*, *Defect*, *Failure*, *Bankruptcy* and *Critical*, in 2013 there were *Restructuring*, *Defect*, *Failure*, *Bankruptcy* and *Critical* and in 2014 were *Restructuring*, *Defect*, *Monopoly*, *Bankruptcy* and *Critical*.

In general, the researcher notes that the daily rate of negative words in 2011 is 39 words per day, in 2012 there are 36 words per day, in 2013 there are 34 words per day and in 2014 there are 36 words per day; the following clockwise chart represents the daily rate for each negative word according to each year.



Figure (5.7): Daily Rate of Negative Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) for each year.

Negative 2011			2012			2013			2014			
Words	F	Р	R <sub>D</sub>	F	Р	RD	F	Р	R <sub>D</sub>	F	Р	RD
Decline	3956	9.19	3.61	3901	9.95	3.55	3920	10.45	3.58	3967	9.96	3.62
Occupation	2695	6.26	2.46	2548	6.50	2.32	1981	5.28	1.81	2571	6.46	2.35
Retreat	2231	5.18	2.04	1874	4.78	1.71	2164	5.77	1.98	2826	7.10	2.58
Crisis	2915	6.77	2.66	3076	7.84	2.80	1539	4.10	1.41	1532	3.85	1.40
Needs	2380	5.53	2.17	1959	4.99	1.78	1803	4.81	1.65	2422	6.08	2.21
Tax	1871	4.35	1.71	2579	6.58	2.35	1682	4.48	1.54	1937	4.87	1.77
Debt	2220	5.16	2.03	1723	4.39	1.57	1612	4.30	1.47	1315	3.30	1.20
Unemployment	1259	2.92	1.15	1266	3.23	1.15	2207	5.88	2.02	1399	3.51	1.28
Judgment	1682	3.91	1.54	1487	3.79	1.35	1479	3.94	1.35	1416	3.56	1.29
Cost	1363	3.17	1.24	1292	3.29	1.18	1196	3.19	1.09	1104	2.77	1.01
Less	1273	2.96	1.16	1143	2.91	1.04	1064	2.84	0.97	1361	3.42	1.24
Deficit	1254	2.91	1.15	1356	3.46	1.23	1061	2.83	0.97	1115	2.80	1.02
Suffering	1214	2.82	1.11	1172	2.99	1.07	1177	3.14	1.07	1160	2.91	1.06
Rights	1239	2.88	1.13	1169	2.98	1.06	1076	2.87	0.98	1185	2.98	1.08
Loss	943	2.19	0.86	1133	2.89	1.03	1118	2.98	1.02	1138	2.86	1.04
Risks	1110	2.58	1.01	763	1.95	0.69	831	2.22	0.76	990	2.49	0.90
Closing	1164	2.70	1.06	595	1.52	0.54	818	2.18	0.75	693	1.74	0.63
Poverty	921	2.14	0.84	707	1.80	0.64	746	1.99	0.68	757	1.90	0.69
Difficult	833	1.93	0.76	746	1.90	0.68	732	1.95	0.67	644	1.62	0.59
Inflation	903	2.10	0.82	487	1.24	0.44	580	1.55	0.53	861	2.16	0.79
Competition	649	1.51	0.59	899	2.29	0.82	524	1.40	0.48	603	1.51	0.55
Drop	584	1.36	0.53	517	1.32	0.47	567	1.51	0.52	865	2.17	0.79
Weakness	670	1.56	0.61	555	1.42	0.51	587	1.57	0.54	677	1.70	0.62
Fear	851	1.98	0.78	501	1.28	0.46	368	0.98	0.34	434	1.09	0.40
Shortage	599	1.39	0.55	400	1.02	0.36	589	1.57	0.54	419	1.05	0.38
Prevent	572	1.33	0.52	489	1.25	0.45	432	1.15	0.39	451	1.13	0.41
Discontinued	521	1.21	0.48	363	0.93	0.33	568	1.51	0.52	458	1.15	0.42
Problems	497	1.15	0.45	496	1.26	0.45	435	1.16	0.40	435	1.09	0.40
Challenges	440	1.02	0.40	441	1.12	0.40	446	1.19	0.41	535	1.34	0.49
Boycott	369	0.86	0.34	186	0.47	0.17	219	0.58	0.20	838	2.10	0.77
Damages	298	0.69	0.27	206	0.53	0.19	107	0.29	0.10	804	2.02	0.73
Recession	367	0.85	0.34	301	0.77	0.27	511	1.36	0.47	216	0.54	0.20
Restriction	265	0.62	0.24	275	0.70	0.25	362	0.97	0.33	336	0.84	0.31
Delay	354	0.82	0.32	341	0.87	0.31	264	0.70	0.24	240	0.60	0.22
Worry	242	0.56	0.22	183	0.47	0.17	528	1.41	0.48	217	0.55	0.20
Disaster	190	0.44	0.17	194	0.49	0.18	482	1.29	0.44	207	0.52	0.19
Termination	301	0.70	0.27	189	0.48	0.17	176	0.47	0.16	208	0.52	0.19
Deflation	132	0.31	0.12	259	0.66	0.24	231	0.62	0.21	218	0.55	0.20
Collapse	243	0.56	0.22	192	0.49	0.17	165	0.44	0.15	159	0.40	0.15
Bad	183	0.43	0.17	199	0.51	0.18	159	0.42	0.15	189	0.47	0.17
Adversely	202	0.47	0.18	228	0.58	0.21	138	0.37	0.13	124	0.31	0.11
Corruption	244	0.57	0.22	138	0.35	0.13	105	0.28	0.10	129	0.32	0.12
Nonperforming	140	0.33	0.13	145	0.37	0.13	144	0.38	0.13	118	0.30	0.11
Conflict	139	0.32	0.13	92	0.23	0.08	127	0.34	0.12	177	0.44	0.16
Monopoly	121	0.28	0.11	91	0.23	0.08	158	0.42	0.14	62	0.16	0.06
Restructuring	170	0.39	0.16	94	0.24	0.09	76	0.20	0.07	63	0.16	0.06
Defect	85	0.20	0.08	109	0.28	0.10	91	0.24	0.08	67	0.17	0.06
Failure	120	0.28	0.11	84	0.21	0.08	61	0.16	0.06	75	0.19	0.07
Bankruptcy	53	0.12	0.05	54	0.14	0.05	58	0.15	0.05	28	0.07	0.03
Critical	25	0.06	0.02	24	0.06	0.02	42	0.11	0.04	66	0.17	0.06
Total	43052	100.0	39	39221	100.0	36	37506	100.0	34	39811	100.0	36

 Table (5.5): Frequency, Percent and Daily Rate for negative words in newspapers for each year.

The following two figures (5.8 and 5.9) represent the frequency of positive and negative words separately in a word cloud chart form. Figure (5) shows the positive words and figure (6) shows the negative words.

Table (5.6) shows the summary of frequently economic positive and negative words in Palestinian economic media content through the period of study 2011 – 2014, whereas the table presents annual frequency, annual percent, daily and monthly rate, daily and monthly maximum and monthly minimum in each year for each newspaper.



Figure (5.8): Word cloud chart for Positive Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) through period of study.



Figure (5.9): Word cloud chart for Negative Words in Palestinian economic media (Al-Hayaa, Al-Ayyam, and Felesteen newspaper) through period of study.

News Paper	Year	Positive words								Negative words						
		Freq.	Percent	Rate R	Rate	Max	Max	Min	Freq.	Percent	Rate	Rate	Max	Max	Min	
				Daily	Monthly	Daily	Monthly N	Monthly			Daily	Monthly	Daily	Monthly	Monthly	
	Al-Hayaa newspaper															
Al-Haya	Total	90341	35.83	62	1882	401	2853	705	48119	30.15	33	1002	586	2189	449	
	2011	30204	33.43	83	2517	401	2853	1883	17362	36.08	48	1447	586	2189	935	
	2012	23755	26.29	65	1980	217	2582	1139	12152	25.25	33	1013	152	1485	623	
	2013	16674	18.46	46	1390	142	1759	705	7909	16.44	22	659	77	803	449	
	2014	19708	21.82	54	1642	183	2058	720	10696	22.23	29	891	118	1075	571	
		Al-Ayaam newspaper														
	Total	119311	47.32	82	2486	617	3304	1191	76827	48.14	53	1601	306	2209	677	
	2011	24598	20.62	67	2050	617	3286	1725	16729	21.77	46	1394	306	2143	1069	
	2012	25826	21.65	71	2152	154	2678	1191	17921	23.33	49	1493	125	2033	677	
	2013	33371	27.97	91	2781	249	3179	1994	20403	26.56	56	1700	137	1943	1519	
	2014	35516	29.77	97	2960	201	3304	2527	21774	28.34	60	1815	131	2209	1584	
		Felesteen newspaper														
Felesteen	Total	42460	16.85	29	885	309	2021	000	34644	21.71	24	722	131	1142	000	
	2011	9041	21.29	25	753	91	1101	000	8961	25.87	25	747	131	1034	000	
	2012	10419	24.54	28	868	73	1105	381	9148	26.41	25	762	94	1016	384	
	2013	14190	33.42	39	1183	309	2021	968	9194	26.54	25	766	122	1142	589	
	2014	8810	20.75	24	734	100	1238	76	7341	21.19	20	612	78	938	96	
		All of newspaper														
All	Total	252112	100.0	58	1751	617	3304	000	159590	100.0	36	1108	586	2209	000	
	2011	63843	25.32	58	1773	617	3286	000	43052	26.98	39	1196	586	2189	000	
	2012	60000	23.80	55	1667	217	2678	381	39221	24.58	36	1089	152	2033	384	
	2013	64235	25.48	59	1784	309	3179	705	37506	23.50	34	1042	137	1943	449	
	2014	64034	25.40	58	1779	201	3304	76	39811	24.95	36	1106	131	2209	96	

 Table (5.6): Frequency, Percent, Daily Rate, Monthly Rate, Daily Maximum, Monthly Maximum and Monthly Minimum of

 Positive and Negative words in Palestinian Media for 2011 – 2014.

Table (5.6) consists of four horizontal and two vertical panels; the first vertical panel contains statistical data about positive word and the second panel contains statistical data about negative words, such data includes (**Freq.**: the number of occurrence for all positive words in each year and in a total. **Percent:** the year's proportion of positive words from the overall counting. **Daily and Monthly Rate:** positive word occurrence rate for each year and in total. **Daily and Monthly Max:** the maximum number of occurrence for each year and in total. **Monthly Min:** the minimum number of occurrence in each year and in total.

The first horizontal panel contains the statistical data about Al-Hayaa newspaper, the second is about Al-Ayyam, the third is about Felesteen, and the last panel is about all the three newspapers.



Figure (5.10): Daily and monthly rate, Annual and Monthly frequency for positive and negative words in Palestinian economic media through 2011 – 2014.

Figure (5.10) is segmented into four sections as, the upper and down left sections include the daily and monthly rate of positive and negative words occurrence in each year (2011-2014) respectively, they show that there are no big differences between the daily rate over the four years, the positive words rate lies between 55 and 59, and the negative words rate lies between 34 and 39, and the same case is in the monthly rates, they are almost equally over the years. The upper and downright sections include the annual and monthly rate of positive and negative words occurrence in each year (2011-2014) respectively.



Figure (5.11): Monthly frequency of positive and negative words in Palestinian media for each year 2011, 2012, 2013 and 2014.

The four curves in figure (5.11) represent the monthly rate of occurrence of the positive and negative words for each year separately. From the curves, the researcher can trace the following notes:

- 1. During February 2011, the curve of both positive and negative words have significantly declined, this declining may be due to the political disturbance in Egypt, which guided the local newspapers to focus on the political news over the economic news. From March to July 2011, the positive and negative curves continue raising regularly.
- 2. During August 2011, the negative word curve raised and became close to the positive curve. This converge happened also during August 2014.
- 3. The negative curve during 2013 has not changed significantly throughout the year, and it was almost flat.
- 4. During July 2014, the two curves have significantly declined. The positive curve declined steeper than negative curve, this is due to the Israeli war on Gaza form 7 July to 26 August 2014.



Figure (5.12): Daily Rate of positive and negative words in Palestinian economic media for each year 2011, 2012, 2013, 2014, and overall.
Figure (5.12) shows the daily rate of occurrence for positive and negative words in each year, and in the total of period (2011-2014). From the figure, the researcher notes the following:

- 1. In Al-Hayaa and newspapers, the positive words rate is higher than the negative words rate during the overall period and during each year separately.
- 2. In Felesteen newspaper, the difference between the two rates is small during the overall period (29:24), and during each year separately, comparing with Al-Hayaa and Al-Ayyam newspapers. They have the same value in 2011 (25 word in each day). 2013 can be excluded from this note, because the difference can be considered meaningful (39:25).
- 3. Except 2011, Al-Ayyam newspaper has the highest rate of occurrence for positive and negative words, and in contrast, Felesteen newspaper has the lowest rate.

#### 5.2.2 The weight of words

After finding the number of occurrence for each word in the list in each day during the period (2011-2014), the researcher calculated  $(df_j)$ , the number of documents where word j occurs at least once. Then he applied equation (4.3) to find the weight of each word. Table (5.7) show the results of weighting the words. the researcher should remember here that the value of (N) in equation (4.3) is 1,461, the total number of documents in the sample (2011-2014).

From table (5.7) the researcher found that the low frequency words have high weight, and vice versa. In general, the negative words have a higher weight than positive words. The word (*bankruptcy*) has the highest weight in the two list, and the word (*growth*) has the lowest weight.

#### **5.2.3 Positive and negative days**

After calculating the weight of each word in the list, and finding the words occurred in a given day and their frequencies, the researcher calculated the score of each day by equation (4.5). And because the study counts the frequency of each newspaper and for each year separately, the researcher can find the number of positive and negative days for each year and for each newspaper to visualize the tone of them. In order to do that, he consider the days that have media tone (MT) lies between ( $\pm$  0.00005) as a natural day. The days with no newspaper publishing are

also considered natural days. Table (5.8) show the number of positive days, negative days, and natural days respectively on the year base. Table (5.9) show the number of positive days, negative days, and natural days respectively on the newspaper base.

		<b>Positive words</b>		Negative words				
#	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)		
1	innovation	236	0.7917	bankruptcy	116	1.1002		
2	satisfaction	238	0.7881	critical	129	1.0541		
3	boom	240	0.7844	defect	239	0.7863		
4	optimism	310	0.6733	failure	257	0.7547		
5	transparency	344	0.6281	monopoly	261	0.7480		
6	expansion	452	0.5095	restructuring	266	0.7398		
7	positive	458	0.5038	corruption	282	0.7144		
8	dividend	496	0.4692	conflict	335	0.6396		
9	appropriate	531	0.4396	nonperforming	351	0.6193		
10	safe	590	0.3938	collapse	434	0.5272		
11	efficiency	703	0.3177	boycott	443	0.5182		
12	establish	709	0.3140	deflation	453	0.5086		
13	clarity	712	0.3122	adversely	474	0.4889		
14	easy	767	0.2799	bad	477	0.4861		
15	rehabilitation	824	0.2487	disaster	523	0.4461		
16	encouragement	835	0.2430	termination	524	0.4453		
17	success	839	0.2409	damages	588	0.3953		
18	construct	895	0.2128	recession	607	0.3815		
19	return	901	0.2099	delay	646	0.3544		
20	contributory	944	0.1897	restriction	647	0.3537		

 Table (5.7): the weight of positive and negative words

		<b>Positive words</b>		Negative words			
#	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)	
21	employment	952	0.1860	worry	688	0.3271	
22	allowance	966	0.1797	inflation	799	0.2621	
23	strategy	978	0.1743	problems	863	0.2286	
24	profit	985	0.1712	challenges	863	0.2286	
25	opening	1003	0.1633	shortage	870	0.2251	
26	trust	1026	0.1535	fear	877	0.2217	
27	Launch	1062	0.1385	prevent	882	0.2192	
28	stability	1066	0.1369	discontinued	884	0.2182	
29	force	1114	0.1178	drop	891	0.2148	
30	income	1117	0.1166	poverty	935	0.1938	
31	able	1133	0.1104	competition	978	0.1743	
32	continue	1166	0.0980	closing	1037	0.1489	
33	protection	1199	0.0858	weakness	1074	0.1336	
34	funds	1218	0.0790	deficit	1099	0.1237	
35	quality	1252	0.0670	rights	1113	0.1182	
36	finance	1255	0.0660	difficult	1139	0.1081	
37	solutions	1272	0.0602	loss	1154	0.1024	
38	best	1273	0.0598	tax	1156	0.1017	
39	cooperation	1335	0.0392	risks	1156	0.1017	
40	development	1341	0.0372	cost	1187	0.0902	
41	progress	1345	0.0359	Unemployment	1197	0.0866	

		<b>Positive words</b>		Negative words				
#	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)	word	number of documents where word j occurs at least once (dfj)	weight: wj=log(N/dfj)		
42	abundance	1346	0.0356	judgment	1238	0.0719		
43	agreement	1368	0.0286	debt	1264	0.0629		
44	opportunity	1372	0.0273	less	1290	0.0541		
45	building	1375	0.0263	suffering	1293	0.0531		
46	support	1417	0.0133	occupation	1313	0.0464		
47	organizing	1426	0.0105	crisis	1342	0.0369		
48	increase	1428	0.0099	retreat	1384	0.0235		
49	raise	1431	0.0090	needs	1386	0.0229		
50	growth	1436	0.0075	decline	1431	0.0090		



Figure (5.13): the weight of positive words.

the weight of the word inversely related to the frequency, this mean that when the readers became familiar with high frequently words, the effect of them will decline, and vice versa.



### negative word weights

Figure (5.14): the weight of negative words.

yeur nom zon zon											
year Number of positive days		Number of negative days	Number of natural days	Total number of days							
2011	122	217	26	365							
2012	157	178	31	366							
2013	153	179	33	365							
2014	125	212	28	365							
total	557	786	118	1,461							

Table (5.8): the number of positive days, negative days, and natural days in eachyear from 2011-2014.



Figure (5.15): the number of positive days, negative days, and natural days in each year from 2011-2014

the researcher notes here that the number of natural days in Al-Hayaa newspaper is large in comparing with other two newspapers; this is because of the number of publishing days. While Al-Ayyam and Felesteen newspapers published economic pages every day, Al-Hayaa newspaper did not publish on Saturdays and Sundays, and these days are a natural day.

Table (5.9): the number of positive days, negative days, and natural days in each newspaper (Al-Hayaa, Al-Ayyam, and Felesteen) from 2011-2014.

Newspaper	Number of positive days	Number of negative days	Number of natural days	Total number of days
Al-Hayaa	755	181	525	1,461
Al-Ayaam	725	419	317	1,461
Felesteen	678	458	325	1,461
total	2,158	1,058	1,167	



### Figure (5.16): the number of positive days, negative days, and natural days in each newspaper (Al-Hayaa, Al-Ayyam, and Felesteen) from 2011-2014.

#### **5.2.4 Companies and sectors frequencies**

As well as the words, the researcher counted the number of occurrence for each listed company in each of the three newspaper, and in each year separately. In addition, by the same manner, he counted the number of occurrence for each economic sector such as Banking and Financial Services, Investment, Insurance, Services, and Industry.

#	Compony	Steel Icon	Num	ber of t	rading	days	Total	Average
#	Company	Stock Icon	2011	2012	2013	2014	Total	(day/year)
1	Bank Of Palestine	BOP	248	249	241	244	982	245.50
2	Palestine Development & Investment	PADICO	247	248	239	243	977	244.25
3	Palestine Telecommunications	PALTEL	247	245	240	244	976	244.00
4	Wataniya Palestine Mobile Telecomm.	WATANIYA	241	244	237	227	949	237.25
5	The National Bank	TNB	224	224	213	216	877	219.25
6	Palestine Electric	PEC	235	231	212	158	836	209.00
7	Palestine Islamic Bank	ISBK	218	213	220	159	810	202.50
8	Palestine Real Estate Investment	PRICO	224	202	187	191	804	201.00
9	Globalcom Telecommunications	GCOM	228	192	206	161	787	196.75
10	Palestinian Dist. & Logistics	WASSEL	218	194	198	119	729	182.25

Table (5.10): details of trading days for all listed companies from 2011 to 2014

щ	Commonw	Stock Lean	Number of trading days		Tetel	Average		
#	Company	Stock Icon	2011	2012	2013	2014	Total	(day/year)
	Services							
11	Arab Palestinian Investment	APIC	0	0	0	182	182	182.00
12	Arab Islamic Bank	AIB	214	186	166	147	713	178.25
13	Ahliea Insurance Group	AIG	213	199	151	144	707	176.75
14	Union Construction And Investment	UCI	216	157	178	142	693	173.25
15	Jerusalem Cigarette	JCC	135	178	206	166	685	171.25
16	Birzeit Pharmaceuticals	BPC	158	148	154	147	607	151.75
17	Palestine Industrial Investment	PIIC	196	139	177	74	586	146.50
18	Golden Wheat Mills	GMC	189	149	110	87	535	133.75
19	The National Carton Industry	NCI	141	103	130	115	489	122.25
20	Jerusalem Pharmaceuticals	JPH	87	94	129	128	438	109.50
21	Al Quds Bank	QUDS	99	77	141	115	432	108.00
22	National Insurance	NIC	105	120	101	103	429	107.25
23	Al-Aqariya Trading Investment	AQARIYA	100	104	61	46	311	77.75
24	Palestine Plastic Industries	LADAEN	72	88	41	52	253	63.25
25	Global United Insurance	GUI	65	49	53	81	248	62.00
26	Dar Al-Shifa Pharmaceuticals	PHARMACARE	0	0	54	57	111	55.50
27	Al-Takaful Palestinian Insurance	TIC	69	69	51	29	218	54.50
28	Palestine Investment Bank	PIBC	69	43	54	48	214	53.50
29	Palestine Commercial Bank	PCB	100	45	23	33	201	50.25
30	Palestine Investment & Development	PID	46	51	47	36	180	45.00
31	Al-Wataniah Towers	ABRAJ	39	40	36	61	176	44.00
32	Arab Real Estate Establishment	ARE	80	33	20	36	169	42.25
33	The Arab Hotels	AHC	25	33	44	54	156	39.00
34	The Ramallah Summer Resorts	PSR	29	34	60	33	156	39.00
35	Palestine Poultry	AZIZA	84	36	23	8	151	37.75
36	National Aluminum And Profile	NAPCO	12	33	38	58	141	35.25
37	The Vegetable Oil Industries	VOIV	37	29	39	33	138	34.50
38	Nablus Surgical Center	NSC	38	16	11	16	81	20.25
39	Arab Investors	ARAB	14	36	18	3	71	17.75
40	Al Shark Electrode	ELECTRODE	33	14	14	10	71	17.75
41	Arab Company For Paints Products	APC	17	22	19	5	63	15.75
42	Trust International Insurance	TRUST	30	14	10	9	63	15.75
43	Al Mashriq Insurance	MIC	13	0	0	0	13	13.00
44	Arab Palestinian Shopping Centers	BRAVO	14	16	7	5	42	10.50

#	Company	Stock Joon	Num	ber of t	trading	days	Total	Average
#	Company	Stock Icon	2011	2012	2013	2014	Total	(day/year)
45	Jerusalem Real Estate Investment	JREI	4	6	8	3	21	5.25
46	Palestine Securities Exchange	PSE	0	6	4	4	14	4.67
47	Palestine Insurance	PICO	2	4	6	5	17	4.25
48	Palaqar For Real Estate Dev.& Management	PALAQAR	0	6	4	3	13	3.25
49	Beit Jala for Pharmaceutical industry	BJP	0	0	0	0	0	0.00

Source: author, 2016.

*Note*: Beit Jala Pharmaceutical **BJP** was listed in PEX in 03/05/2015, to became **50** firms in 31/12/2015



### Figure (5.17): trading day for the top five companies

Table (5.11) shows the numbers of occurrence for the five economic sectors in Palestinian media according to newspaper through period 2011 - 2014, whereas the total number of occurrence for Banking and Financial Services sector is 7,899, the total number of occurrence for Investment sector is 8,940, the total number of occurrence for Insurance sector is 6,982, the total number of occurrence for Industry sector is 4,187, and the total number of occurrence for Industry sector is 3,976. Figure (5.18) shows the time movement of economic sectors annual number of occurrence through 2011 – 2014 Table (5.12) shows the total number of occurrence of Companies names in the Palestinian media through period 2011 to 2014, whereas the total was calculated twice, the first based on the newspaper and the second based on years. According to general total, the researcher notes that *BOP*, *QUDS*, *PALTEL*, *NIC* and *TNB* are the five companies that have the highest occurrence in media respectively. *JREI*, *ELECTRODE*, *PID*, *PALAQAR* and *PHARMACARE* are the five companies that have the lowest occurrence in media respectively. BJP has no occurrence in media through the period of the study because it was listed in PEX in 03/05/2015.

 Table (5.11): Number of occurrence of economic sectors in Palestinian economic

 media (Al-Hayaa, Al-Ayyam, and Felesteen newspapers) through period 2011 to

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		Numb	er of occurr	ence in Al-H	Iayaa	T.4.1		
	sector	2011	2012	2013	2014	Total		
1	Banking and Financial Services	1,052	538	329	407	2,326		
2	Investment	1,108	993	662	811	3,574		
3	Insurance	1,174	727	410	524	2,835		
4	Service	549	371	214	197	1,331		
5	Industry	767	464	323	394	1,948		
ш		Number of occurrence in Al-Aayyam						
Ħ	sector	2011	2012	2013	2014	- I otal		
1	Banking and Financial Services	1,184	999	1,218	1,143	4,544		
2	Investment	949	906	1,372	1,280	4,507		
3	Insurance	852	775	872	830	3,329		
4	Industry	646	451	698	652	2,447		
5	Service	325	426	596	425	1,772		
ш		Number of occurrence Felesteen						
Ħ	sector	2011	2012	2013	2014	Total		
1	Banking and Financial Services	219	379	234	197	1,029		
2	Investment	143	234	275	207	859		
3	Insurance	106	351	258	103	818		
4	Service	122	117	92	78	409		
5	Industry	57	81	61	57	256		
ш		Tot	al of numbe	r of occurre	nce	T-4-1		
Ħ	sector	2011	2012	2013	2014	- I otal		
1	Banking and Financial Services	2,455	1,916	1,781	1,747	7,899		
2	Investment	2,200	2,133	2,309	2,298	8,940		
3	Insurance	2,132	1,853	1,540	1,457	6,982		
4	Service	1,317	939	1,004	927	4,187		
5	Industry	1,149	971	980	876	3,976		



Figure (5.18): Number of occurrence of economic sectors in Palestinian economic media (Al-Hayaa, Al-Ayyam and Felesteen newspaper) through period 2011 to 2014.

Table (5.12): number of occurrence of listed Companies in the Palestinianeconomic media (Al-Hayaa, Al-Ayyam, and Felesteen newspapers) throughperiod 2011 to 2014.

Commonw	Years					General		
Company	2011	2012	2013	2014	Al-Hayaa	Al-Ayyam	Felesteen	Total
BOP	328	292	294	288	748	382	72	1,202
QUDS	193	148	269	424	586	432	16	1,034
PALTEL	255	214	162	181	540	232	40	812
NIC	262	108	140	121	300	327	4	631
TNB	18	45	164	232	183	194	82	459
PADICO	162	104	53	55	233	138	3	374
AIB	65	79	101	84	138	163	28	329
GCOM	128	87	40	37	251	40	1	292
GMC	125	90	30	28	192	79	2	273
PRICO	97	78	28	58	168	90	3	261
ISBK	79	40	42	89	118	106	26	250
BPC	88	85	35	29	151	85	1	237
PCB	70	40	32	75	141	74	2	217
PIIC	95	67	29	18	142	66	1	209
NCI	95	59	31	22	143	62	2	207
PEC	82	67	19	32	109	85	6	200
AIG	14	92	47	37	132	41	17	190
JCC	80	62	25	16	138	44	1	183
AZIZA	83	43	29	9	95	69	0	164
GUI	57	40	13	21	65	63	3	131
APC	44	43	16	20	50	73	0	123
WATANIYA	51	42	7	20	94	26	0	120
PIBC	60	26	16	13	69	41	5	115
AQARIYA	44	47	15	5	89	21	1	111
VOIV	44	25	21	18	69	39	0	108
APIC	5	43	3	54	42	60	3	105

Commonw		Yea	nrs			5	General	
Company	2011	2012	2013	2014	Al-Hayaa	Al-Ayyam	Felesteen	Total
JPH	47	36	11	10	75	28	1	104
WASSEL	60	23	10	10	67	35	1	103
NAPCO	19	61	4	7	56	35	0	91
ARE	49	27	8	6	76	14	0	90
LADAEN	36	33	2	17	79	8	1	88
UCI	27	15	24	18	20	60	4	84
AHC	29	18	22	14	47	36	0	83
TIC	28	34	11	6	42	36	1	79
PSR	27	23	22	1	46	27	0	73
ABRAJ	7	29	9	27	53	18	1	72
MIC	27	14	14	17	48	24	0	72
PSE	13	26	17	7	38	24	1	63
BRAVO	27	16	9	6	34	23	1	58
TRUST	28	11	3	3	30	15	0	45
NSC	19	15	4	5	29	14	0	43
ARAB	21	10	8	3	26	14	2	42
PICO	10	17	10	5	23	19	0	42
JREI	17	13	5	3	23	15	0	38
ELECTRODE	13	3	3	8	16	10	1	27
PID	18	2	3	4	13	14	0	27
PALAQAR	0	4	6	4	10	4	0	14
PHARMACARE	0	0	8	5	10	3	0	13
BJP	0	0	0	0	0	0	0	0



Figure (5.19): Average of number of occurrence Companies names in the Palestinian media (Al-Hayaa, Al-Ayaam and Felesteen newspapers) through period 2011 to 2014.

### 5.3 Description of independent and dependent variables

Table (5.13) shows the descriptive statistics of independent variable (*tone score of media content MT*) through the period of the study in each year, whereas the mean of tone score was negative in 2011, 2012 and 2014 but it was positive in 2013. The minimum tone score was negative in all years but maximum tone score was positive in all years. Figures (5.20, 5.21, 5.22, and 5.23) show the time movement of tone score during joint days in each year. Only the tones of the trading days are taken in account here.

In addition, table (5.13) shows the number of trading days, mean and standard deviation of dependent variables (*Returns r, Trading Volume TV*) and independent variable (Media *tone MT*) for each company in Palestine market through its trading days.

Table (5.13): Number of observation, Mean, standard deviation, Median, Minand max of score of media tone through 2011 – 2014.

Years	Ν	Mean	St.dev	Median	Min	Max
2011	248	-1.383	5.925	-0.869	-49.714	11.433
2012	249	-0.138	5.315	0.600	-30.292	13.674
2013	241	0.418	4.675	0.734	-14.476	14.399
2014	245	-0.472	5.215	-0.472	-14.006	24.230
Total	983	-0.399	5.338	0.085	-49.714	24.230

From table (5.13) the researcher traces the following notes:

- 1. 2012 has the highest number of joint days (the days that have media publishing and stock market exchanging), where 2013 has the lowest number.
- 2. 2013 is the only year in the period, which has a positive mean of media tone, while the other three years have a negative mean, the main reason, from my perspective, is the surrounding political climate. 2012 and 2014 witnessed two Israeli wars on Gaza Strip; these wars have led to the destruction of a large number of houses, public facilities, economic and trade facilities. 2011 witnessed a political unrest and regime change in Egypt.
- 3. In the joint days, the most positively day is 9 July 2014 with a media tone value of (24.230), while the most negative day is 3 January 2011, with a media tone value of (-49.714).



Figure (5.20): Time movement of media tone during joint days in 2011.



Figure (5.21): Time movement of media tone score during joint days in 2012.



Figure (5.22): Time movement of media tone score during joint days in 2013.



Figure (5.23): Time movement of media tone score during joint days in 2014.

Table (5.14): Number of trading days, mean and standard deviation of dependent and independent variables for all listed companies in Palestine stock market.

Commenter	N	Inde va	pendent riable	Dependent Variables					
Companies	IN	Ton	e Score	Ret	urns	Trading	g Volume		
		Mean	Std.Dev	Mean	Std.Dev	Mean	Std.Dev		
BOP	982	-0.398	5.340	-0.141596	3.731871	61368.31	181748.94		
PADICO	977	-0.418	5.340	-0.208707	4.558554	228588.07	1296930.76		
PALTEL	976	-0.412	5.351	-0.124085	3.894485	57729.20	136278.87		
WATANIYA	948	-0.326	5.086	-0.245089	4.743982	38553.33	202409.42		
TNB	877	-0.403	5.395	0.114482	3.123976	42843.12	235580.19		
PEC	836	-0.166	5.090	0.254166	5.114378	6843.36	11910.50		
ISBK	810	-0.426	5.372	0.007761	3.581484	55529.58	195653.67		
PRICO	804	-0.391	5.431	-0.046442	2.003595	24336.01	68677.79		
GCOM	799	-0.295	5.332	-0.326046	3.022634	24540.13	35206.84		
WASSEL	729	-0.336	5.366	0.008169	1.540006	4879.44	29537.12		
AIB	713	-0.343	5.361	-0.061006	3.432160	20924.63	132160.32		
AIG	707	-0.284	5.388	-0.128584	3.288256	27738.61	99241.43		
UCI	693	-0.415	4.902	-0.032811	2.046579	16785.77	59556.35		
JCC	685	-0.078	5.395	-0.200850	4.640834	5800.11	9703.62		
BPC	607	-0.299	5.169	-0.094394	3.538385	6276.95	23552.67		
PIIC	586	-0.116	5.190	-0.299080	4.306056	23744.87	64773.00		
GMC	535	-0.454	5.116	-0.226950	3.468603	15423.95	86841.41		
NCI	489	-0.101	5.277	0.076799	2.929039	11774.32	34770.45		
JPH	438	-0.150	5.829	-0.298463	3.512738	5390.08	19133.65		
QUDS	432	-0.111	4.861	-0.265822	3.347909	30082.23	193731.30		
NIC	429	-0.370	5.104	0.058493	3.390240	3766.51	12507.67		
AQARIYA	310	-0.495	5.307	-0.223565	3.358378	11824.74	47724.93		
LADAEN	253	-0.613	5.063	-0.447841	2.948344	3550.10	11247.79		
GUI	247	-0.291	4.861	0.205180	3.798132	3816.66	7573.08		
TIC	217	-0.129	5.168	-0.342416	5.057658	28084.06	102797.19		
PIBC	214	-0.424	4.612	-0.201462	3.262850	68781.21	384374.13		
PCB	201	-0.337	5.847	0.020890	2.615494	22422.18	44776.02		
APIC	181	-0.549	5.372	-0.073661	5.780910	53495.62	156257.32		
PID	180	-0.298	4.914	0.273003	4.594318	6773.07	38115.15		
ABRAJ	176	-0.294	4.878	-0.038366	3.419374	1208.15	2317.14		
ARE	169	-0.573	6.828	-0.378699	3.334635	1337.43	4385.82		
AHC	156	0.253	4.379	-0.256782	4.313618	43438.33	237983.55		
RSR	156	-0.318	4.906	0.166026	2.723289	6300.69	20060.03		
AZIZA	151	-1.268	6.623	0.389797	3.628573	6868.32	28934.47		
NAPCO	140	-0.693	5.635	-0.219612	3.378606	7395.86	54265.94		
VOIC	138	-0.318	5.138	0.671635	2.785598	11940.72	69458.05		
PHARMACARE	110	0.278	4.488	-0.425780	2.633997	3439.82	4987.43		
NSC	81	-0.628	5.076	1.533265	4.412322	6488.79	11971.90		
ARAB	71	-0.760	5.402	0.090913	2.921561	4569.76	8915.50		
ELECTRODE	70	-0.956	5.048	-1.004485	3.006361	1034.66	2166.16		
APC	63	-0.874	5.720	1.062893	3.574597	929.10	1628.96		
TRUST	63	-0.333	4.860	-0.155728	2.781748	20328.75	49128.06		
BRAVO	42	0.460	5.094	-1.637118	2.978079	1704.90	2709.12		
JREI	21	1.304	5.186	-2.482335	2.620639	97524.62	231091.88		
PICO	17	1.163	3.939	-1.931497	3.341870	190559.18	415598.69		
PSE	13	0.870	2.425	-0.332994	3.145805	44971.69	137044.88		
PALAQAR	12	-3.358	5.684	-3.506050	1.637336	111256.00	226226.41		

### N: Number of trading days.



Figure (5.24): Mean of media tone for all listed companies at joint days through period 2011 to 2014.

The three figures (5.24), (5.25), and (5.26) are clockwise charts, which represent respectively the mean of the three variables; media tone (MT), return (r), and trading volume (TV).



Figure (5.25): Mean of return for all listed companies at joint days through period 2011 to 2014.





### 5.4 Empirical analysis and results

In the previous section, I explained the descriptive result about the media content analysis, and traced the main properties of the media tone during the period 2011-2014. This section represents the empirical analysis of the relationship between the media tone (MT) and the stock anomalies (return r, and trading volume TV). The researcher will begin with the correlation analysis to investigate the existence of the

relations, and then apply the regression analysis to investigate the shape of the relations.

### 5.4.1 Correlation analysis

Table (5.15) shows the correlation coefficient between media tone and each of trading volume and return variables for each listed company in Palestinian Market. Based on the results in table below, the researcher notes that there is no statistically significance relationship at 0.05 level between the score of media and trading volume in each company except *WATANIYA* (r = -0.081, sig = 0.012), *GCOM* (0.101, sig = 0.004), *LADAEN* (r = -0.171, sig = 0.007) and *PICO* (r = 0.499, sig = 0.042). There is no statistically significance relationship at 0.05 level between the media and return in each company except *TNB* (r = -0.078, sig = 0.021), *AIB* (0.075, sig = 0.047), *AQARIYA* (r = -0.115, sig = 0.042) and *ELECTRODE* (r = -0.260, sig = 0.030).

Table (5.15): the correlation coefficient between media tone and each of trading volume and return variables for each listed company in Palestinian Market.

Componing	N	Trading	Return		
Companies	IN	rho	Sig.	rho	Sig.
BOP	982	0.026	0.415	-0.033	0.295
PADICO	977	0.038	0.234	-0.006	0.852
PALTEL	976	0.016	0.609	-0.012	0.700
WATANIYA	948	-0.081	0.012	-0.018	0.584
TNB	877	0.004	0.900	0.078	0.021
PEC	836	-0.058	0.092	-0.021	0.550
ISBK	810	-0.002	0.950	-0.007	0.844
PRICO	804	0.065	0.064	0.009	0.806
GCOM	799	0.101	0.004	0.039	0.271
WASSEL	729	0.010	0.797	0.019	0.602
AIB	713	0.038	0.306	0.075	0.047
AIG	707	0.065	0.084	0.033	0.379
UCI	693	0.043	0.254	-0.048	0.211
JCC	685	0.027	0.485	-0.045	0.240
BPC	607	-0.003	0.945	-0.039	0.343
PIIC	586	0.064	0.122	0.015	0.723
GMC	535	0.010	0.822	0.050	0.245
NCI	489	-0.003	0.949	-0.009	0.846
JPH	438	0.016	0.739	0.009	0.857
QUDS	432	-0.087	0.071	0.017	0.729
NIC	429	-0.030	0.535	0.071	0.142
AQARIYA	310	0.052	0.365	-0.115	0.042
LADAEN	253	-0.171	0.007	-0.018	0.780
GUI	247	-0.110	0.086	-0.072	0.260
TIC	217	0.010	0.882	-0.030	0.662
PIBC	214	0.034	0.624	0.071	0.304

Componing	N	Trading	Volume	Return		
Companies	IN	rho	Sig.	rho	Sig.	
РСВ	201	0.085	0.229	0.000	0.997	
APIC	181	0.061	0.416	-0.072	0.335	
PID	180	0.129	0.085	-0.090	0.231	
ABRAJ	176	-0.080	0.291	0.036	0.632	
ARE	169	-0.130	0.093	0.074	0.338	
AHC	156	-0.018	0.823	0.058	0.476	
RSR	156	0.038	0.642	0.107	0.184	
AZIZA	151	-0.064	0.433	-0.020	0.811	
NAPCO	140	0.044	0.604	-0.077	0.365	
VOIC	138	-0.012	0.888	0.004	0.962	
PHARMACARE	110	0.040	0.677	-0.167	0.080	
NSC	81	0.030	0.792	0.031	0.780	
ARAB	71	0.042	0.731	-0.156	0.194	
ELECTRODE	70	-0.087	0.473	-0.260	0.030	
APC	63	-0.082	0.522	-0.069	0.589	
TRUST	63	0.122	0.340	-0.081	0.529	
BRAVO	42	0.065	0.681	-0.081	0.609	
JREI	21	0.161	0.485	-0.050	0.831	
PICO	17	0.499	0.042	0.054	0.836	
PSE	13	0.334	0.265	-0.393	0.184	
PALAQAR	12	0.366	0.241	-0.378	0.225	

Hints: Bold font Mean the correlation is significant at 0.05 level.

#### 5.4.2 Multiple linear regression analysis for model I (trading volume)

This part aimed at establishing the effect of the Palestinian media tone (MT) on the Trading Volume (TV) for each company in Palestinian market (see Appendix 5 in full details), whereas (MT) variable inserted to the model in level, first lag, second lag and third lag. The F-Test calculated to examine the appropriateness of the model as a whole, the R Square analysis, the Multicollinearity test and autocorrelation test.

Table (5.16) shows the results of regression of TV on MT, MT(-1), MT(-2) and MT(-3), whereas the Bo is the regression coefficient of MT. B1 is the regression coefficient of MT(-1). B2 is the regression coefficient of MT(-2) and B4 is the regression coefficient of MT(-3). Table 11 presents the results of multiple linear regression with all independent variables (MT in level and lags). Table (5.17) presents the results of the best regression model with independent variables that determined using stepwise method.

Companies	N	Standa	rdized Regi	Model fit				
Companies	IN	βο	β1	β2	β3	<b>R-Square</b>	F	Sig.
BOP	982	0.009	0.086	0.043	-0.042	1.11%	2.72	0.028
PADICO	977	0.041	0.028	-0.046	-0.003	0.40%	0.99	0.415
PALTEL	976	-0.001	0.043	0.051	0.018	0.61%	1.48	0.205
WATANIYA	948	-0.077	-0.033	-0.003	0.014	0.78%	1.84	0.118
TNB	877	0.004	-0.024	-0.020	0.027	0.15%	0.34	0.853
PEC	836	-0.045	-0.072	0.053	-0.062	1.36%	2.86	0.023
ISBK	810	-0.011	0.062	-0.035	0.009	0.44%	0.88	0.476
PRICO	804	0.063	-0.001	-0.035	0.051	0.77%	1.54	0.190
GCOM	799	0.099	0.049	0.012	0.015	1.57%	3.16	0.014
WASSEL	729	0.028	-0.028	-0.006	-0.091	0.97%	1.77	0.133
AIB	713	0.028	0.032	0.038	0.006	0.46%	0.81	0.516
AIG	707	0.067	0.048	0.034	-0.010	1.00%	1.76	0.135
UCI	693	0.042	0.000	0.040	-0.014	0.34%	0.58	0.676
JCC	685	0.025	-0.029	0.005	0.027	0.20%	0.34	0.848
BPC	607	0.005	0.002	-0.061	-0.011	0.39%	0.60	0.666
PIIC	586	0.068	-0.034	-0.002	0.023	0.58%	0.84	0.497
GMC	535	0.009	-0.018	-0.008	0.032	0.13%	0.18	0.949
NCI	489	-0.005	0.003	0.008	-0.008	0.01%	0.02	0.999
JPH	438	0.000	0.051	0.013	0.018	0.35%	0.38	0.825
QUDS	432	-0.083	-0.055	-0.016	0.041	1.21%	1.30	0.268
NIC	429	-0.032	0.015	0.116	-0.100	2.07%	2.24	0.064
AQARIYA	310	0.056	-0.024	-0.027	0.056	0.63%	0.48	0.748
LADAEN	253	-0.168	-0.003	-0.098	0.100	4.39%	2.85	0.025
GUI	247	-0.104	0.055	-0.237	0.056	6.55%	4.24	0.002
TIC	217	0.011	-0.014	-0.060	0.084	0.92%	0.49	0.740
PIBC	214	0.040	-0.080	0.007	0.054	0.99%	0.52	0.721
PCB	201	0.108	-0.126	-0.196	-0.050	7.01%	3.68	0.007
APIC	181	0.052	-0.059	0.051	0.042	1.01%	0.45	0.772
PID	180	0.134	-0.036	0.125	-0.034	3.25%	1.47	0.213
ABRAJ	176	-0.064	-0.194	0.048	0.007	4.22%	1.88	0.116
ARE	169	-0.012	-0.006	0.043	-0.272	7.33%	3.18	0.015
AHC	156	-0.001	-0.039	-0.154	-0.092	3.89%	1.52	0.199
RSR	156	0.006	0.067	-0.017	0.091	1.43%	0.55	0.700
AZIZA	151	-0.091	0.012	0.037	0.091	1.67%	0.62	0.652
NAPCO	140	0.007	0.138	-0.060	0.051	2.21%	0.76	0.552
VOIC	138	-0.026	0.001	0.001	0.097	0.95%	0.32	0.866
PHARMACARE	110	0.108	-0.177	-0.147	-0.105	7.27%	2.06	0.092
NSC	81	0.007	-0.185	-0.129	0.161	5.71%	1.15	0.340
ARAB	71	0.013	-0.056	0.020	0.123	1.72%	0.28	0.887
ELECTRODE	70	-0.081	-0.058	0.046	-0.103	2.14%	0.36	0.839
APC	63	-0.056	0.068	-0.029	-0.116	2.21%	0.33	0.859
TRUST	63	0.131	-0.126	0.084	0.008	3.71%	0.56	0.693
BRAVO	42	0.064	0.111	-0.143	0.129	3.72%	0.34	0.850
JREI	21	0.243	-0.023	0.401	-0.101	15.61%	0.74	0.578
PICO	17	0.396	0.313	-0.369	0.457	50.76%	3.09	0.058
PSE	13	0.391	0.339	-0.081	0.629	66.46%	3.96	0.046
PALAQAR	12	0.233	0.175	0.015	0.291	28.28%	0.69	0.622

 Table (5.16): Results of Regression Trading volume on media tone score in level,

 first lag, second and third lag of media tone score.

Note: the table contain 47 companies; the other two company have no trading days during the period.

Table (5.17) shows the results of the best regression model based on stepwise method, whereas the number of companies that have significance effect on media tone was 15 companies, for example the first lag of media tone has positive significance effect on trading volume of **BOP** with (0.09). It means that the media tone of today effects on **BOP's** trading volume. The second lag of media tone has positive significance effect on trading volume of **NIC** with (0.115) and the third lag has negative effect on trading volume of **NIC** with (-0.103). It means that the media tone of today effects positively on **NIS's** trading volume on following days and it affects negatively after that.

#### 5.4.3 Goodness- of –Fit Tests for Model I (trading volume)

According to the analysis of variance (**ANOVA**), the calculated values of F test (in table 12) at the 0.05 level was significant. Table 12 shows the regression which is significant as a whole; this means that media tone (MT) effects on trading volume (TV) of the companies in the table. Therefore, the F value proves that there is a significant relationship between the media tone and trading volume.  $\mathbf{R}^2$  represents the prediction level of variance in trading volume (TV) by media tone (MT), whereas the lowest R-square is 0.60% for PEC Company as shown in table 12 above. This means that 0.6% of TV can be predicted from the first lag of MT.

Durbin-Watson (DW) statistics is the ratio of sum of squares of successive differences of residuals to the sum of squares of errors. As a rule of thumb, if the DW statistic is close to 2, there is evidence of no serial correlation. All of Durbin-Watson statistic were close from 2; it means that there were no high serial correlation residuals of models except *WASSEL* and *AHC*. By analyzing variance inflation factor in model I, it can be said that all independent variables had VIF value less than 2.This finding suggests that multicollinearity was not a problem when selected explanatory variables.

Table (5.17): Results of Regression Trading volume on media tone score in level,first lag, second and third lag of media tone score, using stepwise method.

Compani	N	Sta	andardized Coeffi	d Regressi icients	Model fit					
es	19	βο	β1	β2	β3	R- Square	F	Sig.	DW	VIF
BOP	982		0.090			0.81%	8.01	0.005	1.89	
WATANI YA	948	-0.081				0.66%	6.28	0.012	1.90	
PEC	836		-0.077			0.60%	4.98	0.026	1.96	

Compani	N	Sta	andardize Coeffi	d Regressi icients	Model fit					
es	IN	βο	β1	β2	β3	R- Square	F	Sig.	DW	VIF
GCOM	799	0.112				1.26%	10.17	0.001	1.43	
WASSEL	729				-0.091	0.83%	6.05	0.014	1.38	
AIG	707	0.078				0.61%	4.34	0.038	1.96	
NIC	429			0.115	-0.103	1.96%	4.26	0.015	1.98	1.03
LADAEN	253	-0.171				2.91%	7.52	0.007	1.93	
GUI	247			-0.226		5.12%	13.23	0.000	1.96	
PCB	201			-0.213		4.52%	9.38	0.003	1.87	
ABRAJ	176		-0.190			3.62%	6.53	0.011	1.55	
ARE	169				-0.267	7.15%	12.63	0.000	2.02	
AHC	156			-0.168		2.83%	4.45	0.036	1.14	
PICO	17				0.596	35.52%	8.26	0.012	1.71	
PSE	13	0.510			0.706	57.96%	6.89	0.013	1.96	1.07

### 5.4.4 Regression Results for Model II

This part aimed at establishing the effect of the Palestinian media tone (MT) on the Return (R) for each company in Palestinian market (see Appendix 5 in full details), whereas (MT) variable inserted to the model in level, first lag, second lag and third lag. The F-Test calculated to examine the appropriateness of the model as a whole, the R Square analysis, the Multicollinearity test and autocorrelation test.

Table (5.18) shows the results of regression of R on MT, MT(-1), MT(-2) and MT(-3), whereas the Bo is the regression coefficient of MT. B1 is the regression coefficient of MT(-1). B2 is the regression coefficient of MT(-2) and B4 is the regression coefficient of MT(-3). Table (5.18) presents the results of multiple linear regression with all independent variables (MT in level and lags). Table (5.19) presents the results of the best regression model with independent variables that determined using stepwise method.

 Table (5.18): Results of Regression Return on media tone score in level, first lag, second and third lag of media tone score.

			Regression	Coefficients	Model fit			
Companies	N	βο	β1	β2	β3	R- Square	F	Sig.
BOP	982	0.006	-0.051	-0.047	-0.049	0.9%	2.28	0.059
PADICO	977	-0.004	-0.042	0.001	0.051	0.4%	0.94	0.442
PALTEL	976	-0.003	0.028	-0.025	-0.026	0.2%	0.47	0.755
WATANIYA	948	-0.022	0.010	-0.013	0.028	0.1%	0.29	0.884
TNB	877	0.083	-0.058	0.008	0.045	1.1%	2.52	0.040
PEC	836	-0.016	-0.037	0.050	-0.032	0.4%	0.92	0.454
ISBK	810	-0.002	0.000	-0.003	-0.033	0.1%	0.23	0.923
PRICO	804	0.042	-0.004	-0.063	0.015	0.5%	1.04	0.386
GCOM	799	0.050	-0.002	-0.006	-0.068	0.6%	1.22	0.303
WASSEL	729	0.015	-0.085	-0.031	0.030	0.9%	1.63	0.166

			Regression	Coefficients	5	Model fit			
Companies	Ν	βο	β1	β2	β3	R- Square	F	Sig.	
AIB	713	0.087	-0.044	-0.009	-0.061	1.2%	2.07	0.083	
AIG	707	0.045	-0.047	-0.011	0.031	0.5%	0.80	0.523	
UCI	693	-0.031	-0.005	-0.071	-0.033	0.9%	1.58	0.178	
JCC	685	-0.034	0.002	-0.041	-0.005	0.3%	0.56	0.689	
BPC	607	-0.047	0.033	-0.038	0.030	0.4%	0.66	0.619	
PIIC	586	0.020	0.096	0.002	-0.046	1.2%	1.69	0.151	
GMC	535	0.061	0.010	0.073	-0.141	2.4%	3.23	0.012	
NCI	489	-0.040	-0.004	0.014	0.079	0.7%	0.90	0.465	
JPH	438	-0.013	0.072	-0.056	0.046	0.9%	1.00	0.407	
QUDS	432	0.027	0.008	-0.029	-0.066	0.6%	0.63	0.643	
NIC	429	0.064	0.006	0.005	0.029	0.6%	0.64	0.633	
AQARIYA	310	-0.099	0.054	-0.082	-0.125	3.8%	3.00	0.019	
LADAEN	253	-0.024	-0.019	0.079	0.017	0.7%	0.45	0.774	
GUI	247	-0.049	-0.013	-0.064	-0.082	1.9%	1.15	0.334	
TIC	217	-0.032	0.092	0.018	-0.054	1.1%	0.60	0.661	
PIBC	214	0.081	-0.102	0.113	-0.051	2.5%	1.34	0.257	
PCB	201	-0.017	0.081	-0.037	0.080	1.2%	0.58	0.676	
APIC	181	-0.111	0.014	0.050	0.066	1.4%	0.61	0.660	
PID	180	-0.088	-0.117	-0.011	0.067	2.5%	1.11	0.351	
ABRAJ	176	0.018	0.039	0.141	0.050	2.9%	1.26	0.288	
ARE	169	0.102	0.135	0.028	0.096	5.1%	2.18	0.074	
AHC	156	0.034	0.116	0.053	-0.034	2.0%	0.75	0.558	
RSR	156	0.129	-0.014	0.065	-0.100	2.3%	0.89	0.474	
AZIZA	151	-0.048	0.020	0.058	0.055	1.0%	0.35	0.842	
NAPCO	140	-0.062	-0.091	0.037	0.011	1.4%	0.48	0.748	
VOIC	138	-0.006	0.028	0.005	-0.053	0.3%	0.11	0.977	
PHARMACARE	110	-0.165	0.023	-0.059	-0.021	3.2%	0.87	0.484	
NSC	81	0.015	-0.105	0.161	0.015	3.5%	0.68	0.606	
ARAB	71	-0.159	0.150	-0.035	0.012	4.9%	0.83	0.510	
ELECTRODE	70	-0.241	0.040	0.073	-0.203	10.5%	1.91	0.120	
APC	63	-0.012	0.086	0.233	-0.253	9.4%	1.51	0.211	
TRUST	63	-0.119	-0.057	-0.106	0.124	2.9%	0.43	0.789	
BRAVO	42	-0.128	0.102	0.159	0.168	10.2%	0.99	0.424	
JREI	21	-0.049	0.157	0.307	0.010	13.5%	0.63	0.651	
PICO	17	-0.062	-0.222	-0.195	0.301	9.2%	0.31	0.869	
PSE	13	-0.599	0.402	-0.062	-0.347	33.6%	1.01	0.456	
PALAQAR	12	-0.352	-0.529	-0.072	0.385	39.0%	1.12	0.419	

Hints: Bold font Mean the coefficient is significant at 0.05 level.

The following table shows the results of the best regression model based on stepwise method, whereas the number of companied that have significance effect on media tone was 10 companies, for example the first lag of media tone has negative significance effect on return of **BOP** with (-0.065). It means the media tone of present days' effects on **BOP's** return of the following days.

		<b>Regression Coefficients</b>				Model fit				
Companies	N	βο	β1	β2	β3	R- Square	F	Sig.	DW	VIF
BOP	982		-0.065			0.4%	4.17	0.041	2.18	
TNB	877	0.081				0.7%	5.82	0.016	2.27	
WASSEL	729		-0.084			0.7%	5.19	0.023	2.36	
UCI	693			-0.082		0.7%	4.66	0.031	2.28	
PIIC	586		0.097			0.9%	5.48	0.020	2.16	
GMC	535				-0.117	1.4%	7.40	0.007	2.04	
AQARIYA	310				-0.138	1.9%	5.98	0.015	1.70	
ABRAJ	176			0.153		2.3%	4.18	0.042	1.89	
ARE	169		0.168			2.8%	4.77	0.030	1.37	
ELECTRODE	70	-0.260				6.8%	4.93	0.030	1.27	

Table (5.19): Results of Regression Return on media tone score in level, first lag,second and third lag of media tone score, using stepwise method.

#### 5.4.5 Goodness- of –Fit Tests for Model I (return)

According to the analysis of variance (**ANOVA**), the calculated values of F test (in table 14) at the 0.05 level was significant. Table (5.19) shows the regression which is significant as a whole; this means that media tone (MT) effects on Return (R) of the companies in the table. Therefore, the F value proves that there is a significant relationship between the media tone and return.  $\mathbf{R}^2$  represents the prediction level of variance in return (R) by media tone (MT), whereas the lowest R-square is 0.4% for BOP Company as shown in table 14 above. This means that 0.4% of R can be predicted from the first lag of MT.

Durbin-Watson (DW) statistics is the ratio of sum of squares of successive differences of residuals to the sum of squares of errors. As a rule of thumb, if the DW statistic is close to 2, there is evidence of no serial correlation. All of Durbin-Watson statistic were close from 2; it means that there were no high serial correlation residuals of models exception *ELECTRODE* and *ARE*.

#### **5.5 Hypotheses testing**

### H1: There is an adequate media coverage in the local newspaper about the Palestinian stock market.

Based on the results in table (5.12), the total number of occurrence for all listed companies during the four years' period is 9,688, when the researcher compares this number with the total number of words (16,143,197), the study can conclude that, all listed companies represent 0.0006 (or 0.06%) of the total words in the overall text. In addition, the results in table (5.11) show that that total number of

occurrence for the five economic sectors during the four years' period is 31,984, when the researcher compares this number with the total number of words (16,143,197), the study can conclude that, economics sector names represent 0.0020 (or 0.2%) of the total words in the overall text. This shows that media coverage of the listed companies in the market is very poor, and therefore, this hypothesis cannot be accepted

### H2: There is a significant positive relationship between media tone in the local newspapers and the trading volume of the stock listed in the market.

Based on the results in table (5.17), the hypothesis can be accepted for 15 companies and rejected for the remaining 34 companies. Table (5.18) shows the results for the 15 companies, which have a significant relationship between media tone and trading volume.

### H3: There is a significant positive relationship between media tone in the local newspapers and the returns of the stock listed in the market.

Based on the results in table (5.19), the hypothesis can be accepted for 10 companies and rejected for the remaining 39 companies. Table (5.20) shows the results for the 15 companies, which have a significant relationship between media tone and returns.

### *H4:* There is a significant correlation between media tone in the local newspapers and the stock anomalies (returns and trading volume).

Based on the results in table (5.16), the hypothesis can be accepted for 8 companies and rejected for the remaining 41 companies. From the 8 companies, 4 companies have a significant correlation between the media tone and the trading volume, two have positive correlation coefficient: *GCOM* (r = 0.101, sig = 0.004) and *PICO* (r = 0.499, sig = 0.042), and two companies have negative correlation coefficient: *WATANIYA* (r = -0.081, sig = 0.012) and *LADAEN* (r = -0.171, sig = 0.007).

The other 4 companies have a significant correlation between the media tone and returns, one company has positive correlation coefficient: *AIB* (r = 0.075, sig = 0.047), and three companies have negative correlation coefficient: *TNB* (r = -0.078, sig = 0.021), *AQARIYA* (r = -0.115, sig = 0.042) and *ELECTRODE* (r = -0.260, sig = 0.030).

### **H5**: The impact of the media tone in local newspapers on stock trading volume extends for more than a day after the date of publishing.

Based on the results in Table (5.18), the hypothesis cannot be accepted except for two companies only; the first is *NIC*, which has been affected on the third and fourth days only; and the second is *PSE*, which has been affected on the first and fourth days only.

### **H6**: The impact of the media tone in local newspapers on stock returns extends for more than a day after the date of publishing.

Based on the results in Table (5.20), the hypothesis cannot be accepted absolutely, because the effect is limited to just one day in all the affected companies.

# Chapter 6 Conclusion and recommendations

### **Chapter 6**

### **Conclusion and recommendations**

### **6.1** Conclusion

This research investigates the effects of media tone on stock return and trading volume. The study analyzed the content of economic pages in three Palestinian newspapers, which considered a good representative in public opinion shaping process. To the best of my knowledge, this is the first research in the Arab region that quantifying the financial text to measure the media tone.

The researcher constructed positive and negative word lists, each list consists of 50 word and their most common used derivatives, then he used a software program that support Arabic language to count the number of occurrence for each word and derivative, the counting done on a daily base during the time series of 4 years (2011-2014), this means that, along 1,461 days, the number of occurrence for all the 343 word were counted (50 roots and 138 derivatives in positive list, and 50 roots and 105 derivatives in negative list). This mean that about 501,123 data cells in the word frequencies only (343words \*1,461 days = 501,123 data cells).

After counting the words, the researcher used a model that used by (Jegadeesh and Wu 2013) with some modification to determine the weight of each word, and the score of each day.

The data about stock returns and trading volume that provided through PEX website (www.pex.ps) indicate that there were 49 listed companies during the study time series. According to the data, the market was active on 983 days during the study period, this mean that the stock return and trading volume were determined for 49 companies along 983 days, this resulting in 96,334 data cells of stock returns and trading volume, (983 days \* 49 listed companies \* 2 variables = 96,334 data cells), the two variable are stock return and trading volume.

The Palestinian stock market is considered as an emerging market, so, the study can conclude that the relationship between media tone and stock anomalies is not obvious to the extent that it can consider the media tone predict stock returns and trading volume.

The correlation analysis shows that only 4 companies have a statistically significance relationship at 0.05 level between media tone and trading volume, two

companies have positive correlation coefficient and the other two companies have negative correlation coefficient. Also only 4 companies have a statistically significance relationship at 0.05 level between media tone and stock returns two companies have positive correlation coefficient and the other two companies have negative correlation coefficient. Statistically. No companies have a statistically significant coefficient in the both cases (trading volume and stock returns).

The multiple linear regression analysis for trading volume shows that only 15 companies have a statistically significance relationship at 0.05 level between media tone and trading volume during the publishing day and 3 lagging days, 4 companies affected on the publishing day only, 3 companies affected on the second day only, 3 companies affected on the fourth day only, 1 company affected on the third and fourth days, and 1 company affected on the first and the fourth days. The remaining 34 listed companies have no statistically significance relationship at 0.05 level between the media tone and trading volume.

The multiple linear regression analysis for stock returns shows that only 10 companies have a statistically significance relationship at 0.05 level between media tone and stock returns during the publishing day and 3 lagging days, 2 companies affected on the publishing day only, 4 companies affected on the second day only, 2 companies affected on the third day only, and 2 companies affected on the fourth day only. The remaining 39 listed companies have no statistically significance relationship at 0.05 level between the media tone and stock returns.

The results, in general, show the weakness of the impact of the economic media in the three local newspapers on the performance of stocks in terms of trading volume and returns. This is in contrast with the results shown by many of the previous studies, such as (Ammann, Frey et al. 2014), (Ferguson, Philip et al. 2014), (Bosman, Kräussl et al. 2014), (Aromí-IIEP-Baires 2013) and others, which results show that newspaper content is a valuable predictor of stock future anomalies, especially returns. This can be attributed, according to my point of view, to two main reasons: firstly, the weakness of economic media in shaping and orienting the public opinion and influencing it, this is because the small size of spaces which dedicated to the content, and the absence of concentration on the sector of listed companies, a large part of it is interested in international news and another part discusses the general

economic issues such as the siege, closure, poverty, and unemployment. Secondly, the weakness of investment in the local community culture, and the number of the individual investors is limited; in addition, they do not have sufficient awareness and market experience

### **6.2 Recommendations**

In light of the obstacles and challenges that the researcher faced in this research, he can summarize the most important recommendations in the following points:

### • <u>Media recommendations</u>

- The researcher recommends the local media sources to pay more efforts in developing economic media to reflect the changes in the market more effectively and efficiently, issuing of a specialized economic newspaper for PEX and its listed companies similar to those in American and Europe countries (such as wall street, The New York Times, and Financial Time) perhaps helping in that.
- 2. The researcher recommends the local newspaper to focus more on the local companies and their news, and they should organize and save the soft copy of newspaper in a clear and well-known encoding format to facilitate using them in textual analysis and text mining process.

### • Palestine Exchange Market recommendations

- 1. The researcher recommends PEX to support and sponsor related research and studies, and working on building a cumulative database about economic media and their statistics that can be used in similar researches later.
- 2. The researcher recommends PEX to support and sponsor programing engineers to develop a suitable software able to deal with documents written in Arabic language to make textual analysis process more easily in the future.
- 3. The researcher recommends PEX to give more coordination efforts with media outlets to reach the best economic media coverage. As well as to work for publishing video, audio, and textual media which improve the investment awareness level especially among individuals.

### • <u>Suggestion for future researches:</u>

The researcher recommends the financial management researchers, who interested in the same topic to try applying the study on other markets in the Arab and middle east region, and try to construct a financial dictionary to be used instead of word list such as Harvard IV-4 dictionary used by (Aromí-IIEP-Baires 2013), (Ozik and Sadka 2012) and (Tetlock, Saar-Tsechansky et al. 2008).

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# Appendicies

#	company	symbol	Sector
1	Al Quds Bank	QUDS	
2	Arab Islamic Bank	AIB	
3	Bank Of Palestine	BOP	
4	Palestine Commercial Bank	PCB**	Financial &Banking
5	Palestine Investment Bank	PIBC	Services Sector
6	Palestine Islamic Bank	ISBK	
7	Palestine Securities Exchange	PSE	
8	The National Bank	TNB**	
9	Al-Aqariya Trading Investment	AQARIYA	
10	Arab Investors	ARAB	
11	Arab Palestinian Investment	APIC	
12	Jerusalem Real Estate Investment	JREI	
13	Palestine Development & Investment	PID	Investment Sector
14	Palestine Industrial Investment	PIIC	
15	Palestine Investment & Development	PADICO	
16	palestine Real Estate Investment	PRICO	
17	Union Construction And Investment	UCI	
18	Al-Wataniah Towers	ABRAJ	
19	Arab Palestinian Shopping Centers	PLAZA**	
20	Arab Real Estate Establishment	ARE	
21	Globalcom Telecommunications	GCOM	
22	Nablus Surgical Center	NSC	
23	Palaqar For Real Estate Dev.&	PALAQAR	
24	Palestine Electric	PEC	Service Sector
25	Palestine Telecommunications	PALTEL	
26	Palestinian Dist. & Logistics Services	WASSEL**	
27	The Arab Hotels	AHC	
28	The Ramallah Summer Resorts	RSR	
29	Wataniya Palestine Mobile Telecomm.	WATANIYA	
30	Grand Park Hotel and Resorts	HOTEL	
31	Al Shark Electrode	ELECTRODE	In designer Courters
32	Arab Company For Paints Products	APC	industry Sector

#### **Appendix (A): listed companies**

#	company	symbol	Sector
33	Birzeit Pharmaceuticals	BPC**	
34	Dar Al-Shifa Pharmaceuticals	PHARMACARE**	
35	Golden Wheat Mills	GMC	
36	Jerusalem Cigarette	JCC	
37	Jerusalem Pharmaceuticals	JPH**	
38	National Aluminium And Profile	NAPCO	
39	Palestine Plastic Industries	LADAEN	
40	Palestine Poultry	AZIZA	
41	The National Carton Industry	NCI**	
42	The Vegetable Oil Industries	VOIC	
43	Beit Jala Pharmaceutical	BJP	
44	Ahliea Insurance Group	AIG	
45	Al-Takaful Palestinian Insurance	TIC	
46	Global United Insurance	GUI	
47	National Insurance	NIC**	Insurance Sector
48	Palestine Insurance	PICO	
49	Trust International Insurance	TRUST	
50	Al Mashriq Insurance	MIC	

- BJP, was listed in PEX in 03/05/2015
- MIC, HOTEL, trading was suspended 2011 and 2003 respectively
- PCB, change the trading symbol from CBP to PCB, 2/1/2009
- TNB, change the trading symbol from AMB to TNB, due to mergers, 13/5/2012
- PLAZA, change the trading symbol from PLAZA to BRAVO 31/8/2015
- WASSEL, change trading currency from JD to US\$, 27/10/2014
- BPC, change trading currency from JD to US\$, 8/1/2013
- PHARMACARE, change trading currency from JD to US\$, 6/12/2013
- JPH, change trading currency from JD to US\$, 8/1/2013
- NCI, change trading currency from JD to US\$, 31/3/2011
- NIC, change trading currency from JD to US\$, 27/3/2008

Correlations									
Subscripts  score  returns  volum									
		Pearson Correlation	1	.036	080-				
	score	Sig. (2-tailed)		.632	.291				
		Ν	983	176	176				
		Pearson Correlation	.036	1	.142				
ABRAJ	returns	Sig. (2-tailed)	.632		.059				
		Ν	176	176	176				
		Pearson Correlation	080-	.142	1				
	volume	Sig. (2-tailed)	.291	.059					
		Ν	176	176	176				
		Pearson Correlation	1	.058	018-				
	score	Sig. (2-tailed)		.476	.823				
		Ν	983	156	156				
		Pearson Correlation	.058	1	.022				
AHC	returns	Sig. (2-tailed)	.476		.787				
		Ν	156	156	156				
		Pearson Correlation	018-	.022	1				
	volume	Sig. (2-tailed)	.823	.787					
		N	156	156	156				
		Pearson Correlation	1	.075*	.038				
	score	Sig. (2-tailed)		.047	.306				
		N	983	713	713				
		Pearson Correlation	.075*	1	.036				
AIB	returns	Sig. (2-tailed)	.047		.343				
		N	713	713	713				
		Pearson Correlation	.038	.036	1				
	volume	Sig. (2-tailed)	.306	.343					
		N	713	713	713				
		Pearson Correlation	1	.033	.065				
	score	Sig. (2-tailed)		.379	.084				
		N	983	707	707				
		Pearson Correlation	.033	1	.031				
AIG	returns	Sig. (2-tailed)	.379		.411				
		N	707	707	707				
		Pearson Correlation	.065	.031	1				
	volume	Sig. (2-tailed)	.084	.411					
		N	707	707	707				
		Pearson Correlation	1	069-	082-				
	score	Sig. (2-tailed)		.589	.522				
		N	983	63	63				
		Pearson Correlation	069-	1	.144				
APC	returns	Sig. (2-tailed)	.589		.259				
		N	63	63	63				
		Pearson Correlation	082-	.144	1				
	volume	Sig. (2-tailed)	.522	.259					
		N	63	63	63				
		Pearson Correlation	1	072-	.061				
APIC	score	Sig. (2-tailed)		.335	.416				

## **Appendix (B): Correlation output**

Correlations									
Subscripts score returns volume									
		N	983	181	181				
		Pearson Correlation	072-	1	023-				
	returns	Sig. (2-tailed)	.335		.759				
		N	181	181	181				
		Pearson Correlation	.061	023-	1				
	volume	Sig. (2-tailed)	.416	.759					
		Ν	181	181	181				
		Pearson Correlation	1	115-*	.052				
	score	Sig. (2-tailed)		.042	.365				
		Ν	983	310	310				
		Pearson Correlation	115-*	1	.153**				
AQARIYA	returns	Sig. (2-tailed)	.042		.007				
		Ν	310	310	310				
		Pearson Correlation	.052	.153**	1				
	volume	Sig. (2-tailed)	.365	.007					
		Ν	310	310	310				
		Pearson Correlation	1	156-	.042				
	score	Sig. (2-tailed)		.194	.731				
		Ν	983	71	71				
		Pearson Correlation	156-	1	.037				
ARAB	returns	Sig. (2-tailed)	.194		.762				
		Ν	71	71	71				
		Pearson Correlation	.042	.037	1				
	volume	Sig. (2-tailed)	.731	.762					
		N	71	71	71				
		Pearson Correlation	1	.074	130-				
	score	Sig. (2-tailed)		.338	.093				
		N	983	169	169				
		Pearson Correlation	.074	1	070-				
ARE	returns	Sig. (2-tailed)	.338		.363				
		N	169	169	169				
		Pearson Correlation	130-	070-	1				
	volume	Sig. (2-tailed)	.093	.363					
		N	169	169	169				
		Pearson Correlation	1	020-	064-				
	score	Sig. (2-tailed)		.811	.433				
		N	983	151	151				
		Pearson Correlation	020-	1	.081				
AZIZA	returns	Sig. (2-tailed)	.811		.324				
		N	151	151	151				
		Pearson Correlation	064-	.081	1				
	volume	Sig. (2-tailed)	.433	.324	4				
		N N	151	151	151				
		Pearson Correlation	1	033-	.026				
	score	Sig. (2-tailed)		.295	.415				
BOP	-	N	983	982	982				
	returns	Pearson Correlation	033-	1	.067*				
	recorns	Sig. (2-tailed)	.295		.036				

Correlations									
Subscripts score returns volume									
		N	982	982	982				
		Pearson Correlation	.026	.067*	1				
	volume	Sig. (2-tailed)	.415	.036					
		N	982	982	982				
		Pearson Correlation	1	039-	003-				
	score	Sig. (2-tailed)		.343	.945				
		Ν	983	607	607				
		Pearson Correlation	039-	1	047-				
BPC	returns	Sig. (2-tailed)	.343		.249				
		Ν	607	607	607				
		Pearson Correlation	003-	047-	1				
	volume	Sig. (2-tailed)	.945	.249					
		Ν	607	607	607				
		Pearson Correlation	1	081-	.065				
	score	Sig. (2-tailed)		.609	.681				
		Ν	983	42	42				
		Pearson Correlation	081-	1	044-				
BRAVO	returns	Sig. (2-tailed)	.609		.784				
		Ν	42	42	42				
	volume	Pearson Correlation	.065	044-	1				
		Sig. (2-tailed)	.681	.784					
		Ν	42	42	42				
	score	Pearson Correlation	1	260-*	087-				
		Sig. (2-tailed)		.030	.473				
		Ν	983	70	70				
	returns	Pearson Correlation	260-*	1	.214				
ELECTRODE		Sig. (2-tailed)	.030		.076				
		Ν	70	70	70				
		Pearson Correlation	087-	.214	1				
	volume	Sig. (2-tailed)	.473	.076					
		N	70	70	70				
		Pearson Correlation	1	.039	.101**				
	score	Sig. (2-tailed)		.271	.004				
		N	983	799	799				
		Pearson Correlation	.039	1	.118**				
GCOM	returns	Sig. (2-tailed)	.271		.001				
		Ν	799	799	799				
		Pearson Correlation	.101**	.118**	1				
	volume	Sig. (2-tailed)	.004	.001					
		N	799	799	799				
		Pearson Correlation	1	.050	.010				
	score	Sig. (2-tailed)		.245	.822				
		N	983	535	535				
GMC		Pearson Correlation	.050	1	.060				
Givic	returns	Sig. (2-tailed)	.245		.162				
		N	535	535	535				
	volume	Pearson Correlation	.010	.060	1				
	volume	Sig. (2-tailed)	.822	.162					

Correlations									
Subscripts score returns volume									
		N	535	535	535				
		Pearson Correlation	1	072-	110-				
	score	Sig. (2-tailed)		.260	.086				
		Ν	983	247	247				
		Pearson Correlation	072-	1	.029				
GUI	returns	Sig. (2-tailed)	.260		.646				
		Ν	247	247	247				
		Pearson Correlation	110-	.029	1				
	volume	Sig. (2-tailed)	.086	.646					
		Ν	247	247	247				
		Pearson Correlation	1	007-	002-				
	score	Sig. (2-tailed)		.844	.950				
		Ν	983	810	810				
		Pearson Correlation	007-	1	.114**				
ISBK	returns	Sig. (2-tailed)	.844		.001				
		N	810	810	810				
		Pearson Correlation	002-	.114**	1				
	volume	Sig. (2-tailed)	.950	.001					
		N	810	810	810				
	score	Pearson Correlation	1	045-	.027				
		Sig. (2-tailed)		.240	.485				
		N	983	685	685				
		Pearson Correlation	045-	1	.070				
JCC	returns	Sig. (2-tailed)	.240		.067				
		N	685	685	685				
	volume	Pearson Correlation	.027	.070	1				
		Sig. (2-tailed)	.485	.067					
		N	685	685	685				
	score	Pearson Correlation	1	.009	.016				
		Sig. (2-tailed)		.857	.739				
		N	983	438	438				
		Pearson Correlation	.009	1	019-				
JPH	returns	Sig. (2-tailed)	.857		.688				
		N	438	438	438				
		Pearson Correlation	.016	019-	1				
	volume	Sig. (2-tailed)	.739	.688					
		N	438	438	438				
		Pearson Correlation	1	050-	.161				
	score	Sig. (2-tailed)		.831	.485				
		N	983	21	21				
		Pearson Correlation	050-	1	.262				
JREI	returns	Sig. (2-tailed)	.831		.252				
		N	21	21	21				
		Pearson Correlation	.161	.262	1				
	volume	Sig. (2-tailed)	.485	.252					
		N	21	21	21				
		Pearson Correlation	1	018-	171-**				
LADAEN	score	Sig. (2-tailed)		.780	.007				

Correlations									
Subscripts score returns volume									
		N	983	253	253				
		Pearson Correlation	018-	1	.134*				
	returns	Sig. (2-tailed)	.780		.033				
		N	253	253	253				
		Pearson Correlation	171-**	.134*	1				
	volume	Sig. (2-tailed)	.007	.033					
		Ν	253	253	253				
		Pearson Correlation	1	077-	.044				
	score	Sig. (2-tailed)		.365	.604				
		Ν	983	140	140				
		Pearson Correlation	077-	1	.124				
NAPCO	returns	Sig. (2-tailed)	.365		.144				
		Ν	140	140	140				
		Pearson Correlation	.044	.124	1				
	volume	Sig. (2-tailed)	.604	.144					
		Ν	140	140	140				
		Pearson Correlation	1	009-	003-				
	score	Sig. (2-tailed)		.846	.949				
		Ν	983	489	489				
	returns	Pearson Correlation	009-	1	.135**				
NCI		Sig. (2-tailed)	.846		.003				
		Ν	489	489	489				
		Pearson Correlation	003-	.135**	1				
	volume	Sig. (2-tailed)	.949	.003					
		Ν	489	489	489				
		Pearson Correlation	1	.071	030-				
	score	Sig. (2-tailed)		.142	.535				
		N	983	429	429				
		Pearson Correlation	.071	1	015-				
NIC	returns	Sig. (2-tailed)	.142		.751				
		N	429	429	429				
		Pearson Correlation	030-	015-	1				
	volume	Sig. (2-tailed)	.535	.751					
		Ν	429	429	429				
		Pearson Correlation	1	.031	.030				
	score	Sig. (2-tailed)		.780	.792				
		N	983	81	81				
		Pearson Correlation	.031	1	.120				
NSC	returns	Sig. (2-tailed)	.780		.284				
		N	81	81	81				
		Pearson Correlation	.030	.120	1				
	volume	Sig. (2-tailed)	.792	.284					
		N	81	81	81				
		Pearson Correlation	1	006-	.038				
	score	Sig. (2-tailed)		.852	.234				
PADICO		Ν	983	977	977				
	returns	Pearson Correlation	006-	1	.034				
	Tetullis	Sig. (2-tailed)	.852		.289				

Correlations									
Subscripts score returns volume									
		Ν	977	977	977				
		Pearson Correlation	.038	.034	1				
	volume	Sig. (2-tailed)	.234	.289					
		Ν	977	977	977				
		Pearson Correlation	1	378-	.366				
	score	Sig. (2-tailed)		.225	.241				
		Ν	983	12	12				
		Pearson Correlation	378-	1	224-				
PALAQAR	returns	Sig. (2-tailed)	.225		.484				
		Ν	12	12	12				
		Pearson Correlation	.366	224-	1				
	volume	Sig. (2-tailed)	.241	.484					
		Ν	12	12	12				
		Pearson Correlation	1	012-	.016				
	score	Sig. (2-tailed)		.700	.609				
		Ν	983	976	976				
		Pearson Correlation	012-	1	.010				
PALTEL	returns	Sig. (2-tailed)	.700		.757				
		Ν	976	976	976				
	volume	Pearson Correlation	.016	.010	1				
		Sig. (2-tailed)	.609	.757					
		Ν	976	976	976				
		Pearson Correlation	1	.000	.085				
	score	Sig. (2-tailed)		.997	.229				
		Ν	983	201	201				
	returns	Pearson Correlation	.000	1	.072				
PCB		Sig. (2-tailed)	.997		.310				
		N	201	201	201				
	volume	Pearson Correlation	.085	.072	1				
		Sig. (2-tailed)	.229	.310					
		N	201	201	201				
		Pearson Correlation	1	021-	058-				
	score	Sig. (2-tailed)		.550	.092				
		N	983	836	836				
		Pearson Correlation	021-	1	042-				
PEC	returns	Sig. (2-tailed)	.550		.223				
		N	836	836	836				
		Pearson Correlation	058-	042-	1				
	volume	Sig. (2-tailed)	.092	.223					
		N	836	836	836				
		Pearson Correlation	1	167-	.040				
	score	Sig. (2-tailed)		.080	.677				
		N	983	110	110				
PHARMACAR		Pearson Correlation	167-	1	099-				
E	returns	Sig. (2-tailed)	.080		.301				
		Ν	110	110	110				
	volume	Pearson Correlation	.040	099-	1				
	volume	Sig. (2-tailed)	.677	.301					

Correlations									
Subscripts score returns volume									
		N	110	110	110				
		Pearson Correlation	1	.071	.034				
	score	Sig. (2-tailed)		.304	.624				
		Ν	983	214	214				
		Pearson Correlation	.071	1	019-				
PIBC	returns	Sig. (2-tailed)	.304		.782				
		Ν	214	214	214				
		Pearson Correlation	.034	019-	1				
	volume	Sig. (2-tailed)	.624	.782					
		Ν	214	214	214				
		Pearson Correlation	1	.054	.499*				
	score	Sig. (2-tailed)		.836	.042				
		Ν	983	17	17				
		Pearson Correlation	.054	1	013-				
PICO	returns	Sig. (2-tailed)	.836		.961				
		Ν	17	17	17				
		Pearson Correlation	.499*	013-	1				
	volume	Sig. (2-tailed)	.042	.961					
		Ν	17	17	17				
	score	Pearson Correlation	1	090-	.129				
		Sig. (2-tailed)		.231	.085				
		Ν	983	180	180				
		Pearson Correlation	090-	1	.019				
PID	volume	Sig. (2-tailed)	.231		.796				
		Ν	180	180	180				
		Pearson Correlation	.129	.019	1				
		Sig. (2-tailed)	.085	.796					
		N	180	180	180				
	score	Pearson Correlation	1	.015	.064				
		Sig. (2-tailed)		.723	.122				
		N	983	586	586				
		Pearson Correlation	.015	1	.145**				
PIIC	returns	Sig. (2-tailed)	.723		.000				
		N	586	586	586				
		Pearson Correlation	.064	.145**	1				
	volume	Sig. (2-tailed)	.122	.000					
		N	586	586	586				
		Pearson Correlation	1	.009	.065				
	score	Sig. (2-tailed)		.806	.064				
		N	983	804	804				
		Pearson Correlation	.009	1	.116**				
PRICO	returns	Sig. (2-tailed)	.806		.001				
		N	804	804	804				
		Pearson Correlation	.065	.116**	1				
	volume	Sig. (2-tailed)	.064	.001					
		Ν	804	804	804				
PSE	score	Pearson Correlation	1	393-	.334				
IGL	30010	Sig. (2-tailed)		.184	.265				

Correlations									
Subscripts score returns volume									
		N	983	13	13				
		Pearson Correlation	393-	1	159-				
	returns	Sig. (2-tailed)	.184		.603				
		Ν	13	13	13				
		Pearson Correlation	.334	159-	1				
	volume	Sig. (2-tailed)	.265	.603					
		Ν	13	13	13				
		Pearson Correlation	1	.017	087-				
	score	Sig. (2-tailed)		.729	.071				
		N	983	432	432				
		Pearson Correlation	.017	1	.093				
QUDS	returns	Sig. (2-tailed)	.729		.055				
		N	432	432	432				
		Pearson Correlation	087-	.093	1				
	volume	Sig. (2-tailed)	.071	.055					
		N	432	432	432				
		Pearson Correlation	1	.107	.038				
	score	Sig. (2-tailed)		.184	.642				
		N	983	156	156				
	returns	Pearson Correlation	.107	1	.022				
RSR		Sig. (2-tailed)	.184		.785				
		Ν	156	156	156				
		Pearson Correlation	.038	.022	1				
	volume	Sig. (2-tailed)	.642	.785					
		N	156	156	156				
		Pearson Correlation	1	030-	.010				
	score	Sig. (2-tailed)		.662	.882				
		N	983	217	217				
		Pearson Correlation	030-	1	.019				
TIC	returns	Sig. (2-tailed)	.662		.776				
		N	217	217	217				
		Pearson Correlation	.010	.019	1				
	volume	Sig. (2-tailed)	.882	.776					
		N	217	217	217				
		Pearson Correlation	1	.078*	.004				
	score	Sig. (2-tailed)		.021	.900				
		N	983	877	877				
		Pearson Correlation	.078	1	.123				
TNB	returns	Sig. (2-tailed)	.021	077	.000				
		N	8/7	8//	8//				
		Pearson Correlation	.004	.123	1				
	volume	Sig. (2-tailed)	.900	.000	077				
	<u> </u>		8//	8//	8//				
		Pearson Correlation		081-	.122				
	score	Sig. (2-tailed)	002	.529	.540				
IKUST			983	05	05				
	returns	Pearson Correlation	081-	1	.101				
		Sig. (2-tailed)	.529		.207				

$\begin{tabular}{ c c c c c c } \hline Subscripts & score & returns & v \\ \hline & N & 63 & 63 & 0 \\ \hline & Volume & Pearson Correlation & .122 & .161 & 0 \\ \hline & Volume & Sig. (2-tailed) & .340 & .207 & 0 \\ \hline & N & 63 & 63 & 0 \\ \hline & Pearson Correlation & 1 &048- & 0 \\ \hline & Score & Sig. (2-tailed) & .211 & 0 \\ \hline \end{array}$	volume 63 1 63 .043 .254 693
N  63  63    volume  Pearson Correlation  .122  .161    volume  Sig. (2-tailed)  .340  .207    N  63  63    score  Sig. (2-tailed)  .11 048-    Score  Sig. (2-tailed)  .211	63 1 63 .043 .254 693
Pearson Correlation  .122  .161    volume  Sig. (2-tailed)  .340  .207    N  63  63    Pearson Correlation  1 048-    score  Sig. (2-tailed)  .211	1 63 .043 .254 693
volume  Sig. (2-tailed)  .340  .207    N  63  63    Pearson Correlation  1 048-    score  Sig. (2-tailed)  .211	63 .043 .254 693
N  63  63    Pearson Correlation  1 048-    score  Sig. (2-tailed)  .211	63 .043 .254 693
Pearson Correlation1048-scoreSig. (2-tailed).211	.043 .254 693
score Sig. (2-tailed) .211	.254
	693
N 983 693	0/0
Pearson Correlation048- 1	.004
UCI returns Sig. (2-tailed) .211	.924
N 693 693	693
Pearson Correlation .043 .004	1
volume Sig. (2-tailed) .254 .924	
N 693 693	693
Pearson Correlation 1 .004	012-
score Sig. (2-tailed) .962	.888
N 983 138	138
Pearson Correlation .004 1	.093
VOIC returns Sig. (2-tailed) .962	.276
N 138 138	138
Pearson Correlation012093	1
volume Sig. (2-tailed) .888 .276	
N 138 138	138
Pearson Correlation 1 .019	.010
score Sig. (2-tailed) .602	.797
N 983 729	729
Pearson Correlation .019 1	.098**
WASSEL returns Sig. (2-tailed) .602	.008
N 729 729	729
Pearson Correlation .010 .098**	1
volume Sig. (2-tailed) .797 .008	
N 729 729	729
Pearson Correlation 1018-	081-*
score Sig. (2-tailed) .584	.012
N 983 948	948
Pearson Correlation018- 1	.023
WATANIYA returns Sig. (2-tailed) .584	.479
N 948 948	948
Pearson Correlation081-* .023	1
volume Sig. (2-tailed) .012 .479	
N 948 948	948
*. Correlation is significant at the 0.05 level (2-tailed).	
**. Correlation is significant at the 0.01 level (2-tailed).	

### **Appendix (C): trading volume series**

Appendix C: show a sample of most 12 effective companies in the market from 1 January 2011 to 31 December 2014. The data in Table is compatible with trading days in Al-Quds index. (NA) notation offsets the value of trading volume if the stock was not traded in the previous day. The value of trading volume was rounded to 4 digits.

al-Quds trading date	AIB	AIG	BOP	BPC	всом	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
2 January 2011	17,830	2,700	7,518	NA	133,830	23,000	207,270	81,013	22,704	25,755	10,901	NA
3 January 2011	10,212	97,750	1,880	NA	15,835	55,792	178,113	29,128	15,317	14,525	3,842	NA
4 January 2011	27,000	3,650	22,100	100	50,550	22,000	28,290	210,468	2,325	19,518	10,720	NA
5 January 2011	200	5,830	6,467	230	27,000	22,500	91,879	216,929	30,175	10,332	10,216	NA
6 January 2011	4,500	9,020	24,201	127	6,500	29,516	45,640	78,096	7,000	13,800	6,030	NA
9 January 2011	20,407	1,000	4,665	840	39,700	10,000	25,990	31,305	14,000	6,778	2,998	NA
10 January 2011	10,000	2,000	13,448	1,848	18,900	11,000	68,605	21,022	22,812	18,479	13,446	558,610
11 January 2011	23,205	27,206	15,749	NA	12,800	1,000	185,503	51,500	6,878	6,070	3,708	424,026
12 January 2011	2,201	NA	5,595	NA	8,010	500	66,705	65,036	9,046	2,512	6,612	723,807
13 January 2011	1,600	24,475	5,905	50	15,490	11,981	52,369	18,883	11,240	72,268	4,704	121,356
16 January 2011	3,000	29,810	2,852	816	31,350	33,600	53,262	59,872	5,884	11,503	43,850	69,111
17 January 2011	1,500	2,000	3,052	834	28,000	30,300	50,973	46,507	2,000	7,214	6,845	35,910
18 January 2011	6,634	68,045	13,352	352	23,900	820	133,216	14,275	22,758	2,212	6,468	239,515
19 January 2011	10,000	140,000	11,975	NA	84,650	71,550	75,067	9,712	23,150	1,822	990	45,472
20 January 2011	NA	7,000	14,080	NA	206,401	63,855	52,545	34,806	6,567	3,939	20,270	62,246
23 January 2011	600	15,124	25,624	NA	40,495	30,176	82,666	26,327	7,002	11,306	14,304	17,283
24 January 2011	3,200	87,559	11,598	NA	106,430	63,725	101,384	990	43,280	5,732	3,176	36,280
25 January 2011	1,416	202,512	6,949	50	12,800	25,750	28,466	3,360	6,850	1,000	NA	43,456

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
26 January 2011	1,060	60,100	25,084	800	22,200	29,400	265,400	11,601	NA	1,012	7,640	12,922
27 January 2011	2,000	900	15,700	NA	108,980	13,257	27,370	4,700	10,993	NA	5,846	45,990
30 January 2011	31,730	15,680	27,724	NA	15,905	34,300	286,863	70,450	43,150	32,613	19,032	169,377
31 January 2011	500	4,600	10,491	775	65,250	32,175	94,594	24,545	4,400	3,689	29,086	NA
1 February 2011	1,000	10,648	9,005	46,056	109,600	138,317	45,260	22,150	43,636	1,048	12,354	339,638
2 February 2011	4,182	11,265	12,459	200	50,820	101,000	89,310	7,060	73,303	4,820	4,100	5,182
3 February 2011	2,200	10,000	29,459	1,050	35,792	57,605	90,144	6,091	30,710	6,226	7,874	131,373
6 February 2011	1,700	155	2,534	160	47,613	1,442	91,030	50,716	606	661	2,044	3,047
7 February 2011	960	118,000	920	NA	40,500	18,223	219,767	12,121	8,058	4,481	912	21,018
8 February 2011	1,100	3,800	3,000	NA	7,800	11,119	614,464	9,410	1,050	2,640	5,040	15,738
9 February 2011	7,537	6,280	69,333	200	36,468	15,465	928,378	5,453	52,849	7,400	4,856	55,827
10 February 2011	271	NA	15,286	4,049	9,980	9,607	198,066	51,350	24,480	12,550	680	12,129
13 February 2011	NA	NA	42,963	NA	44,985	NA	38,967	51,125	19,715	40,000	4	15,398
14 February 2011	1,577	51,336	1,043	800	6,215	873	15,387	5,900	3,500	7,127	726	11,554
16 February 2011	5,241	32,384	240,488	NA	19,800	10,760	44,328	1,701	7,957	6,090	11,965	5,853
17 February 2011	3,600	37,404	38,002	5,259	20,050	9,527	122,763	13,433	5,963	17,500	26,812	8,232
20 February 2011	51,607	1,000	223,419	350	26,570	17,050	28,685	359,180	12,000	4,426	NA	20,018
21 February 2011	NA	25,100	300,986	292	92,492	81,879	153,838	97,282	4,400	NA	1,500	9,189
22 February 2011	5,000	22,445	22,200	3,200	62,427	20,230	290,328	347,023	18,704	60,274	696	220,008
23 February 2011	NA	5,500	202,361	150	43,205	NA	68,892	63,250	55,504	1,910	834	59,332
24 February 2011	11,226	1,600	103,054	NA	42,000	1,500	109,385	3,082	83,745	11,415	1,095	4,434
27 February 2011	400	7,000	8,689	8,200	122,094	15,500	917,154	15,931	79,514	5,030	474	6,512
28 February 2011	6,539	3,900	11,893	1,500	147,230	400	84,824	107,051	31,626	53,431	4,315	56,388

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
1 March 2011	6,700	8,100	9,189	NA	45,297	94,293	79,621	121,434	84,218	15,066	2,067	16,845
2 March 2011	5,600	10,540	29,458	1,150	83,150	10,000	37,708	40,821	30,775	18,194	5,200	29,482
3 March 2011	1,319	6,482	4,550	3,050	3,900	5,000	35,100	36,183	23,843	13,652	16,350	4,308
6 March 2011	1,000	101,345	29,200	1,490	7,100	3,000	81,843	17,320	11,211	40,020	5,768	17,000
7 March 2011	13,000	1,080	5,978	31	14,700	8,957	59,973	3,887	2,622	9,646	795	10,506
8 March 2011	NA	66,065	12,475	100	66,220	2,000	30,071	80,983	36,657	32,811	2,067	8,333
9 March 2011	3,000	2,600	15,501	3,609	28,621	2,000	33,865	56,333	10,000	20,171	37,712	10,754
10 March 2011	13,790	3,000	19,310	1,566	5,800	NA	112,325	4,850	15,311	6,784	1,537	5,184
13 March 2011	628	43,300	28,873	184	22,850	3,330	141,675	98,237	226,944	23,848	3,236	11,283
14 March 2011	16,500	49,174	13,507	8,300	58,375	21,564	132,200	27,738	320,041	15,302	7,812	8,837
15 March 2011	465	2,692	6,813	NA	14,875	24,092	319,578	129,499	298,837	58,062	10,985	7,989
16 March 2011	6,700	2,100	42,052	1,667	5,000	5,908	41,497	62,006	144,920	1,831	656	22,924
17 March 2011	5,000	9,311	9,688	4,149	124,437	46,292	441,570	91,204	274,881	11,914	55,800	7,788
20 March 2011	9,050	8,672	35,657	900	12,085	7,034	286,604	47,561	129,389	56,737	17,500	6,252
21 March 2011	1,500	33,794	3,085	NA	10,612	9,230	365,358	62,270	120,588	51,640	38,292	7,961
22 March 2011	3,500	4,353	6,090	4,179	130,824	11,930	387,130	73,474	52,150	6,978	20,294	5,425
23 March 2011	2,456	7,700	32,293	1,100	81,254	57,305	124,666	12,518	61,896	49,376	24,676	17,118
24 March 2011	1,992	402	56,585	2,450	19,400	1,700	86,428	30,235	81,983	24,708	21,120	7,196
27 March 2011	5,300	7,250	109,971	2,440	44,600	NA	59,526	31,287	17,615	8,646	55,857	6,013
28 March 2011	4,900	3,020	67,553	NA	8,000	25,551	49,474	95,504	14,675	2,889	71,140	8,440
29 March 2011	8,705	42,495	44,936	NA	1,100	12,500	63,111	109,032	45,625	15,062	115,932	12,868
30 March 2011	1,695	22,057	12,584	652	50,100	25,309	57,616	89,015	57,528	60,695	647,611	3,501
31 March 2011	8,500	4,500	21,695	720	67,300	15,410	85,908	NA	37,486	51,049	2,050	9,938

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
3 April 2011	10,109	3,600	23,900	350	4,200	38,976	46,087	1,442	63,185	44,415	472	10,296
4 April 2011	23,469	17,984	48,380	3,301	14,932	33,060	266,413	30,173	17,597	11,589	500	11,205
5 April 2011	5,019	5,700	3,862	508	14,000	8,000	58,124	45,228	141,957	6,837	3,562	37,794
6 April 2011	103,204	500	9,890	NA	56,500	55,084	66,247	25,165	10,000	78,437	NA	7,066
7 April 2011	141,637	10,500	75,050	2,000	14,690	20,808	121,676	40,507	24,100	202,439	898	9,823
10 April 2011	12,789	5,500	55,000	908	710	8,000	99,950	21,180	500	189,030	6,102	28,002
11 April 2011	28,500	41,027	31,411	427	15,372	16,123	161,126	25,046	4,246	156,676	NA	46,014
12 April 2011	30,526	15,998	41,060	3,537	7,105	29,891	563,571	9,750	18,841	195,834	784	50,515
13 April 2011	23,152	8,500	24,218	2,693	3,650	69,833	310,079	108,069	77,757	63,559	348	17,942
14 April 2011	21,000	1,550	11,100	2,000	17,500	29,500	236,661	13,000	102,570	17,389	10,000	18,240
17 April 2011	2,126	19,102	50,993	1,414	3,500	44,860	269,978	14,842	124,730	95,118	496	7,442
18 April 2011	28,151	NA	37,333	1,530	15,467	34,800	82,569	9,338	46,500	78,613	3,612	39,800
19 April 2011	4,130	2,902	23,669	NA	8,507	57,268	208,298	29,630	39,012	30,588	3,510	14,558
20 April 2011	3,250	2,800	13,113	NA	39,694	100,000	209,861	38,252	27,268	22,700	360	18,182
21 April 2011	10,924	52,247	16,827	10,500	48,280	120,509	426,263	4,420	25,791	161,679	242	4,708
24 April 2011	12,913	10,000	62,153	100	5,100	22,000	551,757	49,576	30,282	51,640	NA	20,920
25 April 2011	1,760	1,381	71,004	14,673	3,800	20,977	356,575	13,871	95,834	NA	717	6,619
26 April 2011	7,567	500	64,372	1,200	44,730	20,306	142,785	38,701	NA	34,891	2,272	23,940
27 April 2011	NA	21,754	134,773	1,598	5,100	5,112	229,931	17,916	14,100	54,551	176	50,765
28 April 2011	321,738	NA	845,869	115,517	52,808	877,461	2,744,882	827,735	84,418	70,700	19,097	553,852
2 May 2011	24,852	3,350	65,777	NA	38,320	1,000	310,161	7,501	12,940	1,196	28,168	647,583
3 May 2011	4,600	9,928	110,157	887	55,721	41,434	14,342,825	117,969	962,910	33,000	17,137	12,777
4 May 2011	2,000	2,772	119,834	500	NA	20,000	170,582	40,450	25,360	2,854	1,776	8,448

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
5 May 2011	6,060	11,000	11,477	16,363	8,202	28,064	320,179	47,371	13,980	77,090	813	2,583
8 May 2011	1,225	6,000	22,148	NA	NA	4,069	202,619	12,315	7,350	25,466	136	3,657
9 May 2011	4,000	804	24,902	NA	11,948	4,000	86,731	27,115	2,300	7,041	162	14,842
10 May 2011	NA	23,900	39,732	NA	40,350	4,000	240,892	12,580	9,612	10,500	136	3,805
11 May 2011	5,000	736	13,724	1,621	3,378	10,020	116,760	10,717	20,300	44,485	874	3,311
12 May 2011	1,700	7,004	17,074	NA	70,090	9,800	299,723	394,361	5,073	396,000	136	317,909
15 May 2011	1,451	1,570	86,406	1,616	32,200	17,219	457,831	49,090	14,626	5,100	624	4,228
16 May 2011	551	2,000	26,096	377	22,050	NA	NA	163,871	11,100	5,346	602	9,322
17 May 2011	NA	3,000	37,086	615	17,900	5,061	389,161	3,681	48,920	14,169	874	6,659
18 May 2011	2,188	9,000	18,150	918	12,868	6,300	184,304	260,753	10,450	19,669	558	17,490
19 May 2011	1,451	232	28,687	50	21,960	4,000	310,120	368,675	11,530	26,496	1,764	7,758
22 May 2011	NA	1,000	23,074	4,148	4,230	35,000	88,592	20,941	30,281	23,182	1,204	11,128
23 May 2011	791	500	31,479	665	20,500	18,064	189,235	27,101	54,860	72,280	470	49,640
24 May 2011	NA	16,164	18,751	20,038	1,100	490	100,715	7,300	133,501	NA	NA	69,976
25 May 2011	2,000	8,186	32,832	6,665	13,867	6,500	98,495	10,033	105,600	16,316	136	13,575
26 May 2011	15,148	7,814	10,416	5,025	23,570	515,269	125,360	10,315	10,099	1,911	334	2,606
29 May 2011	4,160	11,000	44,990	NA	9,800	14,600	40,153	23,635	9,585	13,801	736	11,001
30 May 2011	5,381	3,940	53,633	NA	15,772	11,500	226,193	18,865	50,969	NA	914	3,848
31 May 2011	12,000	11,700	16,672	NA	3,000	152,847	102,617	117,405	20,635	55,394	460	7,385
1 June 2011	NA	14,830	35,536	6,515	25,250	40,906	294,570	69,288	69,749	3,650	NA	7,852
2 June 2011	63,120	NA	94,932	NA	37,247	541,234	754,065	557,091	54,300	5,946	952	6,849
5 June 2011	10,587	4,000	9,817	339	15,700	10,264	122,934	20,088	10,250	39,135	1,780	15,635
6 June 2011	15,500	11,000	52,562	NA	12,500	181,446	116,168	91,185	NA	1,103	120	8,174

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
7 June 2011	27,780	25	62,684	NA	9,965	NA	135,376	178,095	24,000	13,322	436	6,051
8 June 2011	2,000	2,700	16,756	211	700	NA	38,076	189,438	3,250	2,200	116	13,961
9 June 2011	2,700	8,906	16,200	18	69,225	21,833	28,018	295,620	10,000	13,000	1,690	13,867
12 June 2011	2,228	6,075	5,752	1,320	NA	523	182,231	11,860	5,000	2,909	264	4,414
13 June 2011	13,746	NA	20,095	NA	27,600	8,000	109,605	3,840	5,200	2,300	376	27,873
14 June 2011	734	5,268	103,787	1,439	28,200	1,415	112,557	102,813	3,000	NA	NA	17,201
15 June 2011	6,737	743,363	105,845	30	NA	1,585	368,135	36,317	10,518	825	166	16,493
16 June 2011	1,545	4,000	27,591	276	3,208	10,000	88,612	943	NA	4,878	240	5,321
19 June 2011	2,750	1,761	25,256	70	NA	336,764	30,442	12,137	1,000	4,892	6,342	28,952
20 June 2011	2,104	NA	13,876	2,084	6,352	70	25,254	15,173	720	NA	1,240	15,000
21 June 2011	10,939	1,075	26,858	618	100	133	56,616	18,286	5,633	NA	464	104,736
22 June 2011	1,560	6,000	3,919	21,223	600	29,108	18,250	83,100	17,580	1,250	216	2,525
23 June 2011	2,823	1,495	36,268	150	51,100	1,707	51,260	2,114	4,710	2,632	176	7,568
26 June 2011	1,700	NA	35,111	1,264	9,500	19,987	55,755	150,459	11,620	5,854	284	21,675
27 June 2011	3,000	1,000	41,690	500	200	14,000	24,200	11,103	75	4,966	NA	NA
28 June 2011	7,240	300	30,375	1,286	NA	15,700	139,405	51,286	16,714	200	636	164,052
30 June 2011	200	1,000	63,130	2,133	12,476	3,221	128,534	201,864	18,200	NA	150	21,035
3 July 2011	300	1,320	34,995	2,325	32,000	NA	11,545	2,563	8,000	3,282	420	52,621
4 July 2011	1,000	2,670	39,734	NA	3,050	4,700	29,156	1,947	10,824	15,026	352	25,402
5 July 2011	1,060	3,500	47,916	105,900	10,021	57,705	40,249	10,157	18,000	3,071	400	25,826
6 July 2011	NA	14,400	51,105	NA	8,500	3,967	51,255	31,225	12,595	1,500	456	10,910
7 July 2011	500	1,000	20,990	4,915	8,400	12,500	29,767	86,831	6,415	721	606	26,651
10 July 2011	483	1,102	34,355	230	1,050	49,500	35,423	42,299	6,850	1,141	600	54,734

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
11 July 2011	NA	2,468	45,510	NA	NA	32,110	20,069	7,074	52,500	1,700	NA	27,657
12 July 2011	70	NA	9,436	180	6,000	14,345	34,320	10,393	14,465	NA	856	68,570
13 July 2011	2,880	3,346	11,299	NA	1,000	77,393	26,150	332,101	22,940	4,574	508	24,792
14 July 2011	69,188	NA	29,200	19,692	1,500	66,500	463,522	111,909	68,474	20,936	220	15,785
17 July 2011	7,846	116	46,813	14,385	17,100	56,250	44,390	76,603	14,026	34,107	147	55,301
18 July 2011	9,285	NA	15,498	5,445	10,600	27,797	19,400	82,460	21,710	34,021	272	14,905
19 July 2011	6,500	28,870	17,001	4,111	58,500	5,100	108,100	100,178	14,879	10,982	730	33,244
20 July 2011	3,850	NA	6,726	4,102	4,920	NA	76,514	30,587	9,821	3,622	496	14,056
21 July 2011	500	11,634	6,780	15,825	650	26,850	49,239	75,790	14,338	4,893	21	9,374
24 July 2011	NA	11,368	3,913	NA	39,900	12,000	63,638	4,350	6,372	443	544	7,714
25 July 2011	NA	NA	31,704	29,066	9,700	21,000	406,257	42,844	21,591	10,526	6,820	72,480
26 July 2011	1,614	NA	21,694	142	NA	20,000	213,592	26,712	2,000	18,911	960	26,011
27 July 2011	17,000	10,000	17,950	5,500	300	24,400	140,940	23,605	5,079	8,696	416	50,741
28 July 2011	13,480	300	22,411	NA	16,000	27,892	749,775	610	31,285	18,218	9,726	69,187
31 July 2011	900	NA	32,040	NA	7,700	50,500	1,475,714	5,215	19,649	571	104	25,065
1 August 2011	750	NA	29,265	NA	10,100	2,519	21,915	25,021	1,500	10,543	604	144,717
2 August 2011	10,990	NA	4,901	NA	900	11,000	47,769	1,480	3,242	7,000	NA	5,312
3 August 2011	NA	NA	11,100	1,289	3,195	10,400	14,186	2,000	NA	100	868	15,526
4 August 2011	9,165	4,500	5,200	1,494	23,000	77,213	93,267	17,465	8,060	6,471	292	51,200
7 August 2011	8,621	10,100	7,560	NA	NA	22,200	86,058	21,831	14,500	30,182	6,537	223,710
8 August 2011	6,300	500	15,207	NA	500	5,000	51,243	30,875	3,940	31,466	2,822	21,469
9 August 2011	1,200	2,000	1,125	NA	6,800	23,597	19,955	11,255	3,450	NA	NA	24,204
10 August 2011	6,570	2,620	5,156	1,500	4,000	50,200	133,010	15,204	5,900	110,200	NA	12,286

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
11 August 2011	NA	6,200	51,174	NA	5,500	NA	20,797	22,900	19,305	2,643	748	51,401
14 August 2011	1,000	2,500	22,100	NA	220	1,620	61,963	8,760	6,065	1,943	1,000	37,534
15 August 2011	1,106	NA	35,390	NA	2,100	3,000	13,982	2,105	5,495	10,462	NA	25,411
16 August 2011	95	1,125	76,616	6	3,150	2,000	71,169	15,682	18,510	12,892	3,670	11,944
17 August 2011	44,100	NA	36,955	331	2,370	25,200	54,592	8,947	2,817	NA	NA	1,465
18 August 2011	162	NA	58,258	NA	837	35,213	39,720	39,197	4,520	18,096	NA	10,427
21 August 2011	3,663	2,000	28,000	1,972	6,485	216,392	20,308	10,801	250	1,500	440	35,247
22 August 2011	11,165	NA	19,100	NA	7,430	1,000	22,618	15,952	415	13,000	NA	19,372
23 August 2011	800	500	85,127	1,790	115	26,323	26,731	4,562	14,810	26,398	104	7,698
24 August 2011	500	11,000	33,995	NA	15,560	NA	39,590	31,409	6,435	100,348	2,800	8,816
25 August 2011	NA	22,130	33,893	1,238	6,601	NA	27,466	112,915	4,465	648	2,801	24,386
28 August 2011	NA	14,540	11,166	NA	6,000	NA	74,596	10,480	125	10,698	600	17,222
29 August 2011	NA	5,260	52,534	15	NA	264,000	59,049	12,664	4,158	NA	100	13,224
4 September 2011	3,082	2,681	24,286	500	NA	NA	14,306	4,695	NA	7,969	1,000	14,420
5 September 2011	100	6,545	48,943	732	1,100	1,500	50,200	14,658	13,243	37,164	91,978	7,143
6 September 2011	2,000	3,505	25,826	1,968	11,459	3,500	53,041	6,418	NA	6,425	NA	11,070
7 September 2011	1,000	8,500	38,783	8,500	3,888	32,633	30,238	5,801	NA	300	464	3,712
8 September 2011	NA	15,585	19,702	787	20,793	25,055	69,022	7,300	6,794	29,419	NA	166,546
11 September 2011	NA	17,700	41,134	NA	1,050	NA	144,122	71,333	5,113	NA	NA	20,415
12 September 2011	10,050	12,400	15,587	4	1,000	12,120	32,136	108,567	7,587	327	488	27,983
13 September 2011	26,000	7,100	17,155	NA	1,058	4,827	211,494	51,016	2,990	5,672	2,784	23,443

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
14 September 2011	23,076	1,500	20,934	226	NA	4,620	136,705	9,205	7,442	2,259	3,829	12,320
15 September 2011	8,238	2,000	9,140	NA	7,892	2,252	72,504	36,605	NA	3,616	176	7,192
18 September 2011	14,968	600	18,610	166,752	1,500	840	154,526	9,805	2,745	1,500	568	13,500
19 September 2011	NA	250	28,246	166,827	100	NA	42,950	8,220	1,300	920	1,481	5,200
20 September 2011	4,760	16,953	161,683	8,825	9,500	70,662	120,574	37,250	828	2,791	1,086	3,515
21 September 2011	6,653	600	41,274	1,800	500	2,000	36,738	2,612	50	1,818	42,200	900
22 September 2011	8,183	20,385	6,180	24,474	27,791	NA	50,215	5,249	6,400	711	111,358	13,537
25 September 2011	4,000	6,940	30,376	1,097	NA	7,726	56,095	18,368	NA	678	198,817	38,845
26 September 2011	23,023	3,770	153,468	200	1,100	36,460	107,563	144,247	8,790	NA	207,200	8,673
27 September 2011	30,240	NA	109,918	NA	NA	NA	51,307	31,469	7,610	15,571	119,994	26,786
28 September 2011	8,000	11,000	20,098	12,809	33,466	7,576	187,636	53,629	7,000	NA	191,948	2,409
29 September 2011	NA	13,121	32,218	1,900	17,411	5,611	68,804	57,464	6,000	5,704	NA	6,110
2 October 2011	NA	11,837	16,630	NA	25,893	612	87,660	7,721	15,550	2,096	272	20,470
3 October 2011	500	8,374	36,624	NA	35,539	4,980	44,121	5,948	NA	1,237	104	6,201
4 October 2011	10,000	11,170	36,688	100	67,564	11,000	43,244	143,542	NA	889	NA	1,100
5 October 2011	900	8,354	7,800	NA	6,100	NA	40,249	63,436	NA	11,472	392	2,603

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
6 October 2011	200	2,500	16,926	NA	2,744	20,000	173,140	45,240	282	2,634	472	14,726
9 October 2011	1,760	22,537	113,589	NA	20,200	3,100	540,878	7,534	100	53,054	NA	13,248
10 October 2011	1,161	5,900	34,224	1,256	7,000	15,400	476,823	51,509	16,730	45,443	104	52,276
11 October 2011	NA	500	65,638	300	23,905	7,331	58,345	6,089	1,286	600,443	368	20,158
12 October 2011	1,350	35,043	22,665	6,279	51,010	14,806	23,075	97,527	8,100	35,098	536	21,167
13 October 2011	839	2,305	36,500	NA	51,708	2,500	24,305	142,963	4,330	16,459	NA	27,232
16 October 2011	1,500	6,781	12,020	1,465	15,399	1,650	20,840	132,943	10,170	1,218	396	2,800
17 October 2011	2,000	2,000	16,097	100	45,976	9,362	87,131	35,200	330	126,711	336	3,043
18 October 2011	3,500	NA	16,050	NA	209,680	8,262	16,023	330,643	4,710	14,411	136	12,593
19 October 2011	2,531	1,000	12,342	700	61,973	800	21,952	125,500	NA	89,235	722	32,533
20 October 2011	2,120	25,000	13,434	NA	58,132	5,081	10,009	193,139	3,867	NA	104	495
23 October 2011	1,780	8,000	8,660	NA	47,790	3,100	5,341	52	NA	1,849	844	5,240
24 October 2011	1,500	10,970	6,753	NA	120,621	5,000	1,298,746	11,171	1,128,290	491	176	3,969
25 October 2011	2,500	NA	3,386	1,081	395,579	800	270,847	113,311	20,300	20,556	484	3,207
26 October 2011	3,800	12,000	8,730	NA	78,954	18,431	80,000	340,619	10,270	16,730	251	19,277
27 October 2011	4,000	3,800	12,213	NA	20,600	500	35,590	30,500	NA	6,031	16	910
30 October 2011	51,000	4,066	7,972	887	34,000	2,380	20,910	616,773	14,945	1,394,789	NA	6,846
31 October 2011	25,000	NA	3,942	NA	1,000	12,740	75,506	1,782	NA	109,089	2,246	23,255
1 November 2011	300	20,650	16,030	NA	600	NA	150,056	35,452	16,778	15,863	7,728	13,092
2 November 2011	7,000	5,500	2,358	400	251,905	6,300	66,728	48,016	NA	10,000	532	800
3 November 2011	NA	6,500	13,636	NA	42,934	6,000	60,831	21,025	600	4,118	432	400
10 November 2011	NA	NA	1,150	NA	2,000	100	7,555	200	2,100	5,911	NA	6,506

al-Quds trading date	AIB	ÐIA	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
13 November 2011	3,000	17,300	19,888	40,000	1,100	NA	34,476	10,650	NA	8,571	3,036	2,682
14 November 2011	400	4,846	11,342	NA	5,500	4,850	40,530	2,492	18,335	NA	NA	1,129
16 November 2011	NA	8,400	10,630	7,900	2,155	NA	77,559	23,500	9,200	10,100	136	13,347
17 November 2011	4,500	3,150	9,659	NA	7,025	19,806	66,511	5,547	9,634	NA	1,184	5,433
20 November 2011	NA	NA	26,900	1,600	1,000	NA	86,271	41,741	4,700	13,310	9,102	5,318
21 November 2011	2,239	150	109,653	NA	8,781	1,000	146,971	108,230	1,115	NA	116	12,608
22 November 2011	2,250	9,750	40,850	NA	2,500	1,000	217,938	24,877	8,583	1,414	772	20,000
23 November 2011	NA	1,102	11,730	2,740	5,430	24,500	129,272	2,121	20,479	51,823	176	633
24 November 2011	1,300	4,500	75,679	150	700	NA	74,698	79,007	200	NA	NA	24,234
27 November 2011	200	NA	48,264	NA	NA	630	157,054	24,900	5,150	51,332	468	579
28 November 2011	NA	700	29,162	350	8,906	7,820	449,072	8,423	14,814	7,675	632	3,752
29 November 2011	2,200	3,000	86,135	2,000	31,514	NA	186,698	53,850	13,992	8,015	256	3,156
30 November 2011	10,685	2,200	370,459	NA	9,875	1,200	90,384	260,541	17,839	1,243	3,556	2,003
1 December 2011	1,100	500	95,845	300	NA	NA	59,185	1,823,500	7,810	2,796	136	4,773
4 December 2011	NA	1,036	66,763	17,000	25,625	20,000	193,323	252,000	NA	2,044	2,136	3,347

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
5 December 2011	1,333	NA	34,805	NA	3,655	180,000	89,853	6,910	5,390	6,500	156	6,386
6 December 2011	265	575	55,851	NA	1,250	4,137	112,334	53,500	NA	3,013	676	4,117
7 December 2011	14,250	1,000	16,490	17,208	60,430	165,376	153,582	56,883	2,500	1,766	3,000	388,279
8 December 2011	NA	NA	17,983	NA	38,503	12,250	23,241	226,144	NA	571	818	12,562
11 December 2011	12,000	NA	1,018,349	37,000	14,000	1,000	22,602	27,100	7,019	1,701	256	14,000
12 December 2011	1,114	17,250	56,506	4,002	3,700	NA	13,492	59,520	1,600	1,164	136	11,258
13 December 2011	2,000	1,000	317,748	NA	10,100	NA	17,800	73,053	100	NA	2,672	3,607
14 December 2011	2,497	NA	2,548	NA	NA	3,109	38,058	17,480	18,884	6,387	472	35,886
15 December 2011	3,637	211,750	11,538	NA	36,280	1,850	234,842	575,019	13,250	2,269	584	47,907
18 December 2011	4,600	NA	307,269	NA	NA	261,000	18,687	87,191	NA	816	NA	58,013
19 December 2011	8,230	19,944	3,831	NA	NA	5,000	130,517	125,543	NA	6,000	3,300	274,925
20 December 2011	5,000	2,000	112,852	NA	NA	10,661	82,723	25,124	8,242	4,698	5,404	150,150
21 December 2011	1,250	900	7,198	137	5,440	11,105	33,504	6,231	2,500	NA	256	95,336
22 December 2011	71,420	28,000	742,433	25,429	4,500	NA	372,245	51,382	2,000	5,723	252	175,266
26 December 2011	19,990	2,000	193,460	232	16,000	39,685	42,979	52,085	17,279	15,291	7,670	64,288
27 December 2011	258,156	12,000	110,375	3,000	16,300	16,941	75,677	28,555	25,495	1,984	27,500	119,201

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
28 December 2011	26,100	37,000	5,269	NA	204,200	NA	494,447	22,842	85,027	NA	NA	105,652
29 December 2011	44,337	14,600	168,503	6,698	101,300	6,076	143,130	38,331	12,270	2,000	3,952	22,479
2 January 2012	1,377	3,320	2,480	NA	14,763	272,000	208,742	1,060	17,990	14,261	552	72,734
3 January 2012	6,750	150	73,186	NA	104,425	13,446	570,364	22,088	175,079	8,014	3,941	28,829
4 January 2012	27,000	41,759	420,874	NA	25,185	54	557,790	420	6,996	7,222	NA	NA
5 January 2012	310,619	200	1,063,000	NA	5,650	7,000	2,108,227	130,289	4,225	45,114	136	2,742,388
8 January 2012	20,050	7,000	122,156	NA	89,136	5,180	135,507	12,944	3,200	5,711	688	28,344
9 January 2012	3,427	3,600	319,330	NA	90,440	3,700	631,795	214,130	58,880	4,300	NA	874
10 January 2012	1,551	1,000	252,715	50	10,105	NA	10,409	82,368	66,194	1,140	NA	6,123
11 January 2012	NA	1,440	13,498	NA	40,825	1,005,886	22,968	42,487	3,175	1,000	NA	7,063
12 January 2012	11,600	2,045	7,655	NA	10,594	4,000	217,449	7,521	1,500	5,680	5,628	9,711
15 January 2012	2,624	4,186	15,635	NA	91,150	NA	30,911	11,661	NA	300	208	36,748
16 January 2012	NA	1,200	153,070	NA	48,935	1,000	48,789	4,496	2,000	1,870	413	1,043
17 January 2012	NA	750	3,839	965	NA	1,000	21,576	185,598	3,450	83,301	13,632	5,173
18 January 2012	3,989	660	84,220	NA	2,800	NA	32,550	10,086	7,335	644,940	4,806	21,868
19 January 2012	5,687	NA	13,208	2,100	21,105	4,038	87,700	2,879	10,064	100	NA	34,989
22 January 2012	2,839	NA	18,975	NA	24,043	3,718	92,629	3,073	11,846	3,328	360	51,070
23 January 2012	3,300	500	6,262	200	9,050	100	90,661	3,765	5,000	2,000	448	3,443
24 January 2012	NA	2,125	31,644	340	16,323	NA	79,310	73,155	14,351	6,151	957	2,304
25 January 2012	NA	19,300	2,375	NA	49,011	NA	50,919	121,230	5,000	1,298	NA	11,159
26 January 2012	4,554	1,000	7,218	NA	3,921	NA	22,767	5,120	NA	NA	2,636	8,200
29 January 2012	500	4,000	13,000	NA	7,552	500	75,704	27,908	40,093	85,417	220	4,097

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
30 January 2012	15,000	NA	8,730	160	9,750	778	46,711	63,483	4,000	6,796	520	7,959
31 January 2012	1,200	NA	22,094	800	14,079	11,450	186,008	54,658	51,135	1,371	678	19,517
1 February 2012	NA	1,250	13,800	NA	34,710	500	32,845	166,075	5,000	101,841	448	28,272
2 February 2012	1,350	450	49,800	2,206	16,946	NA	45,414	84,966	NA	1,844	776	39,068
5 February 2012	NA	58	11,200	2,500	3,000	3,760	7,078	9,171	500	1,016	500	2,933
6 February 2012	NA	3,200	14,332	4,300	17,742	NA	90,514	17,198	500	52,594	1,155	21,766
7 February 2012	NA	1,300	13,037	1,700	NA	500	35,258	3,570	239,803	190,332	412	11,427
8 February 2012	17,000	500	2,500	180	13,000	2,000	106,418	78,260	17,990	127,006	208	43,591
9 February 2012	NA	800	4,881	200	11,600	21,617	413,700	11,871	156,927	58,764	15,128	35,907
12 February 2012	NA	630	15,083	5,170	4,000	4,800	52,230	23,816	18,258	1,048	432	11,805
13 February 2012	800	800	17,870	400	2,000	2,000	78,814	21,278	1,800	2,715	408	18,000
14 February 2012	900	NA	10,209	1,000	7,385	NA	259,800	61,432	164,811	9,901	542	17,905
15 February 2012	5,200	1,200	9,248	4,400	11,589	3,269	59,600	21,075	483,851	730	NA	15,496
16 February 2012	7,638	24,776	23,886	500	14,450	8,770	272,090	44,496	83,010	NA	664	20,185
19 February 2012	NA	2,030	7,050	NA	5,367	NA	24,064	49,748	18,100	3,540	448	7,084
20 February 2012	640	100	210,093	NA	3,830	15,105	28,892	27,061	26,344	1,773	272	548
21 February 2012	7,533	100	20,280	NA	21,300	10,329	88,965	20,652	34,987	1,071	728	4,524
22 February 2012	6,614	50	14,800	750	222,699	3,455	144,663	34,000	21,719	1,158	NA	23,130
23 February 2012	8,786	14,600	128,715	6,061	110,338	3,000	35,256	20,510	11,600	15,000	654	22,586
26 February 2012	61	71,450	12,777	NA	204,410	5,000	250,878	22,662	244,804	4,912	496	20,661
27 February 2012	9,197	39,793	52,691	NA	100,407	10,996	126,707	31,750	48,900	2,294	509	19,850
28 February 2012	NA	26,309	322,791	NA	15,252	2,086	110,259	272,017	3,270	13,493	556	3,058
29 February 2012	2,730,961	31,553	77,775	NA	75,930	16,389	134,617	225,721	112,151	NA	932	12,039

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
1 March 2012	5,000	28,020	20,664	NA	120,492	31,835	351,893	43,411	67,800	1,711	NA	10,742
4 March 2012	NA	140,425	22,199	300	35,500	1,851	136,967	38,600	1,394	NA	744	1,043
5 March 2012	9,708	18,000	19,711	NA	53,840	14,000	119,154	42,365	1,460	1,200	186	6,744
6 March 2012	4,900	22,500	3,479	NA	69,103	6,977	54,500	12,867	4,355	3,489	176	9,897
7 March 2012	16,211	13,900	5,007	NA	4,900	2,640	56,221	97,909	8,900	12,203	5,552	17,132
11 March 2012	14,500	4,120	26,146	NA	16,180	6,823	87,595	46,795	6,630	17,856	1,217	3,032
12 March 2012	2,000	2,850	7,084	NA	NA	12,450	40,502	14,430	2,550	507	176	6,795
13 March 2012	NA	19,100	65,075	470	4,200	NA	152,243	21,556	12,540	2,974	3,775	1,453
14 March 2012	2,000	5,755	25,650	266	11,380	NA	68,828	9,415	6,040	402,735	104	2,581
15 March 2012	NA	6,704	49,735	NA	55,402	12,640	62,704	12,100	28,658	1,001	544	NA
18 March 2012	9,000	8,700	26,976	50	14,312	7,000	98,363	27,607	10,000	6,710	936	6,579
19 March 2012	3,000	14,047	51,992	4,051	799	NA	351,818	87,875	3,742	23,858	NA	10,501
20 March 2012	NA	19,053	35,089	100	4,100	1,000	68,348	5,200	20,000	121,000	NA	13,643
21 March 2012	7,000	2,114	29,399	4,152	6,300	NA	46,350	21,716	8,565	887	760	4,287
22 March 2012	10,000	3,370	9,761	NA	17,550	NA	38,010	12,139	5,735	54,000	124	3,681
25 March 2012	500	3,000	6,017	200	70,320	NA	21,649	23,266	16,400	6,870	NA	400
26 March 2012	5,700	NA	31,165	800	57,694	45,500	721,516	148,081	14,463	6,256	NA	19,018
27 March 2012	23,100	400	3,643	NA	72,132	263,550	43,000	1,058,619	43,284	8,107	616	37,057
28 March 2012	69,300	12,906	78,180	NA	6,000	16,350	165,516	43,946	2,700	411	371	14,643
29 March 2012	23,925	2,000	26,128	1,450	11,770	1,339	55,371	1,451,721	10,350	461	NA	23,723
1 April 2012	8,099	600	3,264	100	12,185	1,661	51,580	65,072	1,000	12,384	NA	3,465
2 April 2012	24,110	1,100	31,782	1,049	85,730	7,000	530,677	61,241	1,080	610,952	11	11,648
3 April 2012	3,300	9,825	18,546	500	105,227	500	105,724	53,643	17,755	13,928	860	9,605

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
4 April 2012	3,000	10,000	18,819	NA	11,000	NA	432,007	163,638	50,950	9,276	913	1,849
5 April 2012	2,513	NA	32,780	6,000	15,160	5,000	9,100	NA	18,670	9,732	759	183
8 April 2012	1,000	1,000	32,077	474	5,740	500	87,754	1,175,517	4,680	7,059	106	1,043
9 April 2012	400	3,000	10,839	NA	8,781	1,000	10,234	5,803	13,334	3,162	2,620	5,730
10 April 2012	1,400	3,000	2,490	NA	68,047	NA	38,979	22,157	8,970	4,673	112	5,963
11 April 2012	NA	1,000	21,309	NA	14,521	39,953	1,001,500	21,076	2,722	6,471	NA	34,492
12 April 2012	6,457	6,500	14,857	NA	82,800	570	60,862	13,980	200	11,965	1,008	872
15 April 2012	500	1,900	5,327	15,019	65,173	1,000	92,151	2,898	1,400	3,000	286	834
16 April 2012	1,000	18,981	27,020	2,981	11,427	8,500	380,872	33,264	815	2,533	7,240	5,712
17 April 2012	NA	2,107	14,101	400	8,962	NA	85,858	31,602	5,900	2,256	416	10,464
18 April 2012	1,500	3,795	18,343	4,600	43,889	8,500	153,514	133,720	14,068	NA	3,676	2,612
19 April 2012	6,106	1,000	49,919	NA	35,900	6,000	57,345	154,581	5,985	1,082	216	3,803
22 April 2012	NA	NA	19,308	NA	4,660	NA	41,511	2,050	50,403	3,524	248	5,699
23 April 2012	2,093	5,820	56,053	9,102	20,000	7,152	126,408	15,358	23,206	26,395	116	11,784
24 April 2012	2,000	NA	55,391	4,243	64,907	10,500	89,650	15,486	13,751	5,307	888	8,647
25 April 2012	4,809	NA	95,639	2,514	67,400	59,202	244,342	51,904	57,895	1,832	216	4,031
26 April 2012	5,205	8,085	608,078	550	96,000	48,665	53,812	36,054	87,514	571	NA	10,412
29 April 2012	1,000	20,700	200,672	7,867	126,292	2,000	5,400	24,251	NA	1,773	708	508
30 April 2012	10,000	NA	41,635	NA	20,312	24,501	150,419	11,121	NA	1,348	312	31,483
2 May 2012	19,803	16,660	63,163	25	1,500	58	50,775	89,270	NA	140	336	1,220
3 May 2012	NA	9,577	61,268	NA	28,800	8,543	65,771	18,622	NA	982	NA	1,892
6 May 2012	15,597	11,430	84,236	3,100	22,000	14,210	522,564	28,617	100	48,626	17,257	6,791
7 May 2012	11,909	5,300	26,241	95	17,024	2,500	27,648	8,167	600	77,508	120	1,963

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
8 May 2012	6,717	29,220	64,870	100	44,140	NA	104,152	11,915	7,114	9,496	6,424	6,944
9 May 2012	NA	300	105,188	NA	NA	5,370	155,626	10,419	10,400	NA	104	1,479
10 May 2012	1,262	7,024	8,626	2,010	66,006	3,000	294,373	45,697	3,348	5,632	5,551	202
13 May 2012	38,500	NA	34,530	522	50,000	14,727	368,185	1,570	3,280	100	384	3,108
14 May 2012	4,500	25,606	128,651	1,230	938	39,800	NA	10,039	500	5,020	388	6,254
15 May 2012	3,708	483	57,712	100	14,650	10,000	219,203	14,590	9,950	3,809	1,296	7,979
16 May 2012	8,474	12,120	63,357	14,895	NA	14,700	233,990	31,053	NA	9,391	1,400	6,940
17 May 2012	35,870	10,100	80,783	NA	4,000	73,066	206,604	318,159	15,250	5,228	104	12,107
20 May 2012	1,800	1,000	117,275	226	4,000	13,939	36,375	18,110	1,200	6,717	696	3,118
21 May 2012	460	2,500	7,502	3,000	27,238	7,340	66,955	19,044	NA	65,283	876	12,607
22 May 2012	7,592	788	192,299	NA	6,000	30,934	84,221	65,098	NA	1,111	780	12,763
23 May 2012	10,656	17,323	27,584	NA	33,543	NA	24,356	22,012	440	10,148	344	20,507
24 May 2012	1,775	NA	14,040	NA	13,000	NA	23,081	15,927	NA	411	6,404	1,034
27 May 2012	2,500	17,907	117,300	1,730	2,100	55,000	126,338	20,765	1,609	116,070	1,000	10,995
28 May 2012	500	NA	463,482	NA	13,700	500	12,700	18,090	500	64,420	772	4,504
29 May 2012	500	1,480	48,884	NA	17,810	4,302	146,124	53,213	NA	300,726	762	NA
30 May 2012	NA	NA	115,130	NA	3,600	NA	36,333	18,140	5,500	1,189	880	5,890
31 May 2012	120	7,761	27,932	NA	26,400	34,628	352,138	21,735	3,200	5,555	136	1,895
3 June 2012	5,000	44,051	12,462	NA	65,140	5,000	262,729	37,479	NA	1,647	236	16,020
4 June 2012	52,148	12,326	114,593	NA	53,250	10,000	628,402	58,543	8,000	77,985	296	1,643
5 June 2012	44,568	1,300	167,835	100	70,618	12,850	50,744	11,637	450	17,423	724	2,365
6 June 2012	55,681	2,300	19,435	650	17,105	600	263,058	5,872	NA	16,870	120	968
7 June 2012	24,500	3,279	32,466	NA	57,755	2,000	6,501	2,500	NA	11,479	760	9,779

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
10 June 2012	4,453	14,894	14,976	2,050	12,680	NA	11,587	29,636	15,750	16,908	528	10,170
11 June 2012	NA	20,609	15,596	1,000	26,800	1,625	10,145	10,368	9,700	46,837	236	151
12 June 2012	12,351	680	11,000	700	31,100	1,500	37,050	42,362	204,530	76,546	2,053	5,299
13 June 2012	1,000	16,678	52,027	1,300	23,610	3,900	27,090	2,380	900	1,791	608	31,214
14 June 2012	500	2,891	155,324	200	63,330	6,500	86,328	15,139	NA	507	NA	3,850
18 June 2012	452	2,846	559,546	3,240	13,500	107,425	18,090	11,416	2,321	3,061	312	2,860
19 June 2012	1,100	3,000	13,125	500	52,695	16,350	7,470	13,332	2,250	951	616	7,673
20 June 2012	NA	2,698	18,862	4,630	15,125	156,300	46,698	2,259	2,120	7,313	922	20,649
21 June 2012	NA	NA	10,836	200	36,050	10,718	294,996	27,033	6,000	2,872	548	1,958
24 June 2012	NA	21,422	84,966	1,060	24,546	13,810	18,025	13,238	250	3,144	NA	13,818
25 June 2012	3,000	114,414	16,879	1,337	15,050	3,020	48,226	33,767	NA	6,268	106	4,723
26 June 2012	1,130	NA	7,576	400	24,846	89,679	11,130	1,000	NA	NA	5,168	4,060
27 June 2012	9,736	NA	12,200	2,932	17,100	541,180	19,500	65,091	1,807	2,000	112	8,832
28 June 2012	10,000	4,194	44,850	2,280	1,360	4,216,570	220,160	34,874	3,300	994	264	5,061
1 July 2012	5,066	3,193	1,750	NA	24,150	1,500	72,039	2,488	1,279	170,000	602	21,834
2 July 2012	7,200	7,400	7,693	NA	6,520	1,212	28,208	10,524	3,700	2,508	210	600
3 July 2012	NA	392	10,964	3,008	19,308	57,152	27,439	12,040	310	2,859	NA	8,803
4 July 2012	1,700	2,750	74,221	NA	2,595	NA	25,309	1,835	NA	1,393	256	9,280
5 July 2012	2,000	2,900	19,313	1,000	9,020	2,525	31,795	23,593	2,000	4,541	456	7,714
8 July 2012	5,880	7,234	6,753	2,134	4,815	5,421	73,158	19,115	20,253	364	256	14,000
9 July 2012	9,603	33,009	9,783	3,460	21,000	NA	97,174	2,980	5,643	4,714	812	3,100
10 July 2012	6,000	4,700	217,973	500	36,154	24,320	676,877	17,193	NA	NA	356	7,023
11 July 2012	5,000	25,000	24,640	153	16,700	1,090	19,450	6,719	58,950	871	NA	42,495

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
12 July 2012	3,000	1,000	8,220	719	11,200	6,438	28,502	9,009	106	3,585	NA	17,268
15 July 2012	9,100	2,156	40,194	NA	13,680	6,537	39,605	4,553	1,200	2,000	208	7,685
16 July 2012	14,240	2,957	11,902	54	133,690	36,742	25,492	3,975	1,500	332	452	10,417
17 July 2012	764	10,000	38,995	295	10,323	5,621	24,150	5,788	3,542	12,567	1,512	15,174
18 July 2012	NA	9,694	4,996	16	19,567	27,237	18,493	7,679	4,250	50	584	3,470
19 July 2012	3,000	20,000	8,215	1,000	4,150	11,500	102,528	9,673	276	NA	384	22,570
22 July 2012	5,100	NA	12,302	100	15,377	3,050	97,518	17,619	12,400	1,902	130	9,539
23 July 2012	NA	NA	9,450	NA	8,020	NA	3,678	4,170	2,172	1,396	NA	7,212
24 July 2012	NA	384	16,133	NA	10,532	6,982	6,226	9,554	8,000	3,135	176	14,932
25 July 2012	9,000	100	25,780	980	13,100	26,821	29,974	11,553	1,250	411	1,006	848
26 July 2012	17,000	11,606	7,300	8	350	10,750	32,000	15,179	1,400	3,247	740	11,361
29 July 2012	732	NA	15,921	2,000	5,650	4,435	24,569	12,523	1,700	30,726	1,048	2,300
30 July 2012	46	NA	40,775	10,000	4,950	4,250	21,486	4,369	NA	NA	NA	3,306
31 July 2012	375	NA	11,014	NA	2,694	5,000	69,920	7,356	15,748	NA	1,196	4,296
1 August 2012	NA	NA	46,420	520	49,040	40,499	7,907	22,161	5,300	1,662	4,800	1,870
2 August 2012	11,792	NA	9,040	10,250	147,720	25,316	20,708	11,290	26,200	6,000	5,760	416
5 August 2012	11,020	1,000	8,121	NA	63,796	36,616	27,868	21,524	200	1,398	208	8,478
6 August 2012	8,000	250	9,458	5,270	NA	5,125	44,878	7,353	800	21,917	488	5,546
7 August 2012	5,000	NA	3,899	NA	NA	1,000	30,612	31,025	1,108	2,062	240	7,017
8 August 2012	NA	1,710	8,582	NA	NA	1,000	27,216	5,877	2,000	1,030	115	4,973
9 August 2012	4,000	900	79,309	2,304	NA	8,050	173,673	56,757	3,000	443	232	14,087
12 August 2012	NA	10,651	18,528	1,000	NA	500	107,356	22,987	NA	1,141	785	6,000
13 August 2012	9,100	16,738	24,883	250	NA	5,000	19,428	16,637	NA	982	NA	6,000
al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
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14 August 2012	3,500	5,000	100,040	7,745	NA	NA	30,727	36,821	NA	1,614	NA	7,075
15 August 2012	15,000	100	15,359	NA	NA	8,419	28,683	10,875	NA	441	116	5,000
16 August 2012	50	1,580	23,782	300	NA	NA	49,316	64,232	NA	NA	352	1,746
22 August 2012	1,500	4,000	37,057	NA	NA	24,431	195,641	8,127	NA	411	136	1,781
23 August 2012	NA	500	34,393	NA	NA	36,296	29,746	21,146	7,050	823	296	9,003
26 August 2012	2,000	NA	11,475	970	NA	6,693	33,200	14,325	NA	20,765	136	5,689
27 August 2012	NA	21,317	14,253	500	NA	483	23,730	2,268	100	270	116	5,019
28 August 2012	2,500	19,110	33,309	850	NA	1,602	18,764	84,417	NA	1,614	692	3,886
29 August 2012	NA	3,100	33,754	NA	NA	5,000	48,989	10,770	NA	2,468	208	28,512
30 August 2012	17,000	NA	12,755	NA	NA	1,480	30,199	22,131	11,000	531,219	880	9,100
2 September 2012	9,075	NA	23,180	NA	NA	1,849	7,166	7,820	NA	1,000	2,302	3,458
3 September 2012	102,822	1,075,557	30,500	NA	NA	NA	459,334	71,910	NA	3,436	40,268	15,971
4 September 2012	5,000	3,200	112,440	823	NA	6,355	53,814	7,039	5,100	2,271	606	7,000
5 September 2012	6,000	NA	38,082	200	NA	3,010	66,590	64,839	2,000	10,813	868	7,416
6 September 2012	4,000	5,000	14,791	NA	NA	127,584	60,711	58,685	NA	1,887	1,392	7,174
9 September 2012	7,000	3,795	423,326	20,917	NA	8,025	127,300	128,891	16,420	4,944	366	5,470
10 September 2012	5,000	3,642	25,700	NA	NA	3,000	108,625	12,416	7,330	4,986	792	3,000
11 September 2012	NA	20,625	20,794	3,528	NA	4,904	104,042	83,006	5,900	23,571	46	35,351
12 September 2012	10,000	4,000	11,895	52,600	NA	NA	62,604	16,070	1,200	911	NA	2,100
13 September 2012	8,000	11,669	15,305	3,019	NA	NA	39,306	6,492	50	1,161	216	2,050

al-Quds trading date	AIB	AIG	BOP	BPC	6COM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
16 September 2012	852	NA	21,000	NA	NA	5,000	9,178	15,789	4,800	1,317	176	2,100
17 September 2012	NA	16,000	224,850	780	NA	4,025	49,206	10,255	2,000	17,627	220	7,578
18 September 2012	7,505	NA	20,606	5,287	NA	12,891	30,743	19,080	6,520	1,271	NA	4,858
19 September 2012	NA	8,358	60,792	NA	NA	19,500	37,238	424,206	11,287	211	NA	2,133
20 September 2012	NA	130	28,339	1,571	NA	11,625	50,150	8,127	10,067	3,648	NA	11,174
23 September 2012	3,791	1,000	20,981	4,000	NA	5,025	41,464	1,602	590	8,205	NA	4,023
24 September 2012	NA	5,273	15,128	NA	NA	30,000	26,673	3,607	NA	2,458	156	5,071
25 September 2012	NA	791	19,018	NA	NA	61,500	12,992	5,015	1,500	3,524	NA	4,246
26 September 2012	5,000	NA	7,875	NA	NA	7,175	156,393	3,872	27,236	3,000	NA	5,815
27 September 2012	NA	NA	9,323	NA	NA	25,261	41,932	7,900	3,850	NA	588	2,046
30 September 2012	22,000	NA	27,100	875	NA	4,500	23,612	134,831	57,529	1,000	264	15,126
1 October 2012	NA	20,715	13,931	NA	NA	2,215	29,779	14,428	2,871	18,808	136	16,185
2 October 2012	4,000	NA	118,402	6,382	NA	13,600	12,360	22,045	1,350	3,645	2,796	5,056
3 October 2012	103	20,509	283,783	5,100	NA	2,500	26,656	20,788	2,004	711	NA	6,837
4 October 2012	7,935	39,079	35,201	5,118	NA	6,100	26,067	39	4,428	16,885	848	72,471
7 October 2012	NA	7,590	166,897	9,465	NA	18,450	20,800	3,411	69,850	411	196	46,034

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
8 October 2012	NA	105,049	129,070	NA	NA	9,575	13,955	1,960	350	2,224	404	35,397
9 October 2012	108,000	2,000	138,476	NA	NA	2,000	6,180	16,955	9,612	13,342	156	23,378
10 October 2012	NA	12,629	24,169	NA	NA	131,353	31,056	7,630	5,300	1,937	232	16,780
11 October 2012	14,850	NA	149,983	7,535	NA	55,225	10,093	5,166	3,600	1,253	NA	13,895
14 October 2012	NA	5,176	159,336	NA	NA	6,175	25,017	550	786	NA	352	9,485
15 October 2012	NA	NA	249,232	NA	NA	3,742	26,530	20,092	3,950	111,078	704	16,050
16 October 2012	2,000	NA	36,575	NA	NA	NA	35,475	4,961	8,250	2,103	2,220	3,121
17 October 2012	7,000	1,896	29,175	NA	NA	19,858	37,910	NA	1,700	18,390	508	8,711
18 October 2012	12,500	NA	478,273	5,000	NA	170,438	96,741	5,994	13,600	15,419	NA	NA
21 October 2012	17,974	116,530	114,241	16,784	52,450	50,000	144,334	184,094	20,856	8,617	NA	4,292
22 October 2012	46,000	1,000	47,310	4,666	24,302	51,549	77,775	2,771	NA	2,210	NA	14,817
23 October 2012	10,000	11,320	155,603	10,000	81,208	650,500	19,653	820	3,100	5,019	NA	23,034
24 October 2012	NA	31,000	156,723	NA	17,694	200,575	7,595	1,914	6,250	8,582	NA	7,015
31 October 2012	578,724	4,900	32,049	2,000	12,732	645,479	350,495	21,422	45,844	129,210	NA	32,431
1 November 2012	11,542	20,079	91,873	18,000	1,329	302,950	89,865	NA	2,000	161,076	NA	15,196
4 November 2012	3,000	15,618	3,600	3,144	14,163	367,781	7,555	13,507	NA	1,331	776	10,056
5 November 2012	NA	150	13,600	356	22,050	144,059	39,915	204,141	86,500	775	104	5,062
6 November 2012	NA	247,700	15,495	1,544	3,904	105,132	2,120	31,392	NA	13,973	NA	6,519
7 November 2012	410	636,376	34,355	9,796	15,729	47,850	26,859	13,631	6,540	10,316	NA	940
8 November 2012	19,495	5,140	30,177	3,500	10,672	708,262	116,327	108,613	500	5,407	336	2,324
11 November 2012	5,000	50	14,183	100	5,759	208,122	5,557	17,950	NA	53,310	904	17,100
12 November 2012	9,808	NA	35,605	NA	13,831	252,412	63,040	11,061	5,000	1,230	136	6,858

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
13 November 2012	2,000	25,200	5,697	NA	16,525	68,505	358,301	10,245	3,250	65,397	176	29,363
14 November 2012	10,424	NA	31,742	NA	7,827	18,560	3,406	NA	500	NA	136	7,035
18 November 2012	2,000	140,518	8,950	497	8,500	57,007	54,735	2,300	2,500	NA	696	8,410
19 November 2012	2,581	1,000	27,252	1,000	8,997	20,468	19,527	1,875	260	NA	NA	3,400
20 November 2012	4,119	100	3,960	2,300	2,600	1,000	58,437	17,327	NA	NA	NA	165
21 November 2012	NA	1,000	77,013	2,601	6,439	NA	8,705	5,687	NA	NA	176	5,300
22 November 2012	NA	5,528	350	NA	10,328	171,230	50,028	6,510	65,000	NA	306	817
25 November 2012	NA	2,000	10,768	NA	1,300	33,300	82,993	12,752	5,000	NA	104	60
26 November 2012	NA	1,000	10,420	340	4,439	1,050	102,030	4,136	170	NA	NA	400
27 November 2012	10,000	NA	13,474	NA	1,661	19,200	35,000	2,320	12,000	NA	216	8,543
28 November 2012	2,000	5,000	27,467	NA	27,150	14,500	49,983	7,213	3,500	NA	NA	14,754
29 November 2012	20,000	186,700	23,299	600	6,500	3,150	7,450	6,881	3,887	NA	232	15,051
2 December 2012	NA	3,500	35,755	100	34,004	11,013	40,619	5,000	NA	32,539	136	11,778
3 December 2012	4,500	6,080	56,753	102	12,263	26,590	205,951	19,340	4,000	10,752	508	13,796
4 December 2012	209	1,022	67,880	149	17,427	1,000	44,040	16,950	NA	16,658	104	27,367
5 December 2012	NA	2,000	287,034	NA	41,350	NA	88,022	144,252	NA	30,634	104	6,942

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
6 December 2012	14,500	NA	9,448	1,202	13,846	9,457	243,607	16,734	NA	5,482	104	3,000
9 December 2012	NA	NA	56,422	10,650	3,350	28,587	127,492	5,200	1,000	13,271	116	23,387
10 December 2012	1,100	7,000	24,792	550	1,500	5,125	103,741	2,506	2,400	571	3,534	12,734
11 December 2012	NA	1,000	29,446	181	5,000	533,514	164,937	50,190	16,300	11,301	2,564	15,158
12 December 2012	28,000	NA	38,856	NA	11,539	1,000	17,418	2,049	NA	3,087	452	48,144
13 December 2012	NA	NA	181,724	9,427	8,473	7,186	72,658	45,601	1,500	4,730	NA	5,052
16 December 2012	509	1,560	27,981	NA	7,798	17,489	22,489	4,721	1,000	3,640	1,011	7,587
17 December 2012	56,500	1,000	57,353	NA	10,770	1,106	34,446	830	2,254	2,923	1,872	10,462
18 December 2012	NA	6,050	45,084	NA	12,000	42,288	22,506	13,229	2,100	2,722	1,400	45,350
19 December 2012	10,000	NA	135,016	309	1,590	303,470	298,814	24,025	5,000	12,777	NA	NA
20 December 2012	20,000	2,511	11,369	291	2,293	212,625	50,085	6,789	NA	5,982	NA	101,086
23 December 2012	10,000	240	74,290	12,082	10,343	400	47,584	167,415	NA	6,200	NA	110,000
24 December 2012	6,676	NA	1,410,973	80	NA	110,637	84,559	1,260,476	500	83,069	30,775	3,982,113
26 December 2012	7,483	NA	101,000	5,200	12,601	333,391	9,198	24,664	11,221	2,879	NA	91,200
27 December 2012	12,138	270	54,685	NA	8,804	10,600	1,074,583	37,930	1,950	6,639	NA	3,180,086

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
30 December 2012	101,400	23,059	69,007	1,827	9,766	21,800	56,349	41,319	10,350	3,000	814	38,824
31 December 2012	129,000	9,725	110,619	700	28,513	283,907	1,891,449	27,439	22,091	33,999	3,589	22,353
2 January 2013	NA	3,610	73,980	NA	33,866	387,860	109,600	1,610	NA	4,794	NA	4,100
3 January 2013	4,100	1,160	55,087	11,000	34,568	17,806	16,460	4,490	363	95,220	704	3,019
6 January 2013	NA	1,349	45,224	NA	56,273	43,250	8,000	9,493	22,000	1,186	1,016	3,272
8 January 2013	3,730	68,847	17,360	NA	56,264	52,397	61,000	17,017	4,405	2,300	NA	23,062
13 January 2013	1,002	NA	47,404	NA	41,056	58,923	20,566	13,322	1,900	NA	844	5,310
14 January 2013	1,000	2,149	51,015	NA	93,314	57,166	45,690	707	85,950	1,000	930	1,087
15 January 2013	1,855	NA	57,961	NA	15,282	95,705	83,124	118,663	4,300	6,349	6,794	7,638
16 January 2013	39,423	2,367	47,565	355	94,084	161,986	25,231	6,230	3,500	1,306	136	1,580
17 January 2013	1,000	NA	13,214	NA	16,550	47,580	114,765	1,752	10,100	NA	482	12,085
20 January 2013	NA	17,291	46,013	627	18,424	10,300	23,281	51,151	NA	10,911	136	36,122
21 January 2013	2,500	NA	11,665	977	7,500	20,000	131,850	14,585	3,760	9,575	296	5,023
22 January 2013	NA	NA	21,224	673	1,168	30,530	34,840	708	15,198	NA	2,136	2,496
23 January 2013	NA	NA	46,628	225	45,620	186,450	217,400	165,352	2,000	26,616	NA	49,884
27 January 2013	NA	1,500	144,509	1,000	12,963	28,606	37,865	29,562	8,340	5,504	1,132	2,000
28 January 2013	NA	NA	29,944	1,500	17,253	104,656	16,000	34,554	NA	210,149	826	20,013
29 January 2013	12,853	24,710	52,019	25	9,802	20,580	57,886	441,631	4,500	5,872	638	2,034
30 January 2013	24,344	8,686	25,900	1,850	12,498	128,575	265,650	8,785	NA	1,739	1,268	9,854
31 January 2013	666	17,668	26,937	44,917	25,683	46,865	225,300	50,170	NA	491	496	5,000
3 February 2013	NA	6,000	9,403	NA	1,500	38,500	310,312	7,945	450	1,000	101	5,730
4 February 2013	6,430	288,028	73,259	NA	574	79,730	148,991	26,956	2,000	22,730	NA	3,999

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
5 February 2013	3,700	165,750	125,401	NA	35,688	108,600	374,065	4,268	2,000	6,888	312	16,855
6 February 2013	1,017	NA	28,155	NA	86	NA	184,482	32,207	NA	700	176	4,036
7 February 2013	4,894	173,610	5,469	408	65,854	56,000	121,464	12,257	5,922	9,264	1,120	5,382
10 February 2013	9,774	59,000	94,187	161	16,082	189,456	47,682	217,529	2,000	28,900	531	8,258
11 February 2013	2,000	260,400	7,553	NA	20,925	24,225	177,492	6,190	800	3,100	480	6,122
12 February 2013	41,154	NA	54,997	2,584	15,808	32,439	2,999	5,800	NA	807	536	6,303
13 February 2013	18,431	60,000	39,353	60,796	1,000	19,959	167,570	15,541	NA	4,203	624	424
14 February 2013	2,000	NA	36,355	NA	9,061	14,330	17,500	2,853	1,100	400	136	22,278
17 February 2013	NA	800	13,784	NA	1,455	39,460	25,785	16,113	2,723	1,236	428	1,534
18 February 2013	47,357	145,220	61,549	NA	45,050	70,781	41,250	7,186	4,000	571	2,188	456
19 February 2013	3,800	500	13,127	1,039	1,000	220,309	104,169	11,466	35,195	2,316	NA	42,488
20 February 2013	NA	2,194	32,033	328	1,208	110,882	142,846	35,086	23,857	4,693	392	100
21 February 2013	2,220	NA	9,872	4,634	267	2,050	12,810	14,241	1,000	11,320	408	3,923
24 February 2013	5,000	NA	25,743	NA	660	100	117,140	700	12,594	6,632	NA	8,175
25 February 2013	1,021	3,323	104,168	NA	14,100	27,070	32,635	2,732	NA	1,682	925	2,985
26 February 2013	20,000	191,859	22,924	1,202	15,590	52,738	22,485	16,363	21,490	1,332	NA	NA
27 February 2013	NA	NA	32,872	9,494	9,500	9,334	1,560,180	166,050	6,750	752	NA	12,100
28 February 2013	6,000	NA	29,874	2,096	15,300	4,950	124,396	9,154	10,265	822	408	624
3 March 2013	5,611	NA	7,965	202	21,700	1,175	26,995	113,588	NA	1,811	1,380	1,050
4 March 2013	3,600	145	20,878	NA	21,632	10,864	61,550	13,840	NA	889	106	3,025
5 March 2013	NA	78,128	44,804	18,071	17,500	23,250	943,020	148,190	140	150	64	5,756
6 March 2013	12,547	2,300	10,125	2,000	134,957	169	169,891	188,136	3,949	NA	176	100
7 March 2013	NA	NA	34,052	2,147	70,073	13,322	72,320	30,542	NA	852	920	290

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
10 March 2013	4,322	25,000	28,925	NA	32,750	1,100	184,794	15,764	48,000	132,317	480	1,862
11 March 2013	50,000	8,099	6,750	NA	6,000	37,478	108,810	174,719	8,700	86,447	50	8,234
12 March 2013	1,100	NA	270,028	1,701	1,000	26,605	17,396	4,230	2,600	NA	938	5,733
13 March 2013	NA	1,006	22,138	1,435	NA	37,000	383,472	25,012	5,000	411	NA	381
14 March 2013	7,000	11,309	54,184	2,418	143	8,829	47,895	2,274	24,675	1,300	1,428	NA
17 March 2013	NA	49,220	20,044	55	39,371	2,115	21,488	29,650	1,000	150	672	4,020
18 March 2013	10,199	236,000	15,000	NA	7,000	20,085	299,502	66,950	3,000	6,363	1,012	15,631
19 March 2013	234	NA	20,869	1,000	9,000	7,857	97,590	59,316	NA	4,961	244	734
20 March 2013	NA	NA	15,282	NA	100	86,205	10,325	27,304	2,150	800	432	3,114
21 March 2013	7,117	229	86,701	22,071	5,050	36,025	50,400	114,758	1,800	432	24,624	6,283
24 March 2013	5,488	1,000	9,358	867	28,900	1,060	62,543	13,960	3,300	721	137	932
25 March 2013	3,000	NA	18,280	233	27,844	31,725	21,953	14,748	2,469	NA	2,774	4,892
26 March 2013	2,086	NA	13,565	7,042	114,781	49,757	21,792	16,520	11,000	8,167	756	8,750
27 March 2013	NA	2,000	40,654	711	7,424	38,720	24,674	37,581	4,108	7,326	50	1,054
28 March 2013	20,587	3,500	17,777	372	38,000	29,409	26,501	36,120	NA	903	13,754	10,250
31 March 2013	NA	NA	43,423	NA	45,476	NA	78,147	18,013	16,715	1,011	NA	16,991
1 April 2013	600	2,000	16,337	500	39,979	17,825	62,549	35,222	4,400	2,505	700	4,621
2 April 2013	8,268	NA	94,011	300	NA	NA	148,245	988,172	100	4,250	4,504	20,769
3 April 2013	NA	2,388	121,625	700	14,140	9,100	103,222	253,663	2,650	1,154	NA	1,350
4 April 2013	1,000	1,000	218,289	3,878	31,230	55,250	3,600	NA	NA	100	136	18,983
7 April 2013	2,000	3,116	201,031	3,918	87,300	13,297	64,100	500	NA	3,000	624	12,904
8 April 2013	NA	NA	62,629	10,053	4,151	NA	8,191	162,187	98,250	1,393	136	12,775
9 April 2013	5,151	NA	25,297	NA	9,479	100	27,000	33,509	NA	NA	408	3,579

al-Quds trading date	AIB	AIG	BOP	BPC	6COM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
10 April 2013	NA	NA	32,268	2,671	NA	NA	10,224	36,123	NA	889	512	4,387
11 April 2013	1,000	NA	7,030	55	1,450	NA	9,128	361,640	NA	1,548	1,508	2,688
14 April 2013	1,898	NA	225,970	NA	13,900	NA	345,142	72,983	NA	5,000	136	6,404
15 April 2013	360,827	600	15,556	NA	13,350	7,338	31,087	41,374	257	NA	1,636	832
16 April 2013	NA	10,077	27,456	380,006	38,475	137,990	55,819	117,413	2,643	1,477	512	3,647
17 April 2013	245,704	5,000	465,001	710	1,150	424,165	234,889	27,682	7,850	NA	NA	512
18 April 2013	115,480	NA	35,763	NA	1,730	135,070	276,748	11,187	NA	NA	417	10,529
21 April 2013	10,000	NA	204,086	1,525	NA	105,482	343,860	42,148	800	NA	508	30,414
22 April 2013	84,723	14,088	81,175	NA	2,530	13,499	99,797	15,717	500	6,713	292	2,176
23 April 2013	NA	11,500	135,873	NA	13,305	NA	63,290	5,554	800	571	550	4,377
24 April 2013	124,305	NA	279,155	8,395	29,100	46,951	351,417	23,939	NA	2,792	626	142,421
25 April 2013	6,408	NA	1,518,530	1,000	14,339	5,432	122,399	47,735	NA	4,598	NA	15,170
28 April 2013	NA	110,000	360,424	NA	1,500	365,000	224,900	19,695	NA	1,893	784	6,588
29 April 2013	3,000	NA	70,481	NA	NA	2,670	23,978	561,175	2,000	3,901	3,454	140
30 April 2013	NA	310,000	24,575	50	8,802	5,225	144,249	39,528	3,100	4,929	2,500	2,039
1 May 2013	127,951	NA	51,212	NA	36,997	99,456	27,087	3,495	1,500	1,371	500	2,028
5 May 2013	3,000	130,000	24,004	24	21,883	2,391	53,376	37,670	1,500	4,037	6,285	2,500
6 May 2013	2,996	13,149	91,919	500	NA	18,212	19,243	36,626	1,900	3,243	296	14,192
7 May 2013	NA	NA	64,078	135	9,558	307,052	7,872	20,205	6,550	274	968	2,226
8 May 2013	610	702,431	8,115	16,855	NA	5,500	111,171	16,535	NA	4,549	216	7,070
9 May 2013	1,100	1,000	83,612	NA	2,073	88,572	196,355	12,691	4,002	8,976	288	2,139
12 May 2013	1,000	41,419	88,685	3,000	18,490	27,909	756,001	25,792	403	NA	632	19,933
13 May 2013	8,564	70,000	2,983	NA	10,091	39,606	245,242	19,398	414	NA	232	5,025

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
14 May 2013	2,836	9,132	10,873	100	26,935	53,630	NA	33,375	5,850	NA	272	1,134
15 May 2013	1,168	NA	249,953	NA	62,124	10,163	1,450	7,487	NA	6,652	179	7,502
16 May 2013	4,273	268,147	12,149	NA	32,500	7,507	22,546	21,486	450	1,206	116	4,104
19 May 2013	NA	NA	105,596	NA	22,280	15,018	130,338	16,576	NA	821,924	145	35,956
20 May 2013	3,210	NA	73,811	264	2,033	75,060	726,610	23,836	500	4,000	NA	7,391
21 May 2013	2,320	21,300	101,396	NA	22,846	10,000	645,795	6,600	1,000	NA	1,168	100
22 May 2013	3,197	NA	23,322	403	3,953	238,784	37,848	7,512	NA	67,532	992	2,114
23 May 2013	2,000	NA	9,324	45	NA	13,769	24,264	7,374	5,500	2,232	232	1,174
26 May 2013	NA	NA	6,700	NA	2,000	50,000	45,400	16,350	1,200	1,316	116	437
27 May 2013	NA	20,000	16,306	NA	14,000	38,865	247,270	25,271	1,136	1,129,205	42,508	8,263
28 May 2013	5,525	NA	32,216	NA	3,714	34,712	225,516	150,430	4,500	5,064	866	5,343
29 May 2013	NA	NA	17,923	250	2,175	578,760	21,715	12,385	7,745	2,043	700	619
30 May 2013	NA	1,563,661	7,405	NA	8,820	701,525	735,788	22,730	14,241	89,779	136	8,144
2 June 2013	2,423	8,500	143,426	NA	10,325	8,147	165,823	119,260	2,500	NA	3,262	8,156
3 June 2013	19,826	NA	46,619	740	44,655	542	15,273	14,331	1,000	NA	1,079	7,390
4 June 2013	2,500	4,550	21,185	NA	14,810	44,802	117,750	8,719	23,320	NA	145	1,268
5 June 2013	NA	NA	75,871	527	12,590	3,140	NA	17,307	8,945	571	236	12,813
9 June 2013	188,781	145,859	30,329	360	22,716	56,140	81,257	8,353	NA	4,864	108	84,379
10 June 2013	NA	NA	28,500	242	13,150	542	69,243	10,645	NA	7,554	35	4,472
11 June 2013	NA	158	29,892	2,200	2,652	92,460	160,057	47,660	NA	1,778	124	1,894
12 June 2013	NA	NA	36,104	550	71,400	15,000	74,105	1,646	NA	NA	NA	3,915
13 June 2013	500	1,571	12,885	550	8,860	31,538	54,833	3,372	2,845	762	NA	3,527
16 June 2013	3,500	NA	40,886	787	7,210	11,978	42,901	8,594	NA	3,176	1,488	4,082

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
17 June 2013	4,694	1,420	11,200	8,661	2,100	1,610	65,158	10,155	5,000	8,461	732	3,390
18 June 2013	NA	82,765	90,083	1,200	8,198	32,728	11,641	3,098	4,500	7,320	348	9,024
19 June 2013	42,380	5,950	60,031	17	7,600	42,997	3,136	3,587	NA	4,178	NA	3,082
20 June 2013	NA	12,752	56,304	3,000	7,100	275,202	9,535	19,351	102,657	1,571	136	3,383
23 June 2013	3,500	3,151	31,217	1,300	595	5,264	14,960	11,700	8,000	2,000	372	3,223
24 June 2013	5,000	1,550	42,789	5,370	1,120	7,778	231,770	106,139	NA	889	1,924	623
25 June 2013	1,431	NA	39,931	2,000	19,150	1,394	12,093	6,061	10,000	2,040	780	9,202
26 June 2013	700	NA	39,542	2,081	20,200	10,259	32,203	2,282	2,504	5,705	44	69,635
27 June 2013	NA	23,000	141,067	4,541	2,100	19,888	25,394	15,850	6,550	4,630	136	4,895
30 June 2013	1,000	21,410	29,720	NA	1,100	6,963	94,656	38,032	5,514	3,970	531	24,196
1 July 2013	500	2,814	59,097	946	155,445	100,205	26,061	43,460	25,811	2,657	1,042	362
2 July 2013	10,094	8,000	77,290	4,000	2,460	65	17,638	8,523	68,665	332	136	2,955
3 July 2013	21,287	17,114	90,231	NA	7,172	16,259	20,500	2,307	NA	2,144	850	1,420
4 July 2013	700	NA	24,072	NA	50	1,689	33,242	31,172	6,545	2,765	128	3,087
7 July 2013	5,054	NA	35,738	1,200	1,110	1,652	39,250	9,561	45,120	7,999	352	31,150
8 July 2013	NA	NA	16,304	444	1,050	11,003	17,990	12,476	1,500	1,965	1,796	6,863
9 July 2013	NA	NA	21,000	NA	210	50,000	9,933	14,268	103,877	1,978	NA	1,134
10 July 2013	27,256	5,000	85,205	NA	100	240	20,527	3,681	28,107	1,012	624	114,710
11 July 2013	NA	NA	4,114	NA	1,850	NA	3,304	620	NA	NA	NA	8,175
14 July 2013	NA	NA	37,506	100	2,950	77,190	12,045	3,077	54,500	743	848	20,762
15 July 2013	NA	2,787	2,282	6,000	5,000	6,223	10,650	1,881	1,100	411	120	2,920
16 July 2013	NA	395	58,262	1,000	5,630	16,594	114,395	3,910	72,579	12,551	312	78,886
17 July 2013	NA	NA	10,369	NA	7,100	4,000	61,375	8,596	32,500	411	316	3,283

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
18 July 2013	57	11	29,300	1,116	100	14,500	164,062	17,238	34,600	NA	NA	7,563
21 July 2013	4,237	NA	65,416	16,000	860	1,086	111,950	5,942	3,601	10,000	375	24,564
22 July 2013	6,486	NA	104,127	NA	1,238	5,671	363,509	51,230	2,000	5,589	1,448	NA
23 July 2013	37,399	NA	19,055	33	12,500	12,444	36,385	15,781	NA	432	NA	7,466
24 July 2013	NA	10,300	51,811	NA	833	3,131	10,500	6,070	NA	NA	984	4,626
25 July 2013	530	4,900	28,000	109	NA	6,389	85,406	12,760	10,900	15,982	488	7,034
28 July 2013	NA	500	68,538	180,000	NA	2,500	659,465	53,446	1,000	NA	2,119	3,879
29 July 2013	5,150	500	128,733	221,016	4,120	71,862	1,192,746	81,680	15,000	NA	193	7,360
30 July 2013	NA	200	194,000	4,500	17,050	4,599	1,664,198	141,183	34,000	7,942	153	15,156
31 July 2013	NA	100,000	92,730	NA	5,510	446,069	415,542	20,550	16,000	997	2,760	5,716
1 August 2013	NA	50	71,180	NA	20,825	113,867	573,013	28,942	6,255	10,822	136	2,139
4 August 2013	3,432	31,100	44,415	NA	500	178,281	883,837	11,694	13,850	3,160	NA	21,049
5 August 2013	NA	30,000	99,560	72	9,350	13,877	989,912	76,909	1,000	5,411	333	88,282
6 August 2013	NA	24,000	228,322	NA	2,000	124,811	528,956	126,850	4,500	903,074	416	86,213
12 August 2013	1,415	11,950	260,937	5,000	35,958	65,437	412,441	61,097	12,631	3,000	136	19,484
13 August 2013	375	31	104,397	1,036	4,675	84,563	1,015,556	46,922	13,000	1,311,705	300	25,469
14 August 2013	193	NA	23,741	377	4,650	812,657	191,687	58,981	9,000	9,175	NA	25,642
15 August 2013	24,000	8,408	41,074	13,000	7,850	92,596	476,117	7,600	2,082	4,460	244	37,100
18 August 2013	23,652	3,677	54,331	107	144,233	911,061	99,228	1,601	1,800	1,362	288	2,300
19 August 2013	NA	19,110	38,162	8,126	91,477	20,000	403,300	22,735	3,200	181,646	NA	20,060
20 August 2013	1,000	211,192	123,022	398	50,428	3,259	689,742	7,520	35,730	NA	108	7,235
21 August 2013	2,983	8,850	80,863	1,496	7,360	109,783	312,769	17,318	NA	28,551	584	4,454
22 August 2013	1,000	33,051	104,766	5,202	100	NA	134,389	43,820	NA	1,396	NA	15,389

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
25 August 2013	10,100	99,197	15,100	8,240	50	1,879	145,858	12,025	22,900	150	352	30,037
26 August 2013	NA	3,222	30,547	6,060	50,851	1,413	446,773	4,334	7,000	411	488	4,768
27 August 2013	NA	162,635	67,616	NA	14,780	15,214	410,768	44,367	55,100	11,611	2,352	102,039
28 August 2013	8,300	31,000	232,921	3,000	2,000	43,109	464,045	28,024	NA	19,227	1,076	168,331
29 August 2013	11,604	39,606	5,087	2,357	10,150	1,100	359,230	11,118	3,497	5,000	632	40,569
1 September 2013	5,970	NA	23,918	12,357	31,019	31,268	15,100	33,920	4,335	9,400	402	29,386
2 September 2013	206,104	21,300	11,287	3,488	22,222	28,966	52,577	14,413	2,985	17,600	580	25,451
3 September 2013	1,104	1,600	17,700	2,357	16,940	231,595	222,500	16,058	6,835	1,048	616	63,856
4 September 2013	9,956	1,000	3,236	NA	5,310	NA	27,965	1,439	1,000	3,120	384	13,770
5 September 2013	2,607	NA	39,152	4,918	11,725	54,663	151,940	23,231	2,220	3,752	224	26,591
8 September 2013	4,861	NA	19,280	1,000	1,480	29,976	43,083	1,696	2,140	44	112	4,019
9 September 2013	3,098	NA	39,798	NA	700	510	154,255	5,666	3,010	4,736	136	5,012
10 September 2013	500	NA	16,829	2,000	25,810	5,164	374,769	14,679	8,558	13,466	1,664	26,048
11 September 2013	2,597	NA	103,043	223	42,050	6,825	11,400	5,630	NA	NA	112	6,920
12 September 2013	NA	8,025	97,405	NA	23,000	6,502	12,890	2,877	1,729	4,975	NA	13,500
15 September 2013	NA	250	28,505	NA	NA	5,894	153,506	3,315	5,000	1,235	116	13,006
16 September 2013	1,568	22,500	24,653	1,774	390	NA	20,000	1,850	3,000	NA	256	15,052
17 September 2013	500	50	78,954	7,186	11,112	NA	94,937	10,780	2,000	4,188	648	19,400
18 September 2013	NA	3,550	55,148	321	9,905	3,161	15,566	3,481	810	3,505	NA	4,853

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
19 September 2013	1,000	50,452	3,513	323	NA	1,452	19,173	96,410	5,000	1,037	568	12,987
22 September 2013	302	213,000	22,056	720	NA	440	44,870	5,700	27,640	1,182	NA	8,801
23 September 2013	3,000	3,100	45,930	NA	28,660	1,000	79,133	1,300	5,165	4,929	NA	6,550
24 September 2013	NA	5,000	22,261	1,552	20,000	18,400	13,135	8,449	NA	491	176	5,239
25 September 2013	182,627	210	42,495	NA	NA	298,045	25,138	1,158	22,749	1,872	136	51,934
26 September 2013	NA	50,000	35,298	NA	3,500	7,000	86,664	110,276	21,904	100	100	393
29 September 2013	NA	NA	33,694	1,000	44,828	6,001	83,303	4,503	3,031	411	NA	11,358
30 September 2013	5,000	NA	44,139	2,000	30,215	18,711	317,013	5,617	59,600	966	240	46,421
1 October 2013	1,029	4,500	63,093	NA	15,450	11,075	23,448	8,559	10,000	1,225	696	66,380
2 October 2013	61	49,400	7,778	NA	100	710	5,000	4,560	31,351	NA	136	172,481
3 October 2013	808	127,961	419	500	NA	469	11,050	700	200	1,903	284	8,085
6 October 2013	NA	NA	11,638	30	NA	28,600	2,940	76,790	NA	2,725	NA	34,092
7 October 2013	NA	1,000	16,678	243	100	1,279,307	18,806	647	1,900	300	116	3,134
8 October 2013	NA	NA	41,823	NA	15,510	NA	30,250	1,184	5,980	2,387	NA	4,738
9 October 2013	NA	NA	9,636	452	15,330	NA	111,000	22,678	2,000	411	894	133,654
10 October 2013	NA	73,500	30,809	NA	NA	NA	135,350	60,035	5,720	32,602	NA	149,220
20 October 2013	NA	36,630	9,938	NA	500	NA	34,794	33,970	11,910	300	152	305
21 October 2013	NA	153	14,300	NA	4,680	43,575	45,034	20,834	27,450	2,366	50	50

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	JABK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
22 October 2013	1,190	447	10,445	NA	4,492	NA	90,826	44,837	1,500	500	176	3,237
23 October 2013	4,000	1,000	19,892	48	7,410	3,002	31,633	2,049	2,000	1,300	NA	10,001
24 October 2013	5,860	NA	13,477	1,431	2,000	NA	56,930	1,249	NA	3,943	752	7,379
27 October 2013	NA	56,781	22,582	300	850	14,229	124,345	34,068	430	89,911	158	3,150
28 October 2013	17,500	NA	57,151	NA	52,040	7,379	7,023	46,200	NA	16,712	2,856	15,632
29 October 2013	8,865	NA	58,358	2,111	38,423	650	13,906	13,618	7,380	1,712	208	59,491
30 October 2013	1,100	NA	71,149	3,603	NA	10,400	107,680	13,718	2,190	4,261	136	19,578
31 October 2013	2,700	2,626	59,170	337	6,500	6,694	125,466	2,462	500	854	133	7,371
3 November 2013	NA	50,000	49,242	6,311	46,520	900	427,836	122,942	6,850	7,500	NA	624
4 November 2013	2,600	44,000	19,003	34	10,186	NA	49,347	180,249	2,500	5,001	456	10,343
5 November 2013	10,700	300	22,269	7,625	39,820	1,086	109,575	20,782	1,500	3,832	360	2,866
6 November 2013	15,180	NA	13,112	NA	2,060	14,118	93,391	57,318	200	1,329	761	36,593
10 November 2013	23,695	220	12,123	58	NA	NA	528,848	99,314	NA	21,743	296	1,353
11 November 2013	2,303	NA	22,843	942	38,997	305,514	512,150	469,828	3,785	32,288	104	6,388
12 November 2013	800	5,240	46,236	16,288	13,050	40,542	5,844,989	1,161,485	13,238	55,499	1,092	7,405
13 November 2013	36,089	32,500	165,599	7,516	18,230	231,550	36,795,395	150,594	34,401	45,796	588	19,450
14 November 2013	2,500	NA	19,868	480	8,048	12,100	1,018,048	215,850	26,674	106,838	288	5,043
17 November 2013	60,000	10,000	31,033	NA	9,552	23,901	153,215	93,090	31,900	3,707	NA	12,519
18 November 2013	1,031,602	10,000	22,188	NA	13,708	15,261	372,607	28,979	12,250	8,472	176	29,260

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
19 November 2013	288,849	122,000	12,055	6,841	16,663	35,812	410,802	58,000	7,923	176,936	NA	32,802
20 November 2013	2,701	4,776	42,753	6,367	9,005	439,662	874,720	80,874	36,142	4,300	1,008	69,621
21 November 2013	10,492	13,950	35,867	NA	37,515	40,895	500,269	66,000	15,700	6,801	834	22,107
24 November 2013	6,020	NA	106,101	1,000	77,060	1,755	605,605	220,615	25,221	74,008	2,626	8,565
25 November 2013	13,000	18,750	32,555	1,562	14,000	35,734	1,010,806	314,119	40,979	266,508	264	7,420
26 November 2013	399	211,359	62,787	123	9,900	30,167	1,071,564	67,333	44,150	406,026	1,336	42,085
27 November 2013	1,000	100,670	20,653	49	65,331	68,394	442,170	6,050	84,240	359,313	136	20,409
28 November 2013	1,804	NA	476,398	50	NA	11,180	421,957	28,668	13,500	125,015	52	12,403
1 December 2013	2,000	NA	48,961	NA	NA	10,180	376,735	22,286	NA	55,274	136	5,685
2 December 2013	1,703	1,650	25,565	200	56,885	62,023	51,940	83,671	3,767	911	968	2,500
3 December 2013	63	NA	124,183	2,170	500	24,916	64,400	31,389	3,000	20,316	392	NA
4 December 2013	2,258	NA	30,720	NA	NA	6,658	64,386	9,495	3,700	12,328	NA	3,843
5 December 2013	1,172	NA	4,962	NA	5,550	5,850	87,247	3,179	51,500	5,967	NA	3,655
8 December 2013	NA	5,341	735	NA	18,000	16,839	303,527	20,881	4,460	4,596	136	2,198
9 December 2013	1,050	1,500	70,314	NA	15,600	15,994	207,004	9,402	2,673	4,002	50	23,390
10 December 2013	NA	3,830	8,340	3,972	30,788	128	20,270	20,861	NA	2,208	NA	4,825
11 December 2013	NA	NA	7,509	300	NA	7,206	30,836	7,563	NA	2,985	NA	8,159

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
17 December 2013	86	100	116,850	NA	22,000	6,000	302,996	211,907	NA	1,407	1,900	10,354
18 December 2013	2,336	9,489	10,584	NA	12,050	21,309	126,212	103,866	NA	100	NA	8,167
19 December 2013	NA	NA	87,338	37,215	55,000	21,828	239,716	39,130	14,633	228,826	136	2,234
22 December 2013	500	NA	368,466	NA	2,510	177,634	250,350	51,000	NA	1,997	372	12,331
23 December 2013	130,760	NA	205,728	586	1,500	827,193	111,819	170,020	2,238	11,094	NA	445,170
24 December 2013	1,200	12,750	131,566	207	4,212	195,760	390,185	124,141	17,541	79,407	11,170	26,989
26 December 2013	572	5,000	151,757	800	6,655	21,529	190,165	34,836	39,625	120,611	100	27,657
29 December 2013	NA	2,485	42,594	NA	2,340	4,476	40,136	15,516	29,113	200	497	22,811
30 December 2013	1,200	15,000	46,301	NA	14,305	2,000	91,237	24,137	38,300	8,174	717	8,277
31 December 2013	212	NA	298,909	1,200	100	74,021	33,500	267,237	134,100	9,004	81,280	76,359
2 January 2014	113	NA	25,566	24,308	5,857	382,264	291,526	19,556	1,016	3,948	NA	41,167
5 January 2014	6,861	100	24,331	1,281	53,853	NA	634,819	18,471	34,050	53,046	NA	24,870
6 January 2014	NA	19,659	94,225	1,411	70,570	100	214,118	38,918	51,500	39,108	136	125,402
8 January 2014	1,113	59,170	44,673	200	5,700	1,979	863,127	56,792	16,000	49,018	200	9,249
9 January 2014	NA	2,850	29,244	1,349	16,000	16,181	326,191	72,434	500	16,047	NA	32,542
12 January 2014	300	NA	14,995	NA	32,500	140,000	54,683	23,520	124,500	1,000	404	15,947
14 January 2014	1,180	600	27,412	3,600	32,337	4,594	769,591	125,428	153,884	30,506	480	3,133

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
15 January 2014	NA	9,954	124,825	5,949	49,241	3,500	303,326	30,941	24,936	19,292	1,958	66,042
16 January 2014	1,311	NA	20,399	1,500	69,781	102	717,042	31,936	1,161	18,229	176	36,614
19 January 2014	NA	250	26,423	NA	24,020	1,830	500,440	46,052	62,843	11,735	1,577	31,905
20 January 2014	1,500	40,380	39,386	6,547	10,800	2,000	880,115	73,063	109,548	10,000	900	53,563
21 January 2014	9,994	117,735	132,335	926	203,194	38,796	1,526,892	76,797	199,628	28,603	350	71,169
22 January 2014	NA	37,000	102,867	2,914	55,950	1,000	1,325,338	81,797	48,955	10,748	2,038	14,033
23 January 2014	54,731	53,100	35,666	5,926	21,411	3,000	1,214,297	274,199	548,484	2,141	908	25,465
26 January 2014	NA	11,314	84,998	NA	32,000	10,000	1,312,843	207,784	192,380	339,038	711	17,235
27 January 2014	168	26,817	50,397	1,368	118,576	5,700	1,413,505	171,127	245,120	14,381	706	62,154
28 January 2014	6,876	96,537	52,584	37	7,000	30,000	1,348,389	428,026	63,304	317,372	136	35,453
29 January 2014	732	9,700	6,675	3,000	5,500	NA	662,825	397,822	37,790	2,385	136	67,670
30 January 2014	6,800	3,074	82,110	2,473	34,100	2,283	1,046,716	148,341	228,310	22,392	131	32,335
2 February 2014	3,688	8,300	30,567	7,400	23,600	1,017,804	1,271,064	93,009	38,195	360,770	176	26,386
3 February 2014	NA	38,541	67,018	1,344	154,458	300,000	1,817,363	32,071	308,678	94,638	128	19,128
4 February 2014	217	71,000	19,342	8,100	25,000	710,570	756,497	362,866	60,091	103,884	NA	3,871
5 February 2014	10,456	3,000	117,700	6,822	NA	500	400,237	31,175	49,230	56,000	NA	1,913
6 February 2014	900	600	9,424	1,367	13,488	NA	1,022,571	41,741	19,600	94,715	120	13,835
9 February 2014	1,272	17,000	37,575	6,490	26,580	17,397	101,481	14,196	3,300	7,367	692	16,254
10 February 2014	2,424	8,612	171,091	NA	46,420	4,259	157,774	42,762	7,850	318,706	416	19,290
11 February 2014	NA	70,000	69,398	443	21,080	57,694	76,770	71,853	NA	56,887	524	22,479
12 February 2014	NA	NA	17,618	NA	3,370	12,219	410,413	131,255	62,350	3,071	207	33,290
13 February 2014	NA	500	10,082	NA	6,680	11,500	406,432	168,439	11,150	21,599	502	19,641
16 February 2014	642	9,900	57,095	141	NA	NA	231,135	57,343	48,850	6,866	NA	27,912

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
17 February 2014	NA	1,247	14,997	NA	991	774	209,269	37,377	16,116	7,670	1,625	38,726
18 February 2014	813	2,714	30,159	500	18,320	152,982	562,861	209,831	13,178	13,762	528	42,103
19 February 2014	2,050	3,682	24,171	1,127	NA	2,475	1,157,187	51,727	24,650	300	796	205,139
20 February 2014	NA	NA	52,575	1,640	25,000	231	390,731	21,949	10,100	7,233	296	365,750
23 February 2014	NA	NA	59,921	557	15,496	86,000	815,256	9,275	20,000	332	44	301,413
24 February 2014	NA	17,302	54,120	20,384	27,243	160,958	1,195,166	109,831	20,300	2,322	176	76,151
25 February 2014	500	NA	68,347	NA	33,400	542	456,792	17,167	5,409	23,456	296	25,187
26 February 2014	1,700	18,771	7,548	482	24,000	NA	916,307	26,088	23,133	2,938	NA	8,227
27 February 2014	11,298	111,888	23,959	1,200	38,782	NA	439,721	56,921	56,500	13,728	500	16,665
2 March 2014	157	45,706	18,600	NA	10,218	500	920,870	129,103	1,000	21,372	432	23,112
3 March 2014	4,922	5,100	44,566	600	40,800	NA	966,651	73,110	NA	32,206	NA	91,667
4 March 2014	200	NA	8,630	12,576	15,100	1,817	388,770	62,651	7,000	1,871	1,018	62,867
5 March 2014	NA	NA	20,470	7,424	NA	NA	126,506	92,883	NA	11,310	715	62,510
6 March 2014	30,915	19,125	15,320	76	NA	3,692	475,960	144,802	NA	11,500	NA	1,475,663
9 March 2014	NA	NA	30,411	3,500	19,550	17,185	326,941	1,030,613	139,000	5,086	524	10,500
10 March 2014	11,100	2,000	18,089	NA	2,000	11,170	278,613	16,823	15,000	414	448	8,600
11 March 2014	2,300	NA	44,912	2,008	6,800	11,000	113,841	480,752	4,357	10,288	2,492	5,084
12 March 2014	500	NA	40,040	NA	NA	3,259	54,290	21,954	10,000	9,144	120	100,433
13 March 2014	NA	NA	39,200	NA	30,529	450,000	507,111	67,496	6,500	8,000	136	110,894
16 March 2014	3,220	NA	22,063	4,064	NA	5,982	41,290	4,015	11,000	7,495	1,496	4,473
17 March 2014	NA	209	110,808	NA	6,021	NA	154,559	18,261	10,000	NA	704	500
18 March 2014	588	NA	86,403	30,000	22,050	NA	85,138	106,291	2,500	550	256	16,796
19 March 2014	NA	3,000	27,858	NA	16,400	325	182,002	25,464	3,965	7,096	106	57,400

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
20 March 2014	7,050	NA	26,808	NA	1,166	1,556	177,781	60,818	16,500	16,438	NA	36,232
23 March 2014	NA	600	7,749	465	4,834	1,086	160,612	31,201	15,328	30,212	NA	83,279
24 March 2014	10,340	NA	28,543	NA	34,741	1,000	229,307	33,447	21,543	889	216	10,826
25 March 2014	3,750	NA	98,965	NA	3,660	NA	101,551	232,980	34,500	332	252	13,353
26 March 2014	NA	9,000	12,285	11,041	NA	500	180,157	NA	6,292	90,164	488	880
27 March 2014	300	NA	7,385	NA	NA	NA	137,485	66,589	NA	8,131	252	NA
30 March 2014	NA	NA	19,057	NA	NA	2,124	32,340	47,260	3,135	5,517	796	6,277
31 March 2014	NA	100	13,150	NA	15,000	178,000	272,677	18,794	29,173	1,078	312	21,697
1 April 2014	467	3,896	55,129	400	7,160	145	90,075	26,941	8,568	632	356	1,500
2 April 2014	NA	NA	23,874	NA	11,500	NA	100,118	24,944	44,091	1,922	136	13,094
3 April 2014	NA	1,000	3,613	5,000	4,129	NA	401,185	6,402	10,050	NA	NA	64,287
6 April 2014	200	NA	20,775	NA	NA	NA	287,501	20,147	37,000	332	528	88,038
7 April 2014	650	NA	10,942	NA	18,100	3,450	519,924	31,277	4,983	NA	504	93,557
8 April 2014	NA	20,518	18,731	NA	5,000	1,722	118,010	19,870	40,000	491	356	150,606
9 April 2014	NA	10,000	11,650	1,300	29,570	150	135,540	20,977	10,000	NA	228	16,550
10 April 2014	2,000	NA	4,300	3,700	1,800	200	180,629	8,428	30,600	NA	NA	NA
13 April 2014	3,467	NA	8,240	NA	13,464	1,000	122,491	5,464	4,445	NA	NA	22,560
14 April 2014	500	2,000	13,340	5,000	NA	1,379	183,815	6,646	9,450	NA	359	4,541
15 April 2014	NA	5,000	29,580	NA	16,050	4,017	87,452	12,072	6,200	2,768	1,924	8,794
16 April 2014	1,000	NA	20,735	2,035	8,618	NA	279,000	13,997	42,100	30,203	186	3,319
17 April 2014	NA	NA	7,164	NA	NA	19,460	95,971	2,680	3,188	6,922	372	35,758
20 April 2014	NA	NA	86,206	2,511	1,000	1,307	34,350	7,523	NA	3,500	100	4,737
21 April 2014	NA	31,000	62,098	NA	1,000	64	139,449	27,169	3,978	12,509	240	32,430

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
22 April 2014	1,508	20,020	43,698	8,555	NA	868	39,294	19,956	50	3,800	120	1,244
23 April 2014	22,200	NA	133,463	NA	66,079	NA	42,079	20,381	13,550	15,251	176	462
24 April 2014	9,300	NA	353,661	10,800	20,964	606	74,869	4,730	5,150	NA	236	11,150
27 April 2014	226	35,039	199,060	36,406	10,000	10,000	25,438	2,720	18,700	4,268	NA	8,856
28 April 2014	4,423	52,000	18,916	NA	9,000	403	14,456	26,390	NA	NA	352	31,995
29 April 2014	97	10,000	229,611	NA	30,500	250	68,880	25,156	23,300	NA	NA	17,396
30 April 2014	5,196	53,716	14,470	318	NA	62,400	76,371	42,172	5,500	2,000	228	72,471
4 May 2014	15,447	67,690	58,586	3,039	3,050	6,811	37,153	14,207	1,000	8,500	2,416	50,100
5 May 2014	NA	NA	13,689	148	9,976	29,736	38,472	97,610	11,000	2,530	536	49,517
6 May 2014	1,991	100	45,313	5,649	10,306	14,789	58,587	62,348	68,095	1,500	116	9,957
7 May 2014	NA	1,983	85,557	NA	82,954	5,100	52,743	8,250	19,785	664	528	6,867
8 May 2014	NA	19,700	31,327	106	500	84,934	25,253	5,670	NA	81,594	112	3,019
11 May 2014	1,100	NA	23,293	NA	13,840	251,311	118,452	2,002	20,431	1,173	NA	2,073
12 May 2014	1,591	30,377	39,046	NA	239	1,000	33,538	6,748	32,730	3,000	1,130	2,764
13 May 2014	1,162	900	31,550	NA	14,050	NA	151,676	3,895	7,000	NA	1,044	6,659
14 May 2014	600	300	34,918	21,441	6,000	1,000	117,428	4,219	17,650	413	2,224	524
15 May 2014	3,000	224	48,086	16,649	95,000	7,500	98,968	1,803	5,500	500	368	11,610
18 May 2014	NA	8,310	24,826	16,671	31,740	NA	123,462	67,600	15,100	5,710	NA	2,413
19 May 2014	NA	15,000	8,087	NA	6,260	217	NA	47,179	9,825	2,571	NA	5,500
20 May 2014	NA	566	23,120	278	26,030	3,912	64,853	15,435	NA	316	240	3,152
21 May 2014	NA	478	36,429	1,294	350	50	40,322	21,598	NA	NA	336	7,660
22 May 2014	566	1,800	48,782	NA	7,320	1,619	117,684	32,693	17,394	9,500	212	20,490
25 May 2014	NA	15,000	38,792	950	620	2,202	57,353	36,733	5,500	11,341	NA	9,013

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
27 May 2014	1,547	NA	15,500	NA	450	NA	58,754	19,030	5,000	NA	312	7,373
28 May 2014	500	NA	36,475	NA	7,500	10,487	193,819	89,652	13,626	NA	176	19,139
29 May 2014	891	400	93,703	5,160	13,642	10,202	423,230	90,410	5,828	612	180	10,315
1 June 2014	500	10	16,350	NA	15,600	NA	209,740	25,567	4,680	8,500	NA	10,935
2 June 2014	558	4,140	5,536	NA	NA	271	359,428	33,506	3,500	2,372	NA	13,561
3 June 2014	1,000	15,068	12,979	285	35,050	42	310,451	35,880	12,890	28,631	600	14,706
4 June 2014	1,517	500	144,570	NA	16,536	NA	218,188	46,759	9,900	NA	212	14,720
5 June 2014	1,630,761	30,100	42,727	1,000	NA	5,388	105,810	16,920	NA	13,121	240	150
8 June 2014	524	7,500	6,168	766	NA	NA	250,812	22,225	7,500	13,045	NA	400
9 June 2014	NA	29,650	12,785	5,454	11,350	NA	512,653	11,542	7,500	3,547	512	4,241
10 June 2014	688	13,350	15,291	NA	500	NA	163,807	20,400	16,000	NA	NA	27,500
11 June 2014	2,000	1,090	35,117	100	4,500	NA	136,259	35,191	NA	1,964	286	29,700
12 June 2014	839	5,000	38,635	507	287	NA	230,524	26,525	2,000	2,942	888	2,073
15 June 2014	4,313	200	24,963	NA	1,000	265	213,450	19,748	14,130	4,173	116	4,000
16 June 2014	500	NA	55,145	183	NA	80,000	56,385	19,243	2,360	5,590	108	6,482
17 June 2014	NA	NA	95,643	NA	NA	NA	891,056	40,201	2,700	1,500	104	1,100
18 June 2014	4,049	2,125	10,692	1,000	10,000	1,611	121,698	263,625	10,180	411	108	NA
19 June 2014	1,000	NA	24,593	2,851	12,973	NA	48,540	5,381	1,640	5,670	NA	NA
22 June 2014	1,566	5,000	37,908	NA	15,000	NA	65,068	48,455	NA	332	176	28,467
23 June 2014	NA	6,695	2,036	100	100	NA	65,518	29,386	522	889	NA	1,170
24 June 2014	NA	7,000	63,752	50	750	653	73,222	51,778	4,160	4,115	NA	6,600
25 June 2014	1,193	NA	27,758	10,127	NA	13,305	33,714	13,947	7,300	12,697	NA	4,277
26 June 2014	1,630	1,243	21,406	NA	NA	400	68,740	9,320	12,200	1,233	135	7,313

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	Nasi	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
29 June 2014	1,000	20,700	5,339	NA	1,000	NA	38,023	3,650	1,000	6,160	NA	100
30 June 2014	NA	NA	13,785	NA	344	20,000	93,531	50,336	4,498	18,326	NA	4,823
1 July 2014	6,850	10,000	11,334	110,833	NA	NA	7,059	2,580	NA	NA	116	9,460
2 July 2014	NA	5,281	5,000	NA	13,456	NA	48,850	22,482	7,420	571	NA	NA
3 July 2014	4,312	NA	8,423	NA	232	100	15,230	3,922	NA	NA	NA	12,797
6 July 2014	NA	17,726	18,442	1,500	518	15,955	4,620	1,610	8,400	571	296	3,000
7 July 2014	NA	50	17,542	NA	NA	1,213	32,152	95,811	3,800	889	304	1,100
8 July 2014	3,000	NA	15,251	NA	NA	NA	80,141	12,145	6,817	8,192	NA	7,500
9 July 2014	NA	15,550	3,530	345	NA	NA	58,873	19,600	7,900	8,938	136	41,346
10 July 2014	567,012	NA	NA	7,529	NA	NA	16,560	2,124	NA	NA	NA	23,550
13 July 2014	NA	643	22,000	4,000	NA	NA	36,500	12,740	2,750	17,496	186	4,600
14 July 2014	NA	NA	21,239	NA	NA	NA	59,900	3,663	14,583	1,000	NA	33,700
15 July 2014	NA	NA	22,000	NA	NA	NA	69,634	17,010	5,200	1,221	1,220	9,313
16 July 2014	NA	NA	29,400	NA	NA	34,250	39,100	46,828	5,500	1,863	NA	150
17 July 2014	925	1,714	25,457	NA	NA	9,000	31,034	17,474	8,300	NA	NA	11,545
20 July 2014	1	NA	21,857	NA	1,000	NA	41,262	53,260	8,360	1,265	296	NA
22 July 2014	NA	12,881	18,870	1,000	809	NA	38,853	10,987	NA	520	NA	1,400
23 July 2014	NA	NA	11,248	NA	100	3,081	78,624	15,000	NA	NA	NA	500
24 July 2014	NA	NA	18,461	NA	NA	NA	75,058	30,016	NA	100	NA	3,277
3 August 2014	NA	NA	5,234	150	NA	52,600	103,064	20,740	NA	51,988	NA	400
4 August 2014	NA	286,102	13,350	419	NA	NA	125,411	38,503	6,037	800	NA	7,473
5 August 2014	NA	43,175	44,593	1,500	NA	15,105	53,772	11,336	10,002	15,336	NA	9,100
6 August 2014	NA	NA	20,371	500	NA	542	128,274	27,320	18,200	4,500	NA	6,000

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
7 August 2014	NA	NA	21,063	4,589	NA	1,629	26,918	6,350	700	911	NA	6,100
10 August 2014	NA	33,623	7,250	2,534	NA	NA	10,200	10,200	1,150	NA	NA	2,000
11 August 2014	NA	35,029	13,568	NA	NA	NA	132,160	6,666	NA	1,700	NA	5,684
12 August 2014	868	884	11,433	7,644	NA	NA	223,897	8,061	NA	2,853	NA	3,141
13 August 2014	1,425	NA	25,555	45	NA	NA	128,770	44,729	NA	23,452	NA	NA
14 August 2014	NA	NA	146	NA	NA	8,000	199,659	49,765	NA	3,198	NA	24,820
17 August 2014	1,189	NA	28,127	21,186	7,366	420	128,606	51,838	2,100	18,030	NA	34,954
18 August 2014	4	8,900	26,951	3,300	NA	NA	220,995	35,510	6,500	4,892	NA	542
19 August 2014	NA	1,083	100,695	NA	390	28	378,192	24,323	6,000	888	NA	9,412
20 August 2014	1,650	NA	49,959	1,641	19,334	NA	143,779	43,311	25,000	411	NA	127
21 August 2014	3,219	NA	10,300	4,953	NA	2,000	26,172	3,472	2,000	NA	NA	9,033
24 August 2014	7,420	NA	54,200	NA	2,000	7,000	140,600	15,089	NA	NA	NA	NA
25 August 2014	383	20,300	13,321	1,760	NA	30,000	75,340	169,254	2,000	18,096	NA	NA
26 August 2014	547	NA	9,549	3,060	800	NA	336,787	20,036	1,000	49,284	NA	244
27 August 2014	1,285	2,000	41,779	18,230	10,000	170	192,072	23,897	19,000	89,403	NA	41,793
28 August 2014	NA	NA	18,789	NA	17,627	NA	50,473	17,235	3,200	10,411	NA	100
31 August 2014	1,000	NA	22,161	NA	32,867	2,886	145,145	6,154	12,700	10,294	NA	754
1 September 2014	3,150	NA	32,603	982	4,000	700	192,850	7,840	5,000	411	NA	8,106
2 September 2014	2,025	NA	37,374	NA	NA	NA	186,689	9,839	3,220	1,142	NA	453
3 September 2014	3,297	NA	34,073	5,000	NA	9,415	112,685	9,278	3,580	1,998	NA	494
4 September 2014	1,060	NA	10,958	NA	NA	2,250	61,103	33,701	2,350	1,995	NA	662
7 September 2014	NA	9,258	21,765	200	NA	300	64,000	16,238	NA	300	NA	10,857
8 September 2014	1,000	NA	38,321	NA	200	4,700	120,500	27,827	3,900	1,344	NA	17,183

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
9 September 2014	2,800	13,064	6,226	500	1,686	11,797	5,500	300	2,500	1,411	NA	4,737
10 September 2014	NA	NA	1,529	1,050	1,500	542	90,963	11,055	2,445	23,528	NA	4,053
11 September 2014	425	NA	15,343	3,200	NA	NA	193,368	2,440	NA	895	NA	734
14 September 2014	NA	NA	29,092	3,762	NA	415	190,230	15,571	1,500	3,965	NA	15,079
15 September 2014	NA	NA	13,338	500	10,000	2,000	65,050	16,300	32,000	14,790	NA	NA
16 September 2014	NA	NA	59,772	NA	2,441	5,531	102,444	13,284	3,340	1,536	NA	NA
17 September 2014	NA	NA	3,930	1,000	41,873	542	136,414	2,813	2,000	5,464	NA	26,000
18 September 2014	NA	NA	36,141	240	100	NA	177,953	65,600	3,000	21,234	NA	NA
21 September 2014	700	4,880	13,906	2,187	11,587	2,120	279,302	1,458	NA	21,126	NA	7,950
22 September 2014	500	NA	11,676	1,200	NA	NA	240,855	9,684	500	21,723	NA	20,905
23 September 2014	NA	NA	1,993	NA	100	907,770	268,992	49,053	NA	17,778	NA	8,435
24 September 2014	248	7,307	42,703	112	NA	792	303,480	22,589	2,122	173,422	NA	4,002
25 September 2014	100	2,900	17,507	NA	10,100	1,000	13,553	3,857	108,293	122,661	NA	16,766
28 September 2014	NA	800	6,682	10,000	745	1,600	23,345	419,518	NA	5,024,569	NA	150
29 September 2014	NA	NA	23,241	NA	3,015	55	28,636	1,666	34,307	661	NA	5,439

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
30 September 2014	500	NA	141	6,829	23,744	3,000	46,422	5,839	8,500	3,705	NA	33
1 October 2014	150	NA	55,216	NA	NA	NA	7,634	754	15,800	191,506	NA	7,293
2 October 2014	NA	7,000	600	NA	20,000	NA	5,513	10,120	1,000	60,300	NA	18,000
8 October 2014	898	26,700	13,709	49,607	NA	1,086	50,666	63,030	NA	6,000	NA	16,958
9 October 2014	500	2,000	8,462	150	NA	NA	25,718	5,137	600	135,000	NA	4,462
12 October 2014	2,135	7,964	10,450	6,400	1,800	NA	26,621	11,645	NA	136,963	NA	20,021
13 October 2014	NA	NA	28,591	2,738	71,300	NA	18,571	3,300	15,000	3,306	NA	10,430
14 October 2014	NA	NA	15,247	4,234	4,500	NA	178,299	12,874	NA	3,062	NA	41,634
15 October 2014	5,784	NA	2,176	45,898	NA	393	37,650	18,323	NA	3,029,079	NA	309,995
19 October 2014	1,000	NA	49,689	367	50	NA	34,385	4,918	115,710	2,898	NA	313,629
20 October 2014	5,221	500	128,932	NA	1,100	145	18,253	28,255	14,680	5,000	NA	8,300
21 October 2014	18,996	NA	25,174	400	NA	245,074	74,379	8,162	2,250	6,705	NA	11,022
22 October 2014	100	37,000	16,591	992	NA	NA	38,628	15,689	5,000	27,411	NA	834
23 October 2014	1,000	100	11,230	NA	10,000	20,378	2,500	6,893	1,100	NA	NA	5,177
26 October 2014	2,750	NA	52,000	NA	NA	NA	22,396	46,485	5,000	10,800	NA	NA
27 October 2014	1,600	64,781	38,428	1,000	NA	NA	29,140	27,973	NA	22,834	NA	524
28 October 2014	500	92,101	11,702	NA	956	759	45,752	14,539	6,500	3,000	NA	5,925
29 October 2014	2,500	8,950	67,866	2,199	NA	NA	17,932	17,913	2,000	3,469	NA	1,000
30 October 2014	500	1,000	13,011	1,977	40,046	NA	17,957	19,894	NA	3,132	NA	4,862
2 November 2014	500	5,500	84,534	30,400	NA	NA	215,715	800	18,200	475,000	500	12,907
3 November 2014	NA	NA	10,064	NA	NA	NA	53,910	6,609	8,961	1,261	NA	8,084
4 November 2014	NA	NA	2,854	NA	NA	1,000	53,967	25,044	5,000	2,443	957	3,337

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
5 November 2014	NA	680	5,485	1,600	NA	NA	281,036	49,433	5,950	1,707,118	1,000	15,065
6 November 2014	NA	40,000	7,452	27,982	NA	NA	181,440	260,246	NA	5,550	NA	7,607
9 November 2014	700	NA	2,275	565	NA	55,430	68,765	64,022	24,000	5	NA	1,446
10 November 2014	NA	NA	9,052	3,694	NA	7,525	98,290	28,801	17,510	3,468	NA	734
11 November 2014	1,512	4,200	25,847	NA	10,000	NA	20,010	209,521	NA	1,139	NA	7,500
12 November 2014	7,525	100	6,000	4,473	10,904	2,066	58,203	2,398	NA	2,928	NA	4,500
13 November 2014	NA	103,237	17,431	417	NA	NA	8,338	4,965	NA	NA	NA	23,500
16 November 2014	283	1,700	166	NA	1,840	80	43,548	6,727	NA	NA	NA	3,743
17 November 2014	1,000	21,405	14,987	NA	5,000	NA	1,000	5,063	NA	2,911	NA	8,259
18 November 2014	NA	NA	19,729	640	NA	NA	9,046	4,161	500	1,000	NA	5,124
19 November 2014	500	9,100	40,993	NA	1,000	194	61,926	693	1,000	NA	NA	30,000
20 November 2014	1,000	6,686	5,170	NA	11,726	15,177	11,410	4,918	NA	344	512	10,600
23 November 2014	1,000	NA	43,100	398	50,000	134	7,604	5,218	NA	1,999	NA	1,373
24 November 2014	NA	NA	34,350	23,040	NA	11,495	NA	5,843	NA	11,000	NA	NA
25 November 2014	500	NA	2,155	10,700	47,500	2,272	3,500	5,512	2,792	316	NA	NA
26 November	500	NA	3,157	500	43,269	NA	25,989	9,546	NA	NA	NA	NA

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
2014												
27 November 2014	NA	1,000,100	74,086	106	12,000	50	46,146	13,097	200	150,690	NA	22,601
30 November 2014	500	600	4,299,583	NA	98,000	15,876	14,500	14,350	3,000	8,700	NA	1,103
1 December 2014	500	NA	1,209	10,750	5,353	100	9,346	10,170	9,300	5,411	NA	1,988
2 December 2014	7,000	NA	10,451	NA	1,660	500	10,308	2,812	NA	411	156,483	NA
3 December 2014	11,718	NA	2,012	NA	20,000	NA	20,000	9,581	NA	4,626	NA	49,013
4 December 2014	NA	NA	13,881	1,611	18,117	1,124	3,760	32,593	NA	10,000	NA	16,075
7 December 2014	NA	61,692	42,628	106	NA	6,000	10,046	749	NA	571	NA	34,825
8 December 2014	500	NA	1,705,012	NA	NA	NA	36,243	2,371	NA	380	NA	8,200
9 December 2014	500	NA	42	2,825	NA	8,000	5,900	28,900	9,950	4,615	NA	5,225
10 December 2014	NA	37,309	69,047	NA	NA	NA	192,902	17,615	11,325	17,300	NA	6,600
11 December 2014	500	3,084	32,294	NA	NA	6,081	32,776	3,552	52,262	507	NA	NA
14 December 2014	500	3,200	30,127	NA	NA	188,000	22,172	23,907	4,850	854	2,990	4,600
15 December 2014	NA	NA	52,992	19,602	NA	529	12,935	61,248	3,000	1,560,471	336	42,597
16 December 2014	NA	11,559	6,425	NA	NA	NA	75,765	14,405	NA	8,569	388	1,045
17 December 2014	5,000	30,157	4,010	NA	1,000	NA	77,115	5,417	3,500	5,738	284	152,185
18 December 2014	NA	NA	8,581	106	NA	NA	87,848	1,325	200	411	1,960	400,550
21 December	NA	1,000	8,490	NA	1,100	NA	29,040	55,034	5,370	6,702	9,233	511,725

al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
2014												
22 December 2014	NA	4,600	117,060	2,999	50	3,917	159,209	39,167	4,570	946	324	8,534
23 December 2014	880	NA	8,616	200	1,900	3,039	152,981	2,500	2,800	5,693	1,058	15,617
24 December 2014	500	2,944	172,547	2,735	NA	NA	68,062	30,329	41,424	1,589	100	8,801
28 December 2014	NA	31,595	1,922	1,000	NA	221	32,230	1,935	NA	11,427	628	250,631
29 December 2014	500	11,475	11,169	NA	2,000	2,531	68,822	12,142	NA	56,219	680	15,740
30 December 2014	NA	10,100	374,600	NA	3,000	NA	10,170	25,368	89,739	25,510	692	292,689
31 December 2014	NA	54,100	132,845	150	8,871	2,000	242,750	58,744	104,500	56,301	1,128	200,277

## **Appendix (D): return series**

Appendix D: show a sample of most 12 effective companies in the market from 1 January 2011 to 31 December 2014. The data in Table is compatible with trading days in Al-Quds index. (NA) notation offsets the value of return if the stock was not traded in the previous day. The value of return was calculated by equation (4.2) and rounded to 4 digits.

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
02 January 2011	0.0000	0.0455	0.0000	NA	-0.0123	-0.0126	0.0247	0.0000	0.0382	0.0000	0.0230	NA
03 January 2011	-0.0225	0.0000	0.0059	NA	-0.0124	0.0000	0.0161	0.0019	0.0368	0.0000	-0.0230	NA
04 January 2011	-0.0114	0.0220	0.0203	-0.0392	0.0124	0.0250	-0.0080	0.0057	0.0000	-0.0142	0.0230	NA
05 January 2011	0.0339	0.0000	0.0000	0.0282	0.0000	0.0000	0.0080	0.0056	0.0120	0.0000	0.0445	NA
06 January 2011	-0.0112	0.0000	0.0029	-0.0282	-0.0124	0.0123	0.0000	0.0093	-0.0120	0.0000	-0.0220	NA
09 January 2011	0.0222	-0.0220	0.0000	0.0282	-0.0253	0.0000	-0.0161	0.0019	0.0000	0.0000	-0.0112	NA
10 January 2011	0.0000	0.0000	0.0057	-0.0282	0.0127	-0.0247	0.0000	-0.0019	0.0000	0.0282	0.0112	-0.0073
11 January 2011	-0.0222	0.0000	0.0000	NA	-0.0127	0.0000	0.0000	-0.0019	0.0120	-0.0140	-0.0112	0.0146
12 January 2011	0.0112	NA	0.0057	NA	-0.0392	0.0000	0.0081	0.0111	-0.0120	-0.0142	-0.0227	0.0144
13 January 2011	0.0110	0.0220	-0.0028	0.0029	0.0263	-0.0126	-0.0163	0.0000	-0.0121	0.0142	0.0339	-0.0072
16 January 2011	-0.0110	0.0000	0.0000	0.0000	0.0000	-0.0127	0.0082	0.0091	0.0121	-0.0142	0.0435	0.0000
17 January 2011	0.0000	-0.0220	0.0000	0.0000	0.0000	0.0127	-0.0082	0.0036	-0.0121	0.0000	0.0211	-0.0072
18 January 2011	-0.0112	0.0220	-0.0085	-0.0029	0.0000	0.0000	0.0000	-0.0054	0.0000	-0.0144	0.0000	-0.0146
19 January 2011	0.0112	-0.0445	0.0114	NA	0.0382	0.0250	0.0000	0.0000	0.0000	0.0000	0.0104	0.0000
20 January 2011	NA	0.0000	-0.0028	NA	0.0124	0.0364	0.0082	0.0000	-0.0123	0.0144	0.0305	0.0073
23 January 2011	0.0000	0.0225	0.0000	NA	-0.0377	0.0235	0.0081	0.0000	0.0244	0.0000	0.0000	-0.0073

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
24 January 2011	-0.0112	-0.0455	0.0028	NA	0.0127	0.0116	-0.0081	-0.0073	-0.0121	-0.0144	0.0198	0.0000
25 January 2011	-0.0113	0.0230	0.0028	-0.0379	-0.0387	-0.0116	-0.0164	-0.0018	0.0241	0.0000	NA	0.0000
26 January 2011	-0.0114	0.0000	-0.0085	0.0350	0.0000	0.0000	0.0000	-0.0037	NA	-0.0146	-0.0198	-0.0148
27 January 2011	0.0114	-0.0465	-0.0028	NA	-0.0132	-0.0235	-0.0083	-0.0056	-0.0364	NA	-0.0513	-0.0075
30 January 2011	0.0225	-0.0488	-0.0260	NA	-0.0408	0.0000	-0.0253	-0.0187	-0.0250	-0.0148	-0.0430	-0.0305
31 January 2011	-0.0225	0.0247	0.0087	-0.0261	0.0274	-0.0120	0.0085	0.0000	0.0250	0.0438	0.0109	NA
01 February 2011	0.0000	0.0241	0.0087	-0.0238	-0.0414	0.0471	0.0084	-0.0076	0.0244	-0.0438	0.0108	0.0154
02 February 2011	0.0000	0.0000	-0.0058	0.0442	0.0278	0.0227	-0.0084	0.0095	0.0120	0.0148	0.0421	0.0000
03 February 2011	-0.0114	0.0000	0.0115	0.0057	0.0000	-0.0113	-0.0171	0.0000	0.0000	-0.0148	0.0204	0.0076
06 February 2011	0.0227	0.0000	-0.0231	0.0000	-0.0420	0.0000	0.0086	0.0000	-0.0120	0.0000	0.0000	-0.0153
07 February 2011	0.0000	0.0465	0.0087	NA	0.0142	-0.0465	0.0085	0.0000	0.0000	0.0000	-0.0308	0.0153
08 February 2011	0.0000	0.0225	0.0000	NA	-0.0142	0.0351	-0.0085	0.0113	0.0000	0.0148	0.0104	-0.0153
09 February 2011	-0.0113	-0.0455	-0.0146	-0.0409	0.0000	-0.0233	-0.0172	-0.0131	-0.0494	-0.0299	0.0103	0.0000
10 February 2011	-0.0230	NA	-0.0148	0.0467	-0.0290	0.0000	0.0000	0.0131	-0.0127	-0.0465	0.0000	-0.0077
13 February 2011	NA	NA	0.0000	NA	0.0000	NA	0.0087	-0.0113	0.0253	0.0465	-0.0417	0.0077
14 February 2011	0.0000	0.0000	0.0148	0.0473	0.0290	-0.0238	-0.0087	0.0075	-0.0126	0.0299	-0.0107	0.0000
16 February 2011	-0.0117	-0.0235	-0.0059	NA	0.0000	0.0238	0.0000	-0.0075	-0.0127	-0.0451	0.0421	-0.0155
17 February 2011	-0.0118	-0.0488	-0.0089	-0.0360	-0.0438	0.0000	0.0000	0.0000	0.0000	0.0000	0.0204	0.0000
20 February 2011	-0.0120	-0.0253	0.0060	-0.0432	-0.0458	-0.0482	-0.0087	-0.0095	-0.0260	0.0000	NA	-0.0078
21 February 2011	NA	-0.0260	-0.0119	0.0000	0.0458	0.0244	-0.0267	0.0076	-0.0132	NA	-0.0412	-0.0239
22 February 2011	0.0000	0.0000	0.0060	0.0175	0.0438	0.0471	-0.0090	-0.0019	0.0392	0.0000	-0.0321	0.0473

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
23 February 2011	NA	0.0000	0.0000	-0.0029	-0.0144	NA	0.0180	0.0000	0.0377	-0.0155	0.0321	0.0000
24 February 2011	0.0000	0.0260	-0.0030	NA	-0.0445	-0.0233	0.0000	-0.0057	0.0482	-0.0157	-0.0213	0.0000
27 February 2011	0.0000	-0.0260	0.0030	0.0000	-0.0465	0.0000	0.0089	0.0019	0.0117	0.0000	-0.0108	0.0000
28 February 2011	-0.0368	-0.0267	0.0030	-0.0029	-0.0488	0.0000	-0.0179	-0.0019	-0.0355	0.0157	0.0108	-0.0077
01 March 2011	-0.0382	0.0267	0.0000	NA	0.0000	0.0233	0.0090	0.0000	0.0471	0.0458	0.0000	-0.0156
02 March 2011	0.0000	-0.0267	-0.0060	0.0173	0.0488	-0.0116	0.0000	-0.0019	0.0114	-0.0458	0.0000	0.0000
03 March 2011	0.0256	-0.0274	-0.0030	-0.0290	0.0000	0.0000	0.0000	0.0019	-0.0230	0.0308	0.0000	-0.0079
06 March 2011	-0.0127	-0.0282	0.0060	0.0146	0.0157	0.0000	0.0000	0.0000	0.0116	0.0445	0.0000	0.0000
07 March 2011	0.0000	0.0282	0.0000	-0.0146	-0.0480	-0.0117	0.0000	0.0000	0.0000	0.0144	-0.0108	0.0157
08 March 2011	NA	-0.0282	0.0000	0.0000	0.0163	0.0000	0.0089	0.0000	-0.0116	-0.0144	-0.0220	-0.0237
09 March 2011	0.0000	0.0000	0.0148	0.0146	-0.0328	0.0000	-0.0089	0.0038	0.0000	0.0286	0.0435	0.0000
10 March 2011	0.0000	0.0282	-0.0089	0.0000	0.0000	NA	0.0351	0.0000	0.0000	-0.0142	-0.0107	0.0159
13 March 2011	-0.0129	-0.0282	0.0000	-0.0146	-0.0513	0.0000	0.0000	0.0057	0.0455	0.0000	-0.0108	-0.0079
14 March 2011	0.0256	0.0282	-0.0030	0.0000	0.0345	0.0117	0.0000	0.0000	0.0435	0.0000	0.0321	-0.0080
15 March 2011	0.0126	0.0274	-0.0030	NA	0.0000	-0.0117	-0.0087	0.0000	0.0211	0.0000	-0.0213	0.0000
16 March 2011	-0.0126	0.0000	0.0060	0.0000	0.0168	0.0000	0.0172	0.0000	0.0104	0.0000	-0.0108	0.0000
17 March 2011	0.0000	0.0267	0.0030	0.0404	0.0328	0.0000	0.0085	0.0113	0.0204	-0.0144	0.0215	0.0080
20 March 2011	0.0250	0.0260	-0.0059	0.0388	0.0000	0.0000	0.0000	-0.0019	0.0101	0.0426	-0.0107	0.0000
21 March 2011	-0.0124	0.0000	0.0059	NA	0.0000	-0.0118	0.0168	-0.0056	-0.0101	0.0274	0.0000	0.0079
22 March 2011	0.0000	0.0000	0.0118	0.0000	0.0160	-0.0120	-0.0168	0.0075	0.0000	-0.0136	0.0000	-0.0159
23 March 2011	0.0124	-0.0260	0.0231	0.0000	0.0465	0.0120	-0.0171	0.0074	-0.0204	0.0136	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
24 March 2011	0.0000	0.0000	-0.0057	-0.0082	-0.0153	0.0118	0.0000	-0.0037	0.0000	0.0000	0.0000	0.0000
27 March 2011	0.0000	-0.0267	-0.0058	0.0163	0.0000	NA	0.0000	0.0000	-0.0208	-0.0136	0.0000	0.0000
28 March 2011	-0.0124	0.0000	0.0058	NA	-0.0473	0.0117	-0.0087	-0.0019	-0.0106	-0.0138	0.0000	0.0000
29 March 2011	0.0000	0.0000	-0.0029	NA	0.0160	-0.0117	0.0172	0.0037	0.0314	0.0274	0.0000	0.0080
30 March 2011	0.0000	-0.0274	-0.0058	-0.0054	-0.0160	0.0000	-0.0086	0.0019	0.0103	-0.0274	0.0107	-0.0080
31 March 2011	0.0000	-0.0282	-0.0058	0.0000	-0.0328	-0.0118	-0.0087	NA	-0.0206	0.0274	-0.0215	0.0000
03 April 2011	0.0247	0.0000	-0.0088	-0.0054	0.0328	-0.0241	0.0087	-0.0513	0.0104	-0.0136	0.0000	0.0000
04 April 2011	-0.0247	0.0282	0.0029	0.0054	0.0317	0.0359	0.0255	-0.0157	-0.0104	0.0000	-0.0445	0.0080
05 April 2011	0.0000	0.0274	0.0058	-0.0192	0.0155	0.0000	0.0000	-0.0020	0.0206	0.0000	0.0445	-0.0160
06 April 2011	0.0488	0.0000	0.0058	NA	0.0153	0.0117	0.0000	-0.0020	-0.0206	0.0403	NA	0.0000
07 April 2011	0.0465	0.0000	0.0000	-0.0055	-0.0308	0.0116	0.0000	-0.0020	0.0000	0.0387	-0.0332	-0.0081
10 April 2011	0.0000	0.0267	0.0000	0.0220	0.0000	-0.0116	-0.0084	-0.0040	0.0104	0.0373	0.0440	0.0081
11 April 2011	0.0000	0.0000	-0.0029	-0.0027	-0.0317	0.0000	0.0084	0.0040	-0.0314	0.0241	NA	0.0000
12 April 2011	0.0335	-0.0267	0.0000	0.0081	0.0160	0.0116	0.0412	-0.0040	0.0211	0.0000	-0.0328	0.0473
13 April 2011	0.0109	0.0000	-0.0029	-0.0081	-0.0323	0.0000	0.0239	0.0080	-0.0105	0.0000	0.0000	-0.0473
14 April 2011	-0.0220	0.0267	0.0029	-0.0137	0.0000	0.0000	-0.0159	-0.0060	0.0208	-0.0120	0.0000	0.0160
17 April 2011	0.0000	0.0000	-0.0029	0.0192	0.0000	0.0114	0.0080	-0.0020	-0.0314	-0.0121	-0.0225	0.0000
18 April 2011	0.0220	NA	0.0029	0.0000	0.0323	-0.0114	0.0000	0.0000	0.0211	-0.0123	0.0225	0.0000
19 April 2011	-0.0445	-0.0267	0.0029	NA	0.0313	0.0000	0.0079	0.0060	0.0104	0.0000	0.0328	-0.0080
20 April 2011	0.0113	0.0267	0.0058	NA	-0.0313	0.0000	0.0000	0.0000	-0.0104	0.0123	-0.0328	0.0080
21 April 2011	0.0112	0.0000	0.0086	-0.0109	0.0157	0.0227	0.0000	0.0000	0.0000	-0.0123	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	BNT	WASSEL	WATANIYA
24 April 2011	-0.0225	0.0000	0.0057	0.0109	0.0000	0.0222	0.0233	-0.0060	-0.0105	0.0123	NA	-0.0080
25 April 2011	0.0113	0.0000	-0.0057	0.0027	-0.0317	-0.0222	0.0077	0.0000	-0.0321	NA	-0.0112	0.0000
26 April 2011	0.0000	0.0000	0.0029	0.0027	0.0160	-0.0113	0.0000	-0.0020	NA	-0.0123	0.0000	0.0000
27 April 2011	NA	-0.0267	0.0253	0.0027	0.0000	0.0000	-0.0154	0.0020	-0.0445	-0.0124	-0.0227	0.0000
28 April 2011	0.0000	NA	0.0247	-0.0054	-0.0323	0.0000	0.0230	-0.0020	0.0000	0.0000	0.0339	0.0159
02 May 2011	-0.0113	0.0267	-0.2037	NA	0.0000	-0.0114	-0.0153	0.0020	-0.0230	0.0000	0.0000	-0.0159
03 May 2011	0.0000	-0.0267	0.0295	-0.1205	-0.0165	0.0000	0.0000	0.0139	0.0116	0.0124	0.0000	-0.0080
04 May 2011	0.0000	0.0000	0.0160	0.0330	NA	0.0114	-0.0077	0.0000	0.0000	-0.0124	0.0000	0.0000
05 May 2011	-0.0114	0.0000	-0.0160	-0.0030	0.0165	0.0000	-0.0078	-0.0040	-0.0233	0.0000	0.0000	0.0000
08 May 2011	0.0000	-0.0274	-0.0097	NA	NA	-0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
09 May 2011	-0.0116	0.0274	-0.0065	NA	-0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0455	-0.0081
10 May 2011	NA	-0.0274	0.0000	NA	-0.0345	-0.0116	0.0000	-0.0020	-0.0238	0.0000	0.0230	0.0081
11 May 2011	-0.0117	0.0000	0.0000	-0.0240	0.0000	0.0116	-0.0157	-0.0080	0.0000	0.0124	0.0000	0.0000
12 May 2011	0.0233	0.0000	0.0098	NA	-0.0357	0.0000	0.0157	0.0060	0.0000	0.0000	-0.0114	0.0000
15 May 2011	-0.0351	0.0000	-0.0098	0.0000	-0.0183	-0.0116	0.0000	-0.0040	0.0000	0.0123	-0.0351	0.0000
16 May 2011	-0.0120	0.0000	0.0033	0.0000	0.0364	NA	NA	0.0020	-0.0121	-0.0247	0.0000	0.0000
17 May 2011	NA	-0.0282	0.0033	0.0060	0.0351	0.0116	-0.0480	-0.0100	0.0121	0.0000	0.0000	0.0000
18 May 2011	0.0000	0.0282	0.0033	0.0000	-0.0351	0.0000	-0.0165	0.0060	-0.0121	0.0124	0.0000	-0.0081
19 May 2011	0.0120	0.0274	0.0032	-0.0060	-0.0180	-0.0116	0.0083	0.0000	-0.0123	-0.0124	0.0000	0.0000
22 May 2011	NA	-0.0274	-0.0032	0.0150	-0.0183	0.0000	0.0082	0.0020	0.0000	0.0000	0.0465	-0.0082
23 May 2011	-0.0120	0.0000	0.0032	-0.0150	-0.0187	0.0000	-0.0165	0.0080	0.0482	0.0000	-0.0114	-0.0082

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
24 May 2011	NA	0.0000	0.0000	0.0060	0.0000	0.0116	0.0000	-0.0020	0.0460	NA	NA	0.0245
25 May 2011	0.0120	0.0000	-0.0032	0.0000	0.0000	-0.0116	0.0083	0.0000	0.0112	0.0000	-0.0351	-0.0163
26 May 2011	-0.0120	-0.0282	-0.0065	0.0000	0.0000	0.0230	-0.0083	0.0000	-0.0225	0.0000	0.0118	0.0000
29 May 2011	0.0000	0.0000	0.0033	NA	0.0370	-0.0114	0.0083	0.0059	0.0000	0.0000	0.0000	0.0163
30 May 2011	-0.0121	0.0000	0.0000	NA	-0.0183	-0.0116	0.0000	0.0020	-0.0114	NA	0.0000	-0.0163
31 May 2011	0.0121	0.0282	-0.0065	NA	-0.0187	0.0116	0.0000	0.0329	0.0114	0.0000	0.0000	-0.0082
01 June 2011	NA	0.0000	0.0033	-0.0030	0.0000	0.0114	-0.0083	-0.0096	0.0335	0.0000	NA	0.0082
02 June 2011	0.0120	NA	0.0130	NA	0.0370	0.0113	0.0247	0.0000	-0.0110	-0.0126	0.0000	0.0000
05 June 2011	-0.0120	-0.0282	-0.0097	0.0000	0.0180	-0.0113	0.0000	0.0000	0.0000	0.0126	0.0000	0.0000
06 June 2011	0.0000	0.0282	0.0000	NA	-0.0180	0.0000	0.0000	0.0038	NA	-0.0253	-0.0118	-0.0082
07 June 2011	0.0000	0.0000	-0.0033	NA	0.0180	NA	0.0000	0.0019	0.0000	-0.0129	0.0000	-0.0083
08 June 2011	0.0000	0.0000	0.0033	-0.0122	-0.0180	NA	-0.0082	0.0057	0.0000	0.0256	0.0000	0.0083
09 June 2011	0.0000	-0.0282	-0.0065	0.0091	-0.0370	0.0225	-0.0082	0.0482	0.0000	0.0000	0.0118	-0.0083
12 June 2011	0.0000	0.0000	0.0033	0.0000	NA	-0.0225	0.0082	-0.0407	-0.0225	0.0000	-0.0118	0.0083
13 June 2011	0.0000	NA	-0.0033	NA	0.0187	0.0225	0.0000	0.0019	0.0000	0.0000	0.0118	0.0000
14 June 2011	0.0000	0.0000	0.0033	0.0000	-0.0187	0.0000	0.0082	-0.0038	-0.0114	NA	NA	-0.0083
15 June 2011	0.0000	0.0282	-0.0033	-0.0091	NA	-0.0339	0.0081	-0.0095	0.0000	0.0000	-0.0118	-0.0084
16 June 2011	0.0000	0.0000	0.0000	0.0091	0.0000	0.0227	0.0000	0.0019	NA	-0.0127	0.0000	0.0084
19 June 2011	0.0000	0.0000	0.0000	-0.0091	NA	0.0000	-0.0163	0.0000	0.0000	0.0127	0.0351	0.0000
20 June 2011	0.0120	NA	-0.0066	-0.0061	0.0000	0.0000	-0.0165	0.0019	-0.0116	NA	-0.0351	-0.0168
21 June 2011	-0.0120	-0.0282	0.0033	0.0031	-0.0385	0.0000	0.0000	-0.0038	-0.0117	NA	-0.0241	0.0168

Al-Quds trading date	AIB	AIG	BOP	BPC	<b>GCOM</b>	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
22 June 2011	0.0000	0.0000	0.0000	-0.0031	0.0000	0.0112	0.0000	0.0114	-0.0118	-0.0387	0.0000	-0.0084
23 June 2011	-0.0121	0.0000	0.0000	0.0031	0.0194	0.0000	0.0000	-0.0095	-0.0120	0.0387	0.0000	0.0000
26 June 2011	0.0121	NA	0.0000	-0.0092	-0.0392	-0.0112	-0.0168	0.0095	0.0000	0.0000	-0.0123	0.0000
27 June 2011	-0.0121	-0.0290	-0.0132	0.0031	0.0392	0.0000	0.0000	-0.0038	0.0238	0.0000	NA	NA
28 June 2011	0.0000	0.0290	0.0066	-0.0031	NA	0.0112	0.0000	0.0038	-0.0238	0.0000	0.0123	0.0084
30 June 2011	-0.0123	-0.0290	0.0000	0.0214	0.0000	-0.0112	-0.0171	-0.0133	0.0000	NA	-0.0123	-0.0253
03 July 2011	0.0244	0.0000	-0.0033	-0.0308	0.0190	NA	0.0171	-0.0058	0.0120	0.0000	0.0123	0.0418
04 July 2011	-0.0121	0.0000	0.0000	NA	-0.0190	-0.0113	-0.0085	0.0038	0.0000	-0.0256	0.0000	0.0000
05 July 2011	0.0000	0.0000	0.0099	0.0308	-0.0194	0.0000	0.0000	0.0019	-0.0120	0.0129	0.0000	0.0082
06 July 2011	NA	-0.0299	0.0000	NA	0.0000	0.0000	0.0000	0.0133	0.0000	-0.0129	0.0000	-0.0247
07 July 2011	-0.0123	0.0000	0.0033	-0.0308	0.0385	0.0113	0.0085	0.0094	0.0120	-0.0263	0.0000	0.0165
10 July 2011	0.0000	-0.0308	0.0033	0.0308	-0.0385	0.0112	-0.0085	-0.0075	-0.0120	0.0132	0.0000	0.0000
11 July 2011	NA	0.0308	-0.0033	NA	NA	0.0000	0.0085	-0.0076	0.0000	-0.0132	NA	0.0082
12 July 2011	0.0123	NA	-0.0066	0.0000	0.0000	0.0000	0.0000	0.0057	-0.0121	NA	-0.0123	-0.0082
13 July 2011	-0.0123	-0.0308	0.0066	NA	0.0000	0.0000	-0.0085	0.0000	0.0121	0.0000	0.0123	0.0000
14 July 2011	0.0482	NA	-0.0033	-0.0308	-0.0198	0.0220	0.0085	0.0000	-0.0121	0.0263	0.0000	0.0000
17 July 2011	0.0117	0.0308	0.0033	0.0000	-0.0202	-0.0220	0.0084	0.0000	0.0121	0.0256	0.0000	0.0000
18 July 2011	-0.0117	NA	-0.0066	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0127	0.0000	0.0000
19 July 2011	-0.0238	-0.0308	0.0066	0.0000	-0.0417	0.0000	-0.0169	0.0019	0.0000	0.0127	0.0000	0.0000
20 July 2011	0.0000	NA	-0.0033	0.0000	0.0211	NA	0.0000	-0.0019	0.0000	-0.0256	0.0000	0.0000
21 July 2011	-0.0121	0.0308	0.0033	0.0000	0.0000	0.0000	-0.0086	-0.0019	-0.0121	-0.0131	-0.0247	0.0000
Al-Quds trading date	AIB	AIG	BOP	BPC	WOD9	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
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24 July 2011	NA	0.0000	0.0000	NA	0.0000	0.0000	0.0000	0.0019	0.0000	0.0000	0.0247	0.0000
25 July 2011	NA	NA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0121	0.0000	0.0000	0.0000
26 July 2011	-0.0123	NA	-0.0099	0.0000	NA	0.0000	0.0000	0.0056	-0.0121	0.0000	-0.0123	0.0000
27 July 2011	0.0244	-0.0308	0.0099	0.0000	0.0000	0.0000	0.0086	-0.0019	0.0000	0.0000	0.0000	0.0000
28 July 2011	-0.0244	0.0000	-0.0066	NA	0.0000	-0.0225	-0.0172	0.0000	0.0000	-0.0267	0.0000	0.0000
31 July 2011	0.0000	NA	0.0000	NA	-0.0211	0.0225	0.0000	-0.0038	0.0000	0.0000	0.0000	0.0000
01 August 2011	-0.0124	NA	0.0000	NA	0.0417	-0.0112	-0.0087	0.0000	0.0000	0.0134	0.0000	0.0000
02 August 2011	0.0368	NA	-0.0033	NA	-0.0206	0.0000	0.0174	0.0000	0.0000	-0.0270	NA	0.0000
03 August 2011	NA	NA	0.0000	-0.0126	-0.0211	0.0000	-0.0087	-0.0019	NA	0.0270	0.0123	0.0000
04 August 2011	-0.0368	0.0000	-0.0066	0.0126	0.0417	0.0112	0.0000	0.0019	0.0000	0.0000	-0.0123	0.0000
07 August 2011	-0.0126	0.0000	0.0000	NA	NA	-0.0225	-0.0175	-0.0095	-0.0247	0.0000	0.0244	-0.0165
08 August 2011	0.0126	-0.0317	0.0000	NA	-0.0417	0.0000	0.0000	0.0095	-0.0126	-0.0134	-0.0494	0.0165
09 August 2011	0.0247	0.0000	-0.0067	NA	0.0000	0.0000	0.0000	-0.0057	0.0126	NA	NA	0.0000
10 August 2011	-0.0247	0.0000	0.0067	-0.0157	-0.0215	0.0113	0.0000	-0.0019	0.0000	0.0134	NA	0.0000
11 August 2011	NA	-0.0328	0.0000	NA	0.0215	NA	-0.0089	0.0000	0.0000	0.0000	-0.0127	0.0000
14 August 2011	-0.0126	0.0000	0.0000	NA	0.0000	-0.0227	0.0089	0.0000	0.0000	0.0000	0.0000	0.0000
15 August 2011	0.0126	NA	0.0000	NA	-0.0215	0.0000	0.0000	-0.0019	0.0000	0.0132	NA	0.0000
16 August 2011	-0.0126	0.0328	0.0000	0.0000	-0.0220	0.0000	-0.0179	0.0019	0.0000	0.0131	0.0000	-0.0082
17 August 2011	0.0126	NA	0.0000	0.0000	0.0220	-0.0116	0.0179	0.0038	0.0000	NA	NA	0.0082
18 August 2011	0.0124	NA	0.0000	NA	0.0215	-0.0117	0.0088	-0.0038	0.0000	0.0000	NA	0.0000
21 August 2011	-0.0250	-0.0328	0.0000	0.0157	-0.0435	0.0233	-0.0088	0.0000	0.0000	-0.0131	-0.0260	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>BNT</b>	WASSEL	WATANIYA
22 August 2011	0.0126	NA	0.0000	NA	0.0000	0.0227	-0.0089	-0.0019	-0.0126	0.0131	NA	0.0000
23 August 2011	0.0000	0.0000	0.0000	-0.0253	0.0220	-0.0227	-0.0090	0.0000	0.0126	-0.0263	0.0131	0.0000
24 August 2011	0.0000	-0.0339	0.0000	NA	0.0215	NA	0.0000	0.0000	-0.0126	0.0000	0.0000	-0.0082
25 August 2011	NA	0.0000	0.0066	0.0064	0.0000	NA	0.0000	0.0019	0.0000	-0.0270	0.0000	0.0082
28 August 2011	NA	0.0000	-0.0100	NA	-0.0435	NA	0.0000	-0.0038	0.0000	0.0270	0.0000	0.0000
29 August 2011	NA	0.0000	0.0033	0.0127	NA	0.0227	0.0090	0.0114	0.0126	NA	0.0000	0.0243
04 September 2011	-0.0126	-0.0351	0.0165	0.0000	NA	NA	0.0000	-0.0057	NA	0.0000	0.0000	-0.0243
05 September 2011	0.0250	0.0351	0.0033	0.0000	0.0000	-0.0460	-0.0090	0.0019	-0.0253	0.0132	0.0382	0.0000
06 September 2011	-0.0250	0.0000	0.0033	0.0063	0.0000	0.0000	0.0000	-0.0057	NA	-0.0267	NA	0.0000
07 September 2011	0.0000	0.0339	0.0033	-0.0157	0.0000	0.0000	-0.0090	-0.0019	NA	-0.0274	-0.0126	0.0000
08 September 2011	NA	0.0328	-0.0033	0.0157	0.0220	0.0000	0.0180	-0.0019	0.0127	0.0408	NA	0.0000
11 September 2011	NA	0.0000	-0.0033	NA	0.0215	NA	-0.0180	-0.0058	-0.0256	NA	NA	0.0000
12 September 2011	0.0000	-0.0328	-0.0066	0.0000	-0.0435	0.0000	-0.0183	-0.0058	0.0000	-0.0270	-0.0256	0.0000
13 September 2011	-0.0387	0.0000	0.0000	NA	-0.0455	-0.0118	-0.0187	-0.0058	-0.0131	0.0270	0.0129	-0.0165
14 September 2011	0.0260	-0.0339	-0.0033	-0.0157	NA	0.0000	-0.0095	0.0039	0.0387	0.0000	0.0253	0.0000
15 September 2011	-0.0392	0.0000	-0.0100	NA	-0.0235	0.0000	0.0000	0.0019	NA	-0.0408	0.0000	0.0083
18 September 2011	0.0263	0.0000	0.0000	0.0000	0.0465	-0.0120	0.0374	0.0000	-0.0387	0.0274	0.0000	-0.0083
19 September 2011	NA	0.0000	0.0066	-0.0488	0.0225	NA	-0.0185	0.0000	0.0131	-0.0274	0.0000	0.0000
20 September 2011	-0.0263	-0.0351	-0.0066	0.0066	0.0220	0.0000	0.0185	0.0019	-0.0131	0.0274	0.0000	0.0000
21 September 2011	-0.0134	0.0351	0.0000	-0.0066	-0.0445	0.0120	0.0000	0.0000	0.0260	-0.0136	0.0124	0.0000
22 September 2011	0.0397	0.0339	0.0000	0.0000	-0.0465	NA	0.0182	0.0000	0.0000	-0.0138	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
25 September 2011	0.0256	0.0328	0.0000	0.0000	NA	-0.0120	0.0000	-0.0039	NA	0.0138	0.0000	0.0000
26 September 2011	-0.0387	-0.0328	0.0000	0.0263	0.0235	0.0238	-0.0090	-0.0019	-0.0392	NA	0.0123	0.0000
27 September 2011	-0.0132	NA	0.0000	NA	NA	NA	-0.0091	0.0000	0.0132	0.0136	0.0359	0.0000
28 September 2011	0.0132	-0.0339	0.0000	-0.0431	-0.0476	-0.0238	0.0091	0.0135	-0.0132	NA	0.0000	0.0000
29 September 2011	NA	0.0339	0.0000	0.0366	0.0000	0.0120	0.0000	0.0152	0.0392	-0.0274	NA	0.0165
02 October 2011	NA	-0.0339	0.0000	NA	0.0476	-0.0120	-0.0277	-0.0190	-0.0129	0.0274	-0.0482	-0.0165
03 October 2011	-0.0132	0.0000	0.0000	NA	0.0455	-0.0121	0.0000	0.0000	NA	-0.0274	-0.0124	0.0165
04 October 2011	0.0263	0.0000	0.0000	0.0000	0.0435	0.0000	-0.0094	-0.0039	NA	0.0000	NA	0.0000
05 October 2011	0.0000	0.0000	0.0000	NA	-0.0435	NA	0.0187	0.0000	NA	0.0000	0.0000	0.0000
06 October 2011	0.0000	0.0000	0.0000	NA	0.0220	0.0000	-0.0187	0.0000	-0.0131	0.0000	0.0000	0.0000
09 October 2011	-0.0397	0.0000	0.0000	NA	0.0000	0.0000	0.0000	0.0000	0.0131	0.0274	NA	-0.0333
10 October 2011	0.0134	0.0000	0.0000	-0.0198	-0.0220	0.0000	-0.0095	-0.0058	-0.0397	0.0000	0.0000	0.0168
11 October 2011	NA	0.0000	0.0000	0.0000	0.0435	-0.0247	0.0189	0.0019	0.0000	0.0000	0.0000	-0.0168
12 October 2011	0.0132	0.0000	0.0066	0.0000	0.0417	0.0000	0.0000	-0.0019	0.0134	0.0134	0.0000	0.0000
13 October 2011	-0.0132	0.0000	-0.0066	NA	0.0400	0.0124	0.0000	0.0000	0.0000	0.0132	NA	0.0000
16 October 2011	0.0000	0.0000	0.0000	0.0165	0.0385	0.0000	0.0000	0.0039	-0.0270	0.0000	0.0000	0.0000
17 October 2011	-0.0134	0.0000	0.0000	0.0130	0.0370	0.0364	-0.0094	-0.0039	0.0270	0.0000	0.0000	-0.0085
18 October 2011	0.0397	NA	0.0000	NA	0.0357	0.0000	0.0094	0.0000	0.0000	0.0000	0.0000	0.0085
19 October 2011	-0.0131	0.0000	0.0000	0.0000	0.0345	-0.0364	-0.0094	0.0287	NA	0.0387	0.0000	0.0251
20 October 2011	-0.0132	-0.0351	0.0000	NA	0.0333	0.0244	0.0000	0.0000	0.0000	NA	0.0000	-0.0083
23 October 2011	0.0263	0.0000	0.0000	NA	0.0480	-0.0244	0.0000	-0.0133	NA	0.0000	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>BNT</b>	WASSEL	WATANIYA
24 October 2011	-0.0131	0.0351	-0.0033	NA	0.0000	0.0000	0.0000	-0.0135	0.0000	-0.0387	0.0000	0.0000
25 October 2011	-0.0132	NA	0.0000	-0.0296	0.0458	0.0000	0.0094	0.0077	-0.0270	0.0387	0.0000	-0.0168
26 October 2011	-0.0134	-0.0351	-0.0034	NA	0.0148	0.0000	-0.0094	-0.0058	0.0000	-0.0127	0.0000	-0.0085
27 October 2011	0.0134	0.0000	0.0034	NA	-0.0451	-0.0124	-0.0190	0.0019	NA	0.0000	0.0000	0.0000
30 October 2011	-0.0408	0.0000	0.0000	-0.0168	-0.0473	0.0124	0.0096	0.0039	0.0403	0.0377	NA	0.0000
31 October 2011	0.0000	NA	-0.0034	NA	-0.0496	0.0123	-0.0096	-0.0058	NA	0.0482	0.0000	-0.0086
01 November 2011	0.0138	0.0351	0.0000	NA	-0.0345	NA	-0.0293	-0.0039	0.0260	-0.0238	0.0000	0.0000
02 November 2011	-0.0138	-0.0351	-0.0034	0.0000	0.0000	-0.0247	0.0000	0.0000	NA	0.0000	0.0000	0.0086
03 November 2011	NA	0.0000	0.0000	NA	-0.0177	0.0124	0.0099	-0.0019	-0.0392	0.0000	0.0000	0.0000
10 November 2011	NA	NA	0.0000	NA	0.0177	0.0364	0.0098	0.0019	0.0000	0.0000	NA	-0.0086
13 November 2011	0.0138	0.0000	0.0000	0.0168	-0.0357	NA	-0.0196	0.0000	NA	0.0000	0.0000	0.0000
14 November 2011	0.0000	0.0000	-0.0034	NA	0.0000	-0.0488	0.0099	0.0000	-0.0408	NA	NA	0.0000
16 November 2011	NA	0.0000	0.0000	0.0000	-0.0183	NA	-0.0099	0.0000	-0.0140	0.0000	0.0000	-0.0174
17 November 2011	0.0000	0.0000	-0.0034	NA	0.0000	0.0000	0.0000	0.0000	0.0000	NA	0.0000	0.0000
20 November 2011	NA	NA	-0.0171	0.0000	-0.0377	NA	0.0000	0.0000	-0.0142	0.0000	0.0000	0.0000
21 November 2011	-0.0278	0.0000	0.0000	NA	0.0377	-0.0126	-0.0100	0.0000	0.0000	NA	0.0000	-0.0088
22 November 2011	0.0000	-0.0364	0.0000	NA	-0.0377	-0.0256	-0.0101	-0.0019	-0.0144	-0.0368	0.0000	-0.0269
23 November 2011	NA	0.0000	-0.0035	0.0165	0.0000	0.0382	0.0101	0.0000	0.0144	0.0368	0.0000	0.0357
24 November 2011	0.0000	0.0000	-0.0069	-0.0033	0.0190	NA	0.0100	0.0000	0.0142	NA	NA	-0.0267
27 November 2011	0.0000	NA	-0.0070	NA	NA	-0.0253	-0.0100	0.0000	-0.0432	0.0000	0.0000	0.0000
28 November 2011	NA	0.0000	-0.0070	-0.0471	0.0000	0.0127	0.0000	0.0039	0.0432	-0.0121	0.0000	0.0179

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	BNT	WASSEL	WATANIYA
29 November 2011	0.0140	0.0000	0.0000	0.0000	0.0370	NA	0.0000	-0.0019	0.0414	-0.0123	0.0000	0.0000
30 November 2011	-0.0282	0.0000	0.0035	NA	0.0000	0.0000	0.0000	0.0287	0.0267	0.0123	0.0000	-0.0089
01 December 2011	0.0142	0.0000	0.0035	0.0339	NA	NA	0.0100	-0.0095	0.0000	-0.0247	0.0000	0.0000
04 December 2011	NA	0.0000	-0.0177	0.0000	0.0180	-0.0387	-0.0100	-0.0134	NA	0.0124	0.0000	0.0089
05 December 2011	-0.0142	NA	0.0071	NA	0.0351	0.0000	0.0000	0.0000	-0.0403	0.0123	0.0000	0.0000
06 December 2011	0.0000	0.0000	-0.0036	NA	0.0171	0.0000	-0.0101	0.0039	NA	-0.0247	0.0124	0.0000
07 December 2011	0.0142	0.0000	-0.0036	0.0000	0.0333	0.0387	0.0200	0.0000	0.0000	0.0124	-0.0124	0.0433
08 December 2011	NA	NA	0.0000	NA	-0.0333	0.0126	-0.0100	-0.0039	NA	-0.0506	0.0000	0.0251
11 December 2011	-0.0286	NA	0.0177	-0.0339	-0.0171	0.0247	0.0000	0.0039	0.0000	0.0129	0.0000	0.0000
12 December 2011	0.0144	-0.0377	0.0000	0.0339	0.0000	NA	0.0100	0.0096	0.0000	0.0253	0.0000	0.0000
13 December 2011	0.0000	0.0000	-0.0141	NA	0.0000	NA	0.0000	0.0000	0.0136	NA	0.0000	0.0000
14 December 2011	0.0142	NA	0.0106	NA	NA	-0.0500	-0.0100	0.0000	-0.0414	0.0000	0.0000	-0.0251
15 December 2011	-0.0142	0.0377	-0.0071	NA	0.0339	0.0377	0.0000	0.0038	-0.0142	-0.0382	0.0000	0.0251
18 December 2011	-0.0144	NA	0.0000	NA	NA	0.0364	0.0000	0.0057	NA	0.0000	NA	0.0325
19 December 2011	0.0144	0.0364	-0.0036	NA	NA	-0.0364	0.0000	0.0000	NA	0.0000	0.0124	0.0469
20 December 2011	0.0142	-0.0364	0.0000	NA	NA	-0.0124	0.0000	0.0000	0.0420	0.0000	0.0244	0.0000
21 December 2011	0.0000	-0.0377	-0.0036	-0.0033	-0.0339	0.0000	0.0000	-0.0038	-0.0278	NA	-0.0121	0.0000
22 December 2011	0.0414	0.0377	0.0036	-0.0271	0.0171	NA	0.0198	0.0075	-0.0142	0.0000	0.0000	0.0000
26 December 2011	0.0397	0.0000	-0.0036	0.0137	-0.0345	0.0488	-0.0099	0.0056	0.0282	-0.0131	0.0476	0.0000
27 December 2011	0.0382	0.0364	0.0000	0.0301	-0.0357	0.0000	0.0099	0.0000	-0.0140	0.0387	-0.0117	0.0000
28 December 2011	0.0247	0.0000	0.0036	NA	0.0357	NA	-0.0198	-0.0113	-0.0142	NA	NA	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
29 December 2011	0.0000	0.0000	0.0315	0.0482	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0256	0.0000	-0.0154
02 January 2012	-0.0247	0.0000	-0.0174	NA	-0.0357	-0.0241	0.0488	0.0019	0.0000	0.0129	-0.0359	0.0077
03 January 2012	0.0000	-0.0364	0.0480	NA	0.0180	0.0241	0.0374	0.0000	0.0420	-0.0129	0.0476	0.0000
04 January 2012	0.0368	0.0364	0.0033	NA	0.0000	0.0000	0.0091	0.0019	0.0000	-0.0131	NA	NA
05 January 2012	0.0238	0.0351	0.0100	NA	-0.0364	-0.0120	-0.0091	0.0131	0.0136	-0.0132	-0.0355	0.0000
08 January 2012	0.0000	0.0000	-0.0234	NA	-0.0187	-0.0121	0.0091	-0.0075	-0.0274	0.0000	0.0000	0.0000
09 January 2012	-0.0238	0.0000	-0.0034	NA	-0.0385	0.0121	-0.0091	0.0019	0.0138	0.0000	NA	-0.0077
10 January 2012	0.0120	-0.0351	-0.0171	-0.0482	0.0385	NA	-0.0092	-0.0019	0.0136	0.0000	NA	0.0000
11 January 2012	NA	-0.0364	0.0000	NA	-0.0385	0.0238	-0.0187	-0.0019	-0.0136	0.0263	NA	-0.0156
12 January 2012	-0.0488	0.0000	0.0000	NA	0.0000	-0.0359	-0.0095	0.0037	0.0136	0.0129	0.0000	0.0000
15 January 2012	0.0247	0.0364	-0.0069	NA	0.0000	NA	0.0000	-0.0037	NA	-0.0392	0.0000	-0.0402
16 January 2012	NA	0.0351	0.0069	NA	-0.0198	-0.0247	-0.0096	0.0000	-0.0274	0.0132	0.0000	-0.0249
17 January 2012	NA	0.0000	-0.0069	-0.0132	NA	0.0247	0.0000	0.0019	0.0000	0.0131	0.0000	0.0249
18 January 2012	-0.0247	0.0000	0.0069	NA	-0.0202	NA	0.0190	-0.0019	0.0138	0.0382	0.0000	0.0163
19 January 2012	0.0247	NA	-0.0069	0.0328	0.0000	0.0000	-0.0095	0.0037	0.0000	0.0000	NA	-0.0163
22 January 2012	-0.0247	NA	0.0035	NA	-0.0206	-0.0373	-0.0096	-0.0037	0.0136	-0.0513	0.0000	-0.0165
23 January 2012	0.0000	-0.0351	0.0000	-0.0032	0.0000	0.0000	-0.0097	-0.0038	-0.0136	0.0260	0.0000	0.0083
24 January 2012	NA	0.0351	-0.0035	-0.0464	0.0000	NA	0.0000	0.0075	0.0000	-0.0260	0.0000	-0.0083
25 January 2012	NA	0.0339	0.0000	NA	-0.0211	NA	0.0000	0.0037	0.0000	0.0000	NA	-0.0084
26 January 2012	0.0000	-0.0339	0.0000	NA	-0.0215	NA	0.0097	-0.0037	NA	NA	0.0000	0.0084
29 January 2012	0.0124	0.0339	0.0000	NA	-0.0220	0.0373	0.0000	0.0000	-0.0420	0.0131	0.0000	-0.0084

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
30 January 2012	-0.0124	NA	-0.0035	0.0168	0.0435	-0.0247	0.0096	0.0056	0.0142	0.0129	0.0000	0.0084
31 January 2012	0.0247	NA	0.0035	0.0000	0.0000	0.0368	0.0000	0.0000	-0.0142	-0.0129	0.0000	-0.0084
01 February 2012	NA	0.0000	-0.0035	NA	0.0000	0.0000	0.0000	0.0037	0.0282	0.0129	0.0000	0.0084
02 February 2012	-0.0247	0.0000	-0.0035	0.0000	-0.0435	NA	0.0095	0.0074	NA	-0.0260	0.0000	0.0000
05 February 2012	NA	-0.0339	0.0035	0.0000	0.0435	-0.0368	-0.0095	0.0000	-0.0140	0.0131	0.0000	0.0000
06 February 2012	NA	0.0339	0.0000	0.0000	-0.0435	NA	0.0282	0.0000	0.0278	0.0000	0.0000	0.0000
07 February 2012	NA	0.0000	0.0138	0.0033	NA	0.0000	0.0000	0.0000	-0.0278	0.0382	0.0000	0.0083
08 February 2012	0.0488	-0.0339	-0.0034	0.0000	0.0000	0.0247	-0.0093	0.0018	0.0000	-0.0253	0.0000	0.0000
09 February 2012	NA	0.0339	0.0000	-0.0033	0.0220	-0.0247	0.0000	-0.0018	0.0000	0.0253	0.0000	-0.0167
12 February 2012	NA	-0.0339	0.0000	0.0066	0.0000	0.0000	-0.0094	0.0018	0.0000	-0.0382	0.0000	0.0084
13 February 2012	-0.0241	0.0339	0.0137	-0.0066	-0.0220	0.0000	0.0000	-0.0074	0.0000	0.0000	0.0000	0.0000
14 February 2012	0.0000	NA	0.0000	0.0033	0.0000	NA	-0.0095	0.0074	0.0414	0.0000	0.0000	-0.0084
15 February 2012	-0.0247	-0.0339	-0.0103	0.0295	0.0000	0.0000	0.0000	0.0000	0.0397	0.0000	NA	0.0084
16 February 2012	0.0368	0.0339	0.0000	-0.0261	-0.0455	0.0124	-0.0192	0.0000	0.0000	NA	0.0000	-0.0084
19 February 2012	NA	0.0328	0.0034	NA	0.0455	NA	0.0000	-0.0037	-0.0131	0.0256	0.0000	0.0000
20 February 2012	-0.0121	0.0317	0.0102	NA	0.0000	0.0123	0.0000	-0.0018	0.0000	-0.0256	0.0000	0.0000
21 February 2012	-0.0247	0.0308	0.0000	NA	-0.0225	-0.0123	0.0192	0.0055	0.0000	0.0129	0.0000	0.0000
22 February 2012	0.0000	0.0299	0.0034	0.0000	0.0445	0.0000	0.0000	-0.0018	0.0000	0.0000	NA	-0.0084
23 February 2012	0.0000	0.0290	0.0000	-0.0133	0.0426	0.0123	-0.0096	-0.0018	0.0000	0.0000	0.0000	-0.0085
26 February 2012	-0.0126	0.0000	0.0067	NA	0.0408	-0.0247	0.0096	-0.0055	0.0260	-0.0129	0.0000	0.0000
27 February 2012	0.0126	0.0282	0.0000	NA	0.0198	-0.0126	-0.0096	0.0055	0.0000	0.0000	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
28 February 2012	NA	0.0274	0.0067	NA	-0.0198	0.0126	0.0000	0.0037	-0.0129	0.0000	0.0000	-0.0086
29 February 2012	0.0000	0.0000	0.0000	NA	0.0000	0.0000	0.0096	0.0018	0.0129	NA	0.0000	0.0000
01 March 2012	0.0000	-0.0274	0.0000	NA	0.0392	0.0000	0.0189	-0.0018	-0.0260	0.0000	NA	0.0000
04 March 2012	NA	0.0274	0.0000	-0.0238	0.0190	0.0000	-0.0094	0.0000	0.0131	NA	0.0000	0.0000
05 March 2012	0.0000	-0.0274	0.0000	NA	0.0000	-0.0126	0.0094	0.0018	0.0000	0.0000	0.0000	0.0000
06 March 2012	0.0000	-0.0282	0.0033	NA	0.0000	0.0000	0.0000	-0.0018	0.0000	0.0000	0.0000	0.0000
07 March 2012	0.0000	-0.0290	0.0033	NA	-0.0385	0.0126	0.0000	0.0000	-0.0131	0.0000	0.0355	0.0255
11 March 2012	0.0000	0.0000	0.0033	NA	0.0000	-0.0126	0.0000	0.0018	0.0131	-0.0263	0.0116	-0.0169
12 March 2012	0.0000	-0.0299	0.0033	NA	NA	0.0126	0.0000	0.0018	-0.0131	0.0263	0.0000	0.0000
13 March 2012	NA	-0.0308	0.0131	0.0137	0.0000	NA	0.0000	-0.0018	0.0131	0.0000	-0.0233	-0.0086
14 March 2012	0.0000	0.0000	0.0161	-0.0068	-0.0400	NA	-0.0094	0.0000	0.0000	0.0382	0.0000	0.0086
15 March 2012	NA	-0.0317	0.0221	NA	0.0202	0.0000	0.0000	0.0018	0.0000	0.0124	0.0000	NA
18 March 2012	0.0000	0.0317	-0.0063	0.0000	-0.0408	-0.0126	0.0000	0.0000	0.0000	-0.0506	0.0233	-0.0086
19 March 2012	0.0000	0.0308	0.0000	0.0236	0.0408	NA	0.0094	0.0018	-0.0131	0.0382	NA	0.0000
20 March 2012	NA	0.0299	-0.0095	0.0000	0.0000	0.0126	-0.0189	0.0000	0.0000	0.0247	NA	0.0086
21 March 2012	0.0000	0.0290	-0.0128	0.0000	-0.0408	NA	0.0095	0.0000	0.0000	-0.0500	0.0227	-0.0086
22 March 2012	-0.0126	0.0000	-0.0032	NA	-0.0426	NA	-0.0095	-0.0037	0.0000	0.0253	-0.0113	0.0000
25 March 2012	-0.0127	-0.0290	-0.0097	-0.0168	-0.0445	NA	0.0000	0.0018	0.0131	0.0000	NA	-0.0087
26 March 2012	0.0000	NA	0.0097	-0.0171	-0.0230	0.0000	0.0095	0.0000	0.0000	0.0000	NA	0.0172
27 March 2012	0.0000	0.0000	0.0000	NA	0.0455	0.0000	0.0000	0.0127	0.0000	0.0000	-0.0347	-0.0172
28 March 2012	-0.0392	0.0000	0.0000	NA	0.0435	0.0000	0.0094	0.0018	0.0000	-0.0126	0.0117	0.0087

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
29 March 2012	-0.0270	-0.0299	-0.0097	0.0171	-0.0435	0.0000	0.0000	-0.0036	-0.0131	0.0126	NA	0.0086
01 April 2012	0.0136	0.0299	0.0097	0.0034	0.0000	0.0000	0.0093	0.0036	0.0131	-0.0126	NA	0.0169
02 April 2012	0.0267	0.0000	0.0000	0.0134	0.0220	-0.0253	-0.0093	0.0000	0.0000	0.0126	0.0000	-0.0169
03 April 2012	0.0000	0.0000	-0.0032	-0.0101	-0.0445	0.0253	0.0093	-0.0072	-0.0131	0.0000	0.0000	-0.0086
04 April 2012	-0.0132	-0.0299	0.0032	NA	-0.0230	NA	-0.0187	-0.0018	0.0260	0.0000	-0.0117	0.0086
05 April 2012	-0.0134	NA	0.0000	0.0067	-0.0235	0.0124	0.0094	NA	-0.0392	0.0000	0.0000	0.0000
08 April 2012	0.0134	0.0000	-0.0097	0.0000	0.0465	-0.0377	0.0000	-0.0503	0.0000	0.0000	0.0000	-0.0086
09 April 2012	-0.0134	0.0000	0.0000	NA	-0.0230	0.0000	-0.0094	-0.0252	-0.0134	0.0000	0.0117	0.0000
10 April 2012	-0.0136	0.0000	0.0033	NA	0.0000	NA	0.0094	-0.0079	0.0267	0.0000	0.0000	0.0000
11 April 2012	NA	0.0000	0.0000	NA	0.0000	0.0253	-0.0094	-0.0020	-0.0132	0.0000	NA	0.0000
12 April 2012	0.0136	0.0299	0.0000	NA	-0.0235	-0.0126	0.0000	0.0099	-0.0134	0.0000	-0.0117	0.0086
15 April 2012	0.0134	-0.0299	-0.0033	0.0033	0.0000	0.0000	0.0094	-0.0059	0.0134	0.0000	0.0000	-0.0086
16 April 2012	-0.0270	0.0000	0.0000	0.0100	0.0235	0.0126	0.0000	0.0039	-0.0134	0.0000	0.0117	0.0086
17 April 2012	NA	0.0299	0.0000	-0.0100	0.0000	NA	0.0000	0.0000	0.0267	0.0000	-0.0117	-0.0086
18 April 2012	-0.0138	-0.0299	0.0033	0.0000	-0.0476	0.0000	-0.0094	-0.0039	0.0131	NA	0.0000	0.0000
19 April 2012	0.0138	0.0299	0.0129	NA	0.0000	0.0124	0.0094	0.0000	0.0129	0.0368	0.0000	0.0086
22 April 2012	NA	NA	0.0127	NA	0.0000	NA	-0.0094	0.0000	-0.0260	-0.0368	0.0000	0.0000
23 April 2012	0.0000	-0.0299	0.0000	0.0000	-0.0247	-0.0124	0.0000	-0.0020	0.0000	0.0124	0.0000	0.0000
24 April 2012	0.0000	NA	-0.0063	0.0000	0.0488	0.0000	0.0000	-0.0020	0.0131	-0.0124	0.0000	0.0000
25 April 2012	-0.0138	NA	0.0032	0.0000	0.0000	0.0124	0.0000	0.0020	0.0129	0.0000	0.0000	0.0000
26 April 2012	0.0138	-0.0308	0.0220	0.0000	0.0235	0.0000	-0.0095	0.0000	0.0000	0.0000	NA	-0.0086

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ant	WASSEL	WATANIYA
29 April 2012	-0.0138	-0.0317	-0.1186	-0.0305	0.0000	0.0123	0.0095	-0.0059	NA	0.0000	0.0000	0.0171
30 April 2012	-0.0140	NA	-0.0035	NA	-0.0476	-0.0123	0.0000	-0.0040	NA	0.0000	0.0000	-0.0085
02 May 2012	-0.0142	-0.2151	0.0035	0.0238	0.0241	0.0123	0.0094	0.0020	NA	0.0000	0.0000	-0.0086
03 May 2012	NA	0.0392	0.0000	NA	0.0000	-0.0123	-0.0189	0.0000	NA	0.0000	NA	0.0000
06 May 2012	0.0142	0.0000	-0.0035	-0.0481	-0.0241	0.0244	0.0095	0.0020	-0.0392	0.0488	0.0000	0.0000
07 May 2012	-0.0142	0.0000	-0.0035	0.0209	0.0241	-0.0368	0.0000	0.0000	-0.0408	0.0000	0.0000	-0.0087
08 May 2012	0.0142	0.0377	-0.0035	-0.0174	-0.0241	NA	0.0000	0.0020	-0.0140	-0.0120	0.0000	0.0000
09 May 2012	NA	0.0000	0.0000	NA	NA	0.0000	0.0000	-0.0020	0.0000	NA	0.0000	0.0000
10 May 2012	-0.0142	-0.0377	-0.0035	-0.0357	0.0000	0.0000	-0.0095	0.0020	-0.0142	-0.0121	0.0117	0.0087
13 May 2012	0.0000	NA	-0.0071	-0.0484	-0.0247	0.0000	-0.0096	-0.0040	-0.0144	0.0000	-0.0117	0.0000
14 May 2012	0.0000	0.0000	0.0000	0.0484	0.0247	0.0000	NA	0.0020	0.0000	0.0121	0.0000	0.0000
15 May 2012	-0.0144	0.0000	-0.0036	0.0462	-0.0247	0.0000	-0.0493	-0.0020	-0.0146	0.0000	0.0000	0.0000
16 May 2012	-0.0294	0.0377	-0.0072	-0.0498	NA	0.0000	0.0101	0.0020	NA	0.0000	0.0000	0.0000
17 May 2012	0.0148	-0.0377	-0.0109	NA	-0.0253	0.0124	-0.0101	-0.0020	0.0290	0.0120	0.0000	-0.0262
20 May 2012	0.0000	0.0000	0.0000	0.0394	0.0000	-0.0124	0.0000	0.0000	0.0000	-0.0120	0.0000	0.0000
21 May 2012	0.0146	0.0000	-0.0037	-0.0394	0.0253	0.0000	-0.0102	-0.0020	NA	0.0120	0.0000	0.0000
22 May 2012	0.0000	0.0377	-0.0037	NA	0.0247	0.0124	-0.0103	-0.0020	NA	0.0000	0.0000	0.0088
23 May 2012	0.0000	-0.0377	0.0000	NA	-0.0247	NA	0.0000	0.0000	-0.0144	-0.0120	0.0000	-0.0088
24 May 2012	0.0144	NA	-0.0074	NA	0.0000	NA	0.0000	0.0000	NA	-0.0121	0.0000	-0.0089
27 May 2012	0.0282	0.0000	0.0000	0.0000	0.0000	0.0482	0.0103	0.0040	0.0144	0.0241	0.0000	0.0000
28 May 2012	-0.0140	NA	-0.0037	NA	0.0000	-0.0359	0.0000	-0.0040	-0.0144	-0.0120	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	TNB	WASSEL	WATANIYA
29 May 2012	0.0140	0.0000	-0.0037	NA	-0.0253	0.0000	-0.0103	0.0000	NA	0.0120	0.0000	NA
30 May 2012	NA	NA	-0.0113	NA	-0.0260	NA	0.0000	-0.0060	-0.0146	-0.0120	0.0000	0.0089
31 May 2012	-0.0282	-0.0392	0.0075	NA	-0.0267	0.0000	-0.0314	0.0000	0.0000	0.0000	0.0000	0.0000
03 June 2012	-0.0438	-0.0408	-0.0113	NA	0.0267	-0.0247	-0.0215	0.0060	NA	0.0000	0.0000	0.0000
04 June 2012	0.0000	0.0000	0.0000	NA	0.0000	-0.0126	-0.0220	-0.0101	0.0000	0.0000	0.0000	-0.0089
05 June 2012	0.0438	0.0408	0.0038	0.0000	0.0260	0.0126	0.0435	-0.0020	0.0000	-0.0121	0.0000	0.0177
06 June 2012	0.0420	-0.0408	-0.0038	0.0000	-0.0260	0.0488	0.0106	0.0000	NA	0.0241	0.0000	-0.0088
07 June 2012	0.0403	0.0408	0.0000	NA	0.0260	-0.0364	-0.0106	0.0000	NA	-0.0120	0.0000	-0.0179
10 June 2012	-0.0267	0.0000	0.0038	-0.0448	-0.0260	NA	0.0106	-0.0020	0.0290	0.0000	0.0000	0.0090
11 June 2012	NA	0.0000	-0.0038	0.0000	0.0000	-0.0124	-0.0106	0.0000	0.0282	0.0000	0.0000	0.0000
12 June 2012	-0.0414	0.0000	0.0038	0.0076	-0.0267	0.0124	0.0211	-0.0020	0.0000	0.0238	0.0000	0.0089
13 June 2012	0.0000	-0.0408	-0.0114	-0.0153	-0.0274	-0.0124	0.0000	0.0000	-0.0282	-0.0238	0.0000	-0.0089
14 June 2012	-0.0432	0.0408	-0.0038	0.0000	0.0274	0.0124	0.0104	0.0000	NA	0.0000	NA	-0.0090
18 June 2012	0.0432	0.0000	0.0038	0.0153	-0.0274	0.0482	-0.0104	-0.0041	-0.0290	0.0000	0.0000	0.0000
19 June 2012	0.0140	0.0000	0.0000	-0.0465	0.0000	-0.0238	0.0000	0.0000	0.0146	0.0000	0.0000	0.0000
20 June 2012	NA	0.0000	-0.0038	0.0313	0.0000	-0.0121	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21 June 2012	NA	NA	0.0076	0.0377	0.0000	0.0000	-0.0105	0.0000	0.0144	0.0238	0.0000	-0.0090
24 June 2012	NA	-0.0408	0.0000	-0.0187	-0.0282	0.0000	0.0000	0.0000	0.0000	-0.0238	NA	0.0000
25 June 2012	-0.0426	0.0000	0.0000	-0.0463	-0.0290	0.0000	-0.0106	-0.0061	NA	0.0000	0.0000	0.0000
26 June 2012	-0.0146	NA	-0.0076	0.0157	0.0000	0.0359	-0.0107	0.0061	NA	NA	0.0000	0.0000
27 June 2012	0.0146	NA	0.0038	0.0000	0.0290	0.0460	0.0000	-0.0041	-0.0290	0.0000	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
28 June 2012	0.0426	0.0000	0.0301	0.0000	-0.0290	0.0000	-0.0217	0.0000	0.0290	0.0000	0.0000	-0.0183
01 July 2012	0.0408	0.0000	-0.0225	NA	0.0000	-0.0460	0.0109	0.0000	-0.0144	0.0000	0.0000	0.0092
02 July 2012	0.0132	0.0000	-0.0076	NA	0.0290	-0.0359	0.0108	-0.0041	0.0000	-0.0368	0.0000	0.0272
03 July 2012	NA	-0.0426	-0.0077	0.0000	0.0000	0.0476	0.0000	0.0000	0.0000	0.0124	NA	0.0089
04 July 2012	-0.0267	0.0426	0.0115	NA	0.0000	NA	0.0107	0.0000	NA	0.0000	0.0000	0.0000
05 July 2012	0.0267	0.0000	-0.0076	0.0039	0.0000	-0.0117	-0.0107	-0.0021	-0.0146	0.0000	0.0000	0.0000
08 July 2012	0.0000	-0.0426	-0.0038	-0.0078	-0.0290	-0.0118	-0.0108	0.0041	0.0146	-0.0124	0.0000	0.0000
09 July 2012	0.0000	0.0426	0.0038	0.0000	-0.0299	NA	0.0000	0.0021	-0.0146	0.0000	0.0000	0.0088
10 July 2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108	-0.0021	NA	NA	0.0000	-0.0088
11 July 2012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0146	0.0000	NA	0.0175
12 July 2012	0.0000	0.0000	0.0000	0.0039	0.0299	0.0000	0.0000	0.0000	0.0000	0.0000	NA	0.0000
15 July 2012	-0.0403	-0.0426	-0.0038	NA	0.0290	-0.0120	-0.0108	-0.0021	0.0000	0.0000	0.0000	0.0000
16 July 2012	0.0403	0.0426	0.0000	-0.0078	0.0000	-0.0121	0.0000	0.0000	-0.0146	-0.0126	0.0000	0.0000
17 July 2012	-0.0132	0.0000	0.0000	0.0078	-0.0290	0.0000	0.0108	0.0021	0.0146	0.0126	0.0000	0.0000
18 July 2012	NA	-0.0426	0.0038	0.0000	-0.0299	-0.0123	0.0000	-0.0021	-0.0146	0.0488	0.0000	0.0000
19 July 2012	0.0000	0.0000	0.0000	0.0116	0.0000	0.0000	-0.0108	-0.0041	0.0146	NA	0.0000	0.0000
22 July 2012	0.0132	NA	-0.0038	-0.0233	0.0000	-0.0124	-0.0109	0.0000	-0.0146	-0.0364	0.0347	-0.0087
23 July 2012	NA	NA	0.0000	NA	-0.0308	NA	0.0217	0.0000	0.0146	-0.0124	NA	0.0000
24 July 2012	NA	0.0000	0.0000	NA	0.0000	0.0124	-0.0108	0.0021	-0.0146	0.0000	-0.0347	0.0087
25 July 2012	0.0000	0.0426	0.0153	0.0424	0.0308	-0.0124	-0.0109	-0.0041	-0.0148	0.0000	0.0000	-0.0175
26 July 2012	0.0000	-0.0426	0.0188	0.0187	-0.0308	0.0488	0.0109	0.0021	0.0000	0.0488	0.0000	0.0088

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
29 July 2012	-0.0132	NA	-0.0264	-0.0493	0.0000	-0.0364	0.0000	0.0021	0.0294	-0.0120	0.0000	0.0000
30 July 2012	-0.0134	NA	-0.0077	0.0116	0.0000	0.0244	-0.0109	0.0000	NA	NA	NA	0.0000
31 July 2012	0.0134	NA	0.0038	NA	-0.0317	-0.0244	0.0000	0.0000	0.0144	NA	0.0000	-0.0088
01 August 2012	NA	NA	0.0038	0.0153	-0.0328	0.0000	0.0109	-0.0021	-0.0144	-0.0368	0.0000	0.0000
02 August 2012	-0.0134	NA	-0.0077	-0.0153	0.0000	0.0000	-0.0109	-0.0041	-0.0445	0.0247	0.0000	-0.0089
05 August 2012	0.0134	0.0000	0.0000	NA	-0.0339	0.0000	-0.0110	-0.0041	0.0150	-0.0247	0.0000	0.0264
06 August 2012	0.0132	0.0000	0.0038	0.0153	NA	0.0000	0.0000	-0.0042	-0.0150	0.0247	0.0000	0.0000
07 August 2012	0.0000	NA	0.0038	NA	NA	0.0000	0.0110	-0.0021	0.0150	-0.0247	0.0000	0.0000
08 August 2012	NA	0.0000	-0.0077	NA	NA	0.0244	0.0109	-0.0063	-0.0150	0.0000	0.0000	0.0000
09 August 2012	0.0000	0.0000	0.0000	0.0150	NA	0.0000	-0.0332	-0.0106	0.0445	0.0000	0.0000	-0.0087
12 August 2012	NA	-0.0445	0.0000	-0.0265	NA	-0.0244	-0.0227	-0.0021	NA	0.0000	0.0000	0.0000
13 August 2012	-0.0132	0.0000	0.0000	-0.0038	NA	0.0123	0.0339	-0.0021	NA	0.0000	NA	0.0000
14 August 2012	0.0263	0.0000	0.0000	0.0000	NA	NA	-0.0112	-0.0064	NA	0.0000	NA	0.0087
15 August 2012	0.0382	0.0445	0.0000	NA	NA	0.0000	-0.0113	-0.0065	NA	0.0000	0.0000	0.0000
16 August 2012	0.0000	-0.0445	0.0038	0.0000	NA	NA	0.0225	0.0065	NA	NA	0.0000	-0.0264
22 August 2012	0.0000	0.0000	-0.0038	NA	NA	0.0121	0.0220	0.0000	NA	0.0000	0.0000	0.0089
23 August 2012	NA	0.0445	0.0000	NA	NA	0.0000	-0.0220	-0.0065	-0.0294	0.0000	0.0000	0.0000
26 August 2012	-0.0253	NA	0.0000	0.0153	NA	0.0000	0.0000	-0.0043	NA	0.0368	0.0000	0.0000
27 August 2012	NA	-0.0445	0.0000	-0.0153	NA	-0.0121	0.0000	0.0000	0.0148	-0.0368	0.0000	-0.0089
28 August 2012	-0.0129	-0.0465	0.0000	0.0000	NA	0.0000	0.0110	0.0000	NA	-0.0253	0.0000	-0.0090
29 August 2012	NA	0.0465	0.0000	NA	NA	0.0121	-0.0110	0.0000	NA	0.0253	0.0000	0.0267

Al-Quds trading date	AIB	AIG	BOP	BPC	WOD9	ISBK	PADICO	PALTEL	PRICO	<b>BNT</b>	WASSEL	WATANIYA
30 August 2012	0.0000	NA	-0.0077	NA	NA	0.0000	0.0000	0.0000	0.0000	0.0247	0.0000	0.0000
02 September 2012	-0.0263	NA	0.0077	NA	NA	-0.0244	0.0000	0.0000	NA	0.0121	0.0000	-0.0177
03 September 2012	0.0000	0.0000	0.0000	NA	NA	NA	-0.0225	0.0000	NA	-0.0244	0.0233	-0.0090
04 September 2012	0.0132	0.0000	0.0000	-0.0194	NA	0.0000	0.0000	-0.0022	-0.0148	0.0000	-0.0233	0.0090
05 September 2012	-0.0132	NA	0.0000	0.0194	NA	0.0123	-0.0114	-0.0088	-0.0458	0.0000	0.0000	-0.0180
06 September 2012	0.0000	0.0000	0.0000	NA	NA	-0.0123	0.0000	0.0000	NA	0.0123	0.0000	0.0269
09 September 2012	-0.0270	0.0000	0.0000	0.0000	NA	0.0000	-0.0116	-0.0155	-0.0480	-0.0247	0.0000	0.0000
10 September 2012	0.0270	0.0000	0.0000	NA	NA	0.0000	-0.0235	-0.0067	0.0000	0.0000	0.0000	0.0000
11 September 2012	NA	-0.0465	0.0000	0.0000	NA	-0.0124	-0.0241	0.0022	-0.0333	0.0247	-0.0238	-0.0360
12 September 2012	0.0000	0.0000	0.0000	0.0153	NA	NA	0.0121	0.0000	0.0168	-0.0123	NA	0.0360
13 September 2012	0.0000	0.0000	0.0000	-0.0153	NA	NA	0.0120	-0.0022	0.0328	-0.0124	-0.0121	0.0000
16 September 2012	0.0000	NA	0.0000	NA	NA	0.0000	0.0118	0.0022	0.0000	-0.0126	-0.0247	-0.0089
17 September 2012	NA	0.0000	0.0000	0.0153	NA	0.0124	0.0233	0.0111	0.0160	0.0373	0.0000	-0.0180
18 September 2012	0.0263	NA	0.0000	-0.0076	NA	-0.0124	0.0000	0.0198	0.0313	0.0000	NA	0.0090
19 September 2012	NA	0.0000	0.0000	NA	NA	0.0124	0.0000	0.0087	0.0000	-0.0247	NA	0.0000
20 September 2012	NA	0.0000	0.0000	0.0000	NA	0.0000	0.0000	-0.0087	0.0000	0.0368	NA	-0.0090
23 September 2012	0.0000	0.0465	0.0000	-0.0077	NA	0.0000	0.0000	0.0022	0.0000	-0.0368	NA	0.0090
24 September 2012	NA	0.0000	0.0000	NA	NA	0.0000	-0.0116	0.0000	NA	0.0000	-0.0126	-0.0090
25 September 2012	NA	-0.0465	0.0000	NA	NA	0.0123	0.0116	0.0086	0.0000	0.0000	NA	0.0000
26 September 2012	0.0382	NA	0.0000	NA	NA	-0.0123	0.0450	0.0107	0.0153	0.0000	NA	0.0000
27 September 2012	NA	NA	0.0000	NA	NA	0.0482	-0.0110	0.0169	0.0000	NA	0.0126	0.0090

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
30 September 2012	0.0247	NA	0.0000	-0.0194	NA	-0.0359	0.0000	0.0430	0.0445	0.0488	0.0000	0.0000
01 October 2012	NA	0.0465	0.0000	NA	NA	-0.0123	-0.0112	-0.0326	-0.0146	-0.0120	0.0000	0.0000
02 October 2012	-0.0373	NA	0.0000	0.0194	NA	0.0123	0.0000	-0.0083	0.0000	0.0000	0.0000	-0.0090
03 October 2012	-0.0127	-0.0465	0.0000	0.0000	NA	-0.0123	0.0000	0.0021	-0.0148	-0.0368	NA	0.0000
04 October 2012	0.0377	0.0000	0.0000	0.0153	NA	0.0000	-0.0113	0.0000	0.0148	0.0368	0.0000	0.0445
07 October 2012	NA	0.0465	0.0000	-0.0153	NA	0.0000	0.0113	-0.0042	0.0432	-0.0244	0.0000	0.0172
08 October 2012	NA	0.0000	0.0000	NA	NA	0.0000	0.0112	0.0021	-0.0142	-0.0124	0.0488	0.0253
09 October 2012	-0.0250	0.0000	0.0000	NA	NA	0.0000	0.0000	0.0021	0.0000	0.0000	-0.0488	0.0000
10 October 2012	NA	-0.0465	0.0000	NA	NA	0.0000	-0.0112	0.0000	0.0000	0.0000	0.0000	0.0000
11 October 2012	-0.0387	NA	0.0000	0.0000	NA	0.0000	0.0000	-0.0021	0.0142	0.0124	NA	0.0000
14 October 2012	NA	0.0000	0.0000	NA	NA	-0.0124	0.0000	0.0000	-0.0286	NA	0.0000	0.0000
15 October 2012	NA	NA	0.0000	NA	NA	0.0124	0.0000	-0.0105	0.0144	-0.0124	0.0000	0.0000
16 October 2012	-0.0132	NA	0.0000	NA	NA	NA	-0.0113	-0.0063	0.0000	0.0000	0.0000	-0.0084
17 October 2012	0.0392	0.0000	0.0000	NA	NA	0.0000	0.0000	NA	0.0000	0.0000	0.0000	0.0084
18 October 2012	-0.0392	NA	0.0488	0.0153	NA	0.0482	0.0335	0.0063	0.0000	0.0368	NA	NA
21 October 2012	0.0263	0.0465	0.0430	0.0481	0.5039	0.0000	0.0217	0.0147	0.0282	-0.0121	NA	-0.0253
22 October 2012	0.0000	0.0445	-0.0106	0.0459	-0.0426	0.0000	0.0213	0.0041	NA	0.0000	NA	0.0169
23 October 2012	0.0129	0.0426	0.0106	0.0471	0.0426	0.0000	0.0000	0.0062	-0.0282	-0.0123	NA	0.0084
24 October 2012	NA	0.0408	-0.0035	NA	0.0000	0.0117	-0.0321	0.0000	0.0282	0.0482	NA	0.0000
31 October 2012	0.0377	-0.0408	-0.0071	0.0195	-0.0211	-0.0117	0.0215	0.0082	-0.0282	-0.0238	NA	0.0083
01 November 2012	0.0123	-0.0426	-0.0071	0.0317	-0.0435	0.0347	-0.0435	NA	0.0000	0.0120	NA	0.0245

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
04 November 2012	-0.0500	-0.0445	0.0000	-0.0285	-0.0455	0.0445	0.0000	0.0000	NA	-0.0364	0.0000	0.0000
05 November 2012	NA	0.0000	0.0000	0.0000	-0.0476	0.0321	-0.0225	0.0000	0.0142	0.0123	0.0000	0.0000
06 November 2012	NA	-0.0465	0.0000	-0.0097	0.0241	0.0000	0.0000	0.0000	NA	0.0000	NA	-0.0328
07 November 2012	0.0253	0.0000	0.0000	0.0382	0.0000	-0.0213	0.0225	0.0020	-0.0142	0.0000	NA	0.0000
08 November 2012	0.0000	0.0000	0.0000	0.0458	0.0465	0.0421	0.0220	-0.0020	0.0000	0.0121	0.0000	0.0247
11 November 2012	0.0000	0.0465	0.0000	-0.0303	-0.0465	0.0404	-0.0332	0.0102	NA	0.0120	0.0000	0.0000
12 November 2012	0.0000	NA	0.0000	NA	-0.0488	-0.0100	-0.0227	0.0000	0.0000	-0.0120	0.0000	-0.0164
13 November 2012	0.0000	-0.0465	0.0000	NA	-0.0513	-0.0101	0.0114	-0.0102	0.0000	0.0238	0.0000	0.0082
14 November 2012	0.0124	NA	0.0000	NA	0.0000	-0.0308	0.0000	NA	0.0000	NA	0.0000	0.0000
18 November 2012	-0.0506	-0.0488	-0.0072	-0.0155	-0.0267	-0.0105	0.0225	-0.0103	0.0000	NA	0.0000	-0.0082
19 November 2012	0.0382	0.0488	-0.0109	-0.0157	0.0000	-0.0321	-0.0339	0.0041	0.0000	NA	NA	0.0000
20 November 2012	0.0368	0.0465	0.0072	0.0313	-0.0274	0.0321	0.0000	-0.0041	NA	NA	NA	-0.0083
21 November 2012	NA	-0.0465	0.0072	-0.0505	-0.0282	NA	-0.0116	0.0000	NA	NA	0.0000	0.0000
22 November 2012	NA	0.0000	0.0000	NA	0.0282	0.0000	0.0116	0.0082	0.0000	NA	0.0000	-0.0084
25 November 2012	NA	0.0000	0.0000	NA	-0.0282	0.0105	-0.0116	-0.0020	-0.0290	NA	0.0000	0.0084
26 November 2012	NA	0.0465	-0.0036	-0.0296	-0.0290	0.0000	0.0000	0.0000	0.0146	NA	NA	-0.0168
27 November 2012	0.0000	NA	0.0036	NA	-0.0299	-0.0105	0.0000	-0.0041	-0.0146	NA	0.0000	0.0168
28 November 2012	-0.0121	-0.0465	0.0036	NA	-0.0308	0.0105	0.0116	0.0062	0.0146	NA	NA	0.0000
29 November 2012	0.0476	0.0000	0.0000	0.0488	0.0308	0.0000	0.0000	0.0020	0.0144	NA	0.0000	0.0165
02 December 2012	NA	0.0000	0.0000	-0.0160	0.0299	0.0104	-0.0116	0.0000	NA	0.0460	0.0124	-0.0165
03 December 2012	-0.0235	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	0.0000	-0.0144	0.0222	-0.0124	0.0165

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>BNT</b>	WASSEL	WATANIYA
04 December 2012	0.0000	0.0000	0.0000	0.0000	-0.0299	-0.0104	0.0000	0.0000	NA	0.0000	0.0000	0.0000
05 December 2012	NA	0.0000	0.0000	NA	0.0000	NA	-0.0116	0.0000	NA	0.0000	0.0000	0.0000
06 December 2012	0.0000	NA	0.0036	0.0032	0.0000	0.0000	0.0000	-0.0020	NA	0.0109	0.0124	0.0000
09 December 2012	NA	NA	-0.0036	-0.0032	-0.0308	0.0000	0.0000	0.0020	0.0000	-0.0109	0.0000	0.0082
10 December 2012	-0.0120	0.0000	0.0000	0.0000	0.0308	-0.0105	0.0000	-0.0020	-0.0146	-0.0222	0.0000	0.0000
11 December 2012	NA	0.0000	0.0177	0.0000	0.0000	0.0412	0.0116	0.0020	0.0000	0.0112	0.0000	0.0000
12 December 2012	-0.0121	NA	0.0000	NA	0.0299	-0.0102	-0.0116	0.0000	NA	0.0000	0.0000	0.0081
13 December 2012	NA	NA	0.0174	0.0000	-0.0299	-0.0103	0.0000	0.0020	-0.0148	0.0000	NA	0.0000
16 December 2012	0.0000	0.0000	0.0000	NA	0.0000	0.0000	-0.0117	0.0000	0.0000	-0.0112	0.0000	0.0000
17 December 2012	0.0241	0.0000	0.0034	NA	0.0299	-0.0104	0.0000	0.0020	0.0000	0.0112	0.0000	0.0000
18 December 2012	NA	0.0000	0.0137	NA	-0.0299	-0.0105	0.0000	0.0081	0.0000	-0.0339	0.0000	0.0080
19 December 2012	0.0000	NA	0.0068	0.0000	0.0000	0.0412	0.0117	0.0020	-0.0150	0.0227	NA	NA
20 December 2012	0.0235	0.0000	0.0034	0.0000	0.0000	0.0000	0.0000	0.0020	NA	0.0000	NA	0.0237
23 December 2012	0.0116	0.0000	0.0067	0.0160	0.0000	-0.0102	0.0000	0.0100	NA	0.0112	NA	0.0155
24 December 2012	0.0114	NA	0.0100	-0.0160	NA	0.0202	0.0116	0.0158	0.0299	-0.0112	0.0482	0.0000
26 December 2012	0.0000	NA	-0.0100	0.0000	-0.0308	0.0000	-0.0116	0.0117	0.0146	0.0112	NA	0.0000
27 December 2012	0.0000	0.0000	0.0000	NA	0.0000	0.0000	0.0455	-0.0019	0.0144	-0.0225	NA	0.0000
30 December 2012	0.0445	-0.0488	0.0000	0.0096	-0.0317	-0.0202	-0.0225	0.0019	0.0000	0.0225	-0.0482	-0.0155
31 December 2012	0.0000	0.0000	-0.0033	0.0190	0.0317	0.0400	0.0225	-0.0039	0.0000	0.0000	0.0482	-0.0078
02 January 2013	NA	0.0000	0.0033	NA	0.0308	0.0194	-0.0339	-0.0196	NA	-0.0225	NA	-0.0320
03 January 2013	-0.0445	0.0488	0.0000	-0.0126	0.0299	-0.0097	0.0114	0.0000	-0.0438	0.0225	-0.0359	-0.0164

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
06 January 2013	NA	0.0000	0.0000	NA	0.0290	0.0000	0.0000	0.0079	0.0000	-0.0339	0.0000	-0.0251
08 January 2013	-0.0114	-0.0488	0.0000	NA	0.0282	0.0192	0.0000	-0.0020	-0.0150	0.0000	NA	0.0415
13 January 2013	-0.0351	NA	0.0000	NA	0.0274	0.0095	0.0000	0.0039	0.0000	NA	0.0000	-0.0331
14 January 2013	0.0000	0.0000	0.0000	NA	0.0267	0.0094	-0.0114	0.0039	0.0150	0.0000	0.0000	0.0000
15 January 2013	0.0235	NA	-0.0033	NA	0.0260	-0.0094	0.0114	-0.0039	0.0000	0.0114	-0.0123	0.0084
16 January 2013	0.0455	0.0000	-0.0034	-0.0323	0.0253	0.0000	-0.0114	0.0020	-0.0150	0.0113	0.0000	0.0000
17 January 2013	0.0000	NA	0.0034	NA	0.0000	0.0000	0.0000	0.0059	0.0150	NA	0.0244	-0.0084
20 January 2013	NA	0.0488	0.0000	0.0000	-0.0513	0.0000	0.0000	-0.0078	NA	-0.0227	0.0000	-0.0084
21 January 2013	0.0000	NA	-0.0034	-0.0033	-0.0267	0.0094	0.0227	0.0020	0.0148	0.0000	0.0000	0.0000
22 January 2013	NA	NA	0.0067	0.0000	-0.0274	0.0000	-0.0227	0.0039	-0.0299	NA	0.0238	-0.0085
23 January 2013	NA	NA	0.0000	0.0000	0.0000	-0.0094	0.0000	-0.0059	0.0000	0.0114	NA	-0.0172
27 January 2013	NA	0.0000	0.0000	0.0000	-0.0282	-0.0095	-0.0116	0.0059	-0.0153	0.0113	-0.0238	0.0087
28 January 2013	NA	NA	0.0000	0.0033	-0.0290	0.0189	0.0230	0.0019	NA	0.0332	0.0000	0.0255
29 January 2013	-0.0112	0.0000	0.0000	0.0163	0.0290	-0.0189	0.0000	0.0116	0.0303	-0.0445	0.0238	-0.0255
30 January 2013	-0.0227	0.0000	0.0000	-0.0032	-0.0290	0.0095	0.0000	0.0038	NA	0.0335	0.0000	0.0000
31 January 2013	0.0227	0.0465	0.0000	0.0032	0.0000	-0.0287	0.0000	-0.0038	NA	-0.0335	-0.0238	0.0086
03 February 2013	NA	-0.0465	0.0100	NA	0.0000	0.0000	0.0113	0.0000	0.0000	0.0225	0.0000	-0.0172
04 February 2013	0.0000	0.0000	0.0196	NA	0.0000	0.0000	0.0112	0.0000	-0.0150	-0.0225	NA	0.0000
05 February 2013	0.0000	-0.0488	0.0065	NA	-0.0299	0.0192	0.0000	0.0038	0.0000	0.0113	0.0000	-0.0087
06 February 2013	0.0000	NA	0.0064	NA	0.0000	NA	0.0220	-0.0019	NA	0.0112	0.0000	0.0000
07 February 2013	0.0000	0.0000	-0.0032	-0.0130	0.0000	-0.0096	-0.0109	0.0019	-0.0153	0.0000	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
10 February 2013	0.0000	0.0000	0.0000	-0.0033	0.0299	0.0284	0.0000	-0.0019	0.0153	0.0000	0.0000	0.0000
11 February 2013	0.0000	0.0000	0.0000	NA	0.0290	-0.0094	-0.0110	0.0000	0.0000	0.0110	0.0000	0.0174
12 February 2013	0.0000	NA	0.0032	0.0163	0.0000	-0.0190	0.0000	0.0000	NA	-0.0110	0.0000	0.0000
13 February 2013	0.0000	0.0000	0.0000	0.0160	-0.0290	0.0096	0.0000	-0.0019	NA	0.0220	0.0000	-0.0087
14 February 2013	0.0000	NA	0.0127	NA	0.0000	0.0095	0.0000	0.0000	0.0150	0.0000	-0.0121	-0.0087
17 February 2013	NA	0.0000	-0.0095	NA	-0.0299	0.0000	-0.0112	-0.0097	-0.0303	-0.0220	0.0000	-0.0088
18 February 2013	-0.0113	0.0000	0.0032	NA	-0.0308	-0.0095	-0.0113	0.0000	0.0000	0.0000	0.0121	0.0088
19 February 2013	0.0225	0.0000	0.0000	-0.0064	0.0000	0.0095	-0.0230	0.0000	-0.0473	0.0000	NA	-0.0267
20 February 2013	NA	0.0000	-0.0032	0.0000	0.0000	0.0000	0.0230	0.0000	-0.0163	0.0000	-0.0121	0.0267
21 February 2013	-0.0112	NA	0.0000	-0.0259	0.0308	-0.0095	0.0000	-0.0019	0.0000	0.0000	0.0000	-0.0088
24 February 2013	0.0112	NA	-0.0032	NA	-0.0308	0.0000	-0.0114	-0.0019	-0.0165	0.0000	NA	0.0088
25 February 2013	-0.0112	0.0000	0.0000	NA	-0.0317	-0.0096	0.0000	0.0039	NA	0.0000	0.0000	-0.0088
26 February 2013	0.0222	0.0000	-0.0032	0.0000	-0.0328	0.0096	0.0000	-0.0058	0.0488	0.0000	NA	NA
27 February 2013	NA	NA	-0.0064	-0.0033	0.0328	-0.0096	0.0114	0.0155	0.0157	0.0110	NA	0.0088
28 February 2013	-0.0110	NA	0.0128	-0.0132	0.0000	0.0000	0.0000	-0.0077	0.0308	-0.0222	0.0121	0.0000
03 March 2013	0.0000	NA	-0.0032	0.0000	0.0317	0.0096	0.0000	0.0077	NA	0.0222	-0.0121	-0.0088
04 March 2013	0.0000	0.0000	0.0000	NA	0.0308	0.0000	0.0113	-0.0058	NA	-0.0335	0.0476	0.0000
05 March 2013	NA	0.0000	0.0000	0.0488	0.0299	0.0000	0.0000	0.0058	-0.0308	0.0335	0.0000	-0.0089
06 March 2013	0.0110	0.0488	0.0000	-0.0192	0.0290	0.0000	0.0332	0.0077	-0.0317	NA	-0.0355	0.0264
07 March 2013	NA	NA	0.0000	0.0032	0.0282	-0.0096	-0.0109	0.0019	NA	-0.0110	-0.0121	-0.0087
10 March 2013	0.0000	-0.0488	-0.0032	NA	0.0000	0.0096	0.0000	0.0000	0.0160	0.0110	0.0000	-0.0088

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
11 March 2013	0.0324	0.0000	0.0000	NA	-0.0282	0.0000	0.0000	0.0000	-0.0323	-0.0110	0.0000	0.0000
12 March 2013	0.0000	NA	0.0000	-0.0130	-0.0290	-0.0096	0.0000	-0.0019	0.0323	NA	0.0000	0.0000
13 March 2013	NA	0.0000	0.0000	-0.0033	NA	0.0000	0.0109	-0.0019	-0.0323	-0.0225	NA	0.0000
14 March 2013	-0.0324	0.0000	0.0064	0.0000	-0.0299	0.0000	-0.0109	0.0019	-0.0165	0.0000	0.0000	NA
17 March 2013	NA	0.0488	0.0000	0.0098	0.0299	-0.0097	0.0000	0.0019	0.0165	0.0225	-0.0247	0.0000
18 March 2013	0.0217	0.0000	-0.0032	NA	0.0000	0.0097	0.0000	0.0000	0.0000	0.0000	0.0000	0.0088
19 March 2013	0.0000	NA	0.0064	-0.0131	0.0290	-0.0097	0.0000	0.0000	NA	0.0000	0.0000	-0.0088
20 March 2013	NA	NA	-0.0032	NA	-0.0290	0.0097	-0.0110	0.0095	0.0323	-0.0225	0.0000	0.0000
21 March 2013	-0.0328	0.0000	-0.0032	0.0000	-0.0299	0.0000	-0.0112	-0.0095	-0.0160	-0.0114	0.0000	0.0000
24 March 2013	0.0328	0.0000	0.0032	-0.0099	0.0299	0.0096	0.0222	0.0019	-0.0328	0.0450	-0.0126	-0.0089
25 March 2013	0.0000	NA	0.0032	0.0000	-0.0299	0.0095	-0.0110	0.0038	0.0328	NA	0.0126	0.0000
26 March 2013	0.0000	NA	0.0000	0.0033	0.0000	0.0000	0.0110	-0.0019	0.0000	-0.0222	0.0000	0.0000
27 March 2013	NA	-0.0488	0.0126	0.0033	0.0000	0.0000	-0.0222	-0.0057	-0.0163	-0.0113	-0.0126	0.0000
28 March 2013	0.0000	0.0000	-0.0031	0.0000	-0.0308	0.0000	-0.0113	-0.0019	NA	0.0000	0.0126	0.0000
31 March 2013	NA	NA	0.0000	NA	-0.0317	NA	-0.0114	0.0019	-0.0165	-0.0114	NA	-0.0090
01 April 2013	0.0000	-0.0513	0.0000	-0.0100	0.0317	-0.0683	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000
02 April 2013	0.0000	NA	0.0063	0.0000	NA	NA	0.0113	-0.0057	0.0165	0.0450	0.0000	0.0000
03 April 2013	NA	0.0000	0.0155	0.0000	0.0000	-0.0412	-0.0113	-0.0077	-0.0165	-0.0450	NA	-0.0090
04 April 2013	0.0000	0.0000	0.0092	0.0000	-0.0317	0.0311	-0.0114	NA	NA	0.0339	0.0000	0.0090
07 April 2013	0.0000	0.0000	-0.0031	0.0033	-0.0328	-0.0417	0.0227	-0.0496	NA	0.0000	0.0000	-0.0182
08 April 2013	NA	NA	-0.0216	-0.0033	0.0328	NA	-0.0227	-0.0500	0.0000	-0.0339	0.0000	0.0091

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
09 April 2013	0.0000	NA	0.0000	NA	0.0000	0.0211	0.0114	0.0021	NA	NA	0.0000	0.0000
10 April 2013	NA	NA	0.0000	-0.0168	NA	NA	-0.0114	0.0043	NA	-0.0233	0.0000	-0.0091
11 April 2013	0.0000	NA	-0.0031	-0.0171	0.0000	NA	0.0000	0.0148	NA	0.0460	0.0000	0.0272
14 April 2013	0.0000	NA	-0.0094	NA	0.0000	NA	0.0000	0.0000	NA	-0.0343	-0.0126	0.0000
15 April 2013	0.0213	0.0000	0.0063	NA	0.0000	0.0000	0.0000	0.0000	0.0000	NA	0.0000	-0.0090
16 April 2013	NA	-0.0541	0.0000	-0.0069	-0.0328	0.0408	0.0339	0.0042	0.0000	0.0116	0.0000	0.0000
17 April 2013	0.0311	0.0541	0.0063	-0.0105	0.0328	0.0392	0.0000	0.0042	0.0165	NA	NA	-0.0090
18 April 2013	0.0202	NA	0.0000	NA	0.0000	0.0096	0.0220	-0.0042	NA	NA	0.0126	0.0090
21 April 2013	0.0000	NA	0.0031	-0.0177	NA	-0.0290	-0.0109	0.0021	0.0163	NA	0.0000	0.0090
22 April 2013	0.0000	0.0000	0.0000	NA	0.0000	0.0194	-0.0110	-0.0042	-0.0163	-0.0233	0.0000	0.0000
23 April 2013	NA	0.0000	-0.0031	NA	-0.0328	NA	0.0000	0.0021	0.0000	0.0000	0.0000	-0.0090
24 April 2013	0.0000	NA	-0.0031	-0.0253	0.0000	0.0000	0.0000	-0.0021	NA	0.0117	0.0000	0.0090
25 April 2013	0.0000	NA	0.0430	0.0073	-0.0339	-0.0097	-0.0112	0.0000	NA	-0.0117	NA	-0.0180
28 April 2013	NA	0.0000	-0.1383	NA	0.0339	0.0192	0.0222	0.0021	NA	0.0000	0.0000	0.0090
29 April 2013	0.0000	NA	0.0000	NA	NA	-0.0192	-0.0110	-0.0021	-0.0333	-0.0238	0.0000	-0.0182
30 April 2013	NA	0.0000	-0.0069	0.0000	-0.0339	0.0000	0.0000	-0.0021	0.0000	0.0120	0.0000	0.0000
01 May 2013	0.0000	NA	-0.0035	NA	-0.0351	-0.0196	0.0110	-0.0021	0.0000	-0.0120	0.0000	0.0091
05 May 2013	0.0000	0.0000	-0.0140	0.0180	0.0351	0.0000	0.0000	0.0021	-0.0171	0.0000	0.0000	0.0000
06 May 2013	0.0000	0.0000	0.0070	-0.0072	NA	-0.0100	0.0109	0.0000	0.0000	0.0000	0.0000	-0.0183
07 May 2013	NA	NA	-0.0035	0.0036	-0.0351	0.0000	-0.0109	0.0042	0.0171	0.0000	0.0000	0.0092
08 May 2013	0.0100	0.0513	-0.0035	-0.0365	NA	0.0100	0.0109	0.0000	NA	-0.0121	0.0000	-0.0092

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
09 May 2013	-0.0100	0.0488	-0.0035	NA	-0.0364	0.0000	0.0000	0.0000	0.0000	0.0121	0.0000	0.0000
12 May 2013	0.0000	-0.0488	0.0071	-0.0112	-0.0377	0.0000	0.0108	-0.0021	0.0000	NA	0.0000	0.0000
13 May 2013	0.0000	-0.0513	-0.0071	NA	0.0377	0.0000	-0.0108	0.0000	0.0000	NA	0.0000	0.0092
14 May 2013	0.0000	0.0000	-0.0071	0.0441	-0.0377	0.0000	NA	0.0021	0.0333	NA	0.0000	-0.0092
15 May 2013	0.0100	NA	0.0000	NA	0.0377	0.0000	-0.0445	0.0000	NA	0.0000	0.0000	0.0000
16 May 2013	0.0000	0.0000	0.0000	NA	-0.0377	0.0000	-0.0347	-0.0021	-0.0165	0.0120	0.0000	0.0000
19 May 2013	NA	NA	0.0000	NA	-0.0392	0.0000	0.0117	0.0021	NA	0.0235	0.0000	0.0092
20 May 2013	0.0000	NA	0.0000	-0.0479	0.0000	0.0196	0.0230	0.0083	0.0000	0.0000	NA	-0.0092
21 May 2013	0.0000	0.0000	0.0000	NA	0.0000	0.0000	0.0113	0.0000	0.0000	NA	0.0000	0.0000
22 May 2013	0.0000	NA	0.0000	0.0000	0.0392	0.0287	0.0000	0.0021	NA	-0.0117	0.0124	0.0000
23 May 2013	0.0099	NA	0.0000	0.0075	NA	-0.0095	-0.0113	0.0000	0.0000	-0.0118	-0.0124	0.0000
26 May 2013	NA	NA	0.0000	NA	-0.0392	0.0282	-0.0114	0.0000	0.0165	0.0235	0.0000	0.0092
27 May 2013	NA	0.0000	0.0000	NA	0.0000	-0.0282	0.0000	0.0000	0.0000	0.0230	0.0488	0.0000
28 May 2013	-0.0099	NA	0.0000	NA	0.0000	0.0000	0.0114	0.0000	0.0000	-0.0114	-0.0488	-0.0092
29 May 2013	NA	NA	0.0000	-0.0075	0.0000	0.0095	-0.0114	0.0000	0.0163	0.0000	0.0000	0.0092
30 May 2013	NA	0.0513	0.0000	NA	-0.0408	0.0094	0.0114	0.0000	0.0473	-0.0116	0.0000	-0.0092
02 June 2013	-0.0100	0.0488	0.0000	NA	-0.0426	-0.0189	-0.0114	-0.0041	-0.0473	NA	0.0000	0.0000
03 June 2013	0.0000	NA	0.0000	0.0443	0.0000	0.0000	0.0114	0.0021	-0.0163	NA	0.0000	-0.0093
04 June 2013	0.0000	0.0000	-0.0036	NA	-0.0445	0.0189	0.0000	-0.0041	0.0480	NA	0.0000	0.0093
05 June 2013	NA	NA	0.0036	-0.0330	0.0000	0.0000	NA	0.0000	0.0000	0.0000	0.0000	0.0000
09 June 2013	0.0000	0.0000	0.0000	0.0258	0.0000	0.0000	0.0000	-0.0021	NA	0.0116	0.0000	-0.0474

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
10 June 2013	NA	NA	0.0000	0.0000	0.0000	-0.0094	0.0000	0.0000	NA	0.0000	0.0000	0.0381
11 June 2013	NA	-0.0488	-0.0036	-0.0183	-0.0465	0.0187	0.0000	0.0041	NA	-0.0233	0.0000	-0.0094
12 June 2013	NA	NA	0.0036	0.0000	-0.0488	0.0000	0.0000	-0.0021	NA	NA	NA	0.0000
13 June 2013	0.0100	0.0488	0.0000	-0.0301	0.0488	0.0000	0.0113	0.0021	0.0155	0.0233	NA	0.0000
16 June 2013	-0.0100	NA	0.0000	0.0000	0.0000	-0.0093	-0.0227	0.0000	NA	-0.0116	0.0000	0.0000
17 June 2013	0.0000	0.0000	0.0000	0.0114	0.0000	0.0093	0.0114	-0.0021	-0.0313	0.0116	0.0000	0.0000
18 June 2013	NA	0.0000	0.0000	0.0187	0.0000	0.0000	0.0113	0.0000	0.0000	0.0114	0.0000	0.0000
19 June 2013	0.0000	-0.0488	0.0000	0.0000	-0.0488	0.0364	-0.0113	-0.0021	NA	-0.0114	NA	0.0370
20 June 2013	NA	0.0488	0.0000	-0.0187	0.0000	-0.0180	0.0000	0.0021	0.0465	0.0000	0.0000	-0.0277
23 June 2013	0.0000	-0.0488	0.0000	0.0000	0.0488	0.0000	-0.0114	0.0021	0.0000	0.0000	0.0000	0.0000
24 June 2013	0.0000	0.0000	0.0000	0.0150	0.0000	0.0617	0.0000	-0.0021	NA	-0.0116	0.0000	0.0000
25 June 2013	0.0000	NA	0.0000	-0.0150	0.0000	0.0000	0.0000	-0.0021	0.0000	0.0000	0.0000	-0.0094
26 June 2013	0.0000	NA	0.0000	-0.0038	0.0000	-0.0348	0.0227	0.0021	0.0150	0.0000	0.0000	-0.0287
27 June 2013	NA	-0.0513	-0.0072	-0.0076	0.0000	0.0262	-0.0113	-0.0021	0.0000	0.0000	0.0000	0.0097
30 June 2013	0.0000	0.0000	0.0036	NA	0.0000	-0.0262	-0.0114	-0.0021	0.0000	-0.0235	0.0000	-0.0097
01 July 2013	0.0000	0.0513	-0.0036	-0.0077	-0.0488	0.0000	0.0000	0.0042	0.0000	0.0000	0.0000	0.0000
02 July 2013	0.0000	-0.0513	0.0000	0.0000	0.0488	-0.0089	0.0114	-0.0021	0.0148	0.0000	0.0000	0.0192
03 July 2013	0.0000	0.0000	0.0000	NA	-0.0488	0.0000	0.0000	0.0021	NA	0.0000	0.0000	0.0000
04 July 2013	0.0100	NA	0.0036	NA	0.0488	0.0000	-0.0114	0.0041	-0.0148	0.0000	0.0000	0.0000
07 July 2013	-0.0100	NA	-0.0036	0.0038	0.0000	0.0000	0.0000	-0.0062	0.0000	-0.0120	0.0000	-0.0192
08 July 2013	NA	NA	0.0000	0.0000	0.0000	0.0089	0.0000	0.0021	0.0148	0.0000	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
09 July 2013	NA	NA	0.0000	NA	0.0000	-0.0089	0.0114	0.0000	0.0432	0.0120	NA	0.0192
10 July 2013	0.0100	0.0000	0.0000	NA	0.0000	-0.0090	0.0000	-0.0021	-0.0142	-0.0120	0.0000	0.0000
11 July 2013	NA	NA	0.0000	NA	0.0000	NA	0.0000	0.0021	NA	NA	NA	0.0000
14 July 2013	NA	NA	0.0036	-0.0038	-0.0488	0.0179	0.0000	0.0021	-0.0144	0.0000	0.0000	-0.0192
15 July 2013	NA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0097
16 July 2013	NA	0.0000	0.0000	0.0303	0.0000	-0.0179	0.0225	0.0041	0.0144	0.0120	0.0000	0.0000
17 July 2013	NA	NA	0.0000	NA	0.0488	0.0090	-0.0112	-0.0041	-0.0144	-0.0120	0.0000	-0.0097
18 July 2013	-0.0100	-0.0541	0.0000	-0.0188	0.0000	0.0000	0.0222	0.0021	0.0144	NA	NA	0.0192
21 July 2013	0.0000	NA	-0.0036	0.0000	-0.0488	-0.0090	0.0000	0.0000	0.0142	0.0000	0.0000	-0.0192
22 July 2013	0.0000	NA	0.0000	NA	0.0488	0.0000	0.0000	0.0123	-0.0142	0.0000	0.0000	NA
23 July 2013	0.0000	NA	0.0000	0.0188	-0.0488	0.0000	0.0109	0.0000	NA	0.0000	NA	0.0000
24 July 2013	NA	0.0541	0.0000	NA	0.0488	0.0090	-0.0220	0.0041	NA	NA	0.0000	0.0000
25 July 2013	0.0000	0.0000	0.0000	0.0185	NA	-0.0090	0.0000	0.0081	-0.0144	0.0000	0.0000	0.0000
28 July 2013	NA	0.0000	0.0000	-0.0222	NA	0.0000	0.0645	0.0140	0.0144	NA	0.0000	0.0000
29 July 2013	0.0000	0.0000	0.0036	0.0222	0.0000	0.0000	0.0704	0.0079	-0.0144	NA	0.0000	0.0000
30 July 2013	NA	0.0000	-0.0036	-0.0110	-0.0488	-0.0182	0.0474	0.0020	0.0000	0.0238	0.0000	0.0000
31 July 2013	NA	-0.0541	0.0036	NA	0.0488	0.0000	-0.0282	-0.0079	0.0000	0.0117	0.0000	0.0097
01 August 2013	NA	0.0541	0.0000	NA	0.0000	0.0536	0.0282	0.0020	0.0144	-0.0117	0.0000	0.0096
04 August 2013	0.0000	-0.0541	-0.0036	NA	0.0000	0.0000	0.0274	0.0000	-0.0144	-0.0118	NA	-0.0096
05 August 2013	NA	0.0000	0.0072	0.0000	-0.0488	0.0000	0.0267	0.0293	0.0000	0.0000	0.0000	0.0470
06 August 2013	NA	0.0000	0.0142	NA	0.0000	0.0258	0.0000	-0.0058	0.0000	0.0690	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	WOD9	ISBK	PADICO	PALTEL	PRICO	<b>BNT</b>	WASSEL	WATANIYA
12 August 2013	0.0000	0.0000	0.0000	0.0074	0.0488	0.0000	0.0000	0.0058	-0.0294	-0.0339	0.0000	0.0091
13 August 2013	0.0000	0.0000	0.0000	0.0467	0.0465	0.0168	0.0087	-0.0019	0.0000	0.0667	0.0000	-0.0091
14 August 2013	0.0000	NA	0.0035	0.0000	0.0445	0.0000	-0.0175	0.0000	-0.0150	-0.0217	NA	-0.0092
15 August 2013	0.0296	0.0541	0.0070	0.0139	0.0426	-0.0084	0.0088	-0.0058	0.0150	-0.0335	0.0000	0.0092
18 August 2013	-0.0098	0.0000	-0.0035	0.0205	0.0408	0.0084	-0.0177	0.0000	-0.0303	-0.0114	0.0000	-0.0279
19 August 2013	NA	-0.0541	0.0000	-0.0068	0.0392	0.0000	0.0000	-0.0039	0.0153	0.0339	NA	0.0094
20 August 2013	0.0000	-0.0572	-0.0035	-0.0242	0.0377	-0.0168	0.0089	-0.0078	0.0000	NA	0.0000	0.0000
21 August 2013	-0.0099	0.0572	0.0000	0.0035	-0.0377	0.0000	-0.0089	-0.0020	NA	-0.0339	0.0000	0.0000
22 August 2013	0.0000	0.0000	-0.0035	-0.0035	-0.0392	NA	-0.0090	0.0020	NA	0.0000	NA	0.0000
25 August 2013	-0.0100	-0.0572	0.0035	-0.0035	-0.0408	0.0000	-0.0090	-0.0059	-0.0465	0.0450	0.0000	0.0000
26 August 2013	NA	0.0000	0.0000	0.0000	0.0000	-0.0171	-0.0091	0.0039	0.0000	-0.0450	0.0000	-0.0094
27 August 2013	NA	-0.0606	-0.0141	NA	0.0000	-0.0174	-0.0566	-0.0079	-0.0488	-0.0116	0.0000	-0.0385
28 August 2013	0.0000	0.0606	-0.0036	0.0000	-0.0426	-0.0177	0.0000	0.0000	NA	-0.0117	0.0000	0.0000
29 August 2013	0.0000	-0.0606	0.0107	-0.0541	-0.0445	0.0177	0.0097	-0.0120	0.0000	0.0000	0.0000	0.0000
01 September 2013	0.0000	NA	0.0000	0.0364	0.0000	0.0000	0.0190	0.0120	0.0000	0.0572	0.0000	0.0098
02 September 2013	0.0000	0.0606	-0.0035	0.0000	-0.0465	0.0000	-0.0095	0.0000	0.0328	0.0000	0.0000	-0.0098
03 September 2013	0.0000	0.0572	0.0035	0.0000	0.0465	0.0087	-0.0096	-0.0100	-0.0496	-0.0455	0.0000	-0.0198
04 September 2013	0.0000	-0.0572	-0.0107	NA	0.0445	NA	-0.0097	0.0000	0.0168	-0.0117	0.0000	0.0100
05 September 2013	0.0000	NA	-0.0144	-0.0072	-0.0445	-0.0264	-0.0098	-0.0040	0.0328	0.0117	0.0000	-0.0100
08 September 2013	0.0000	NA	0.0072	0.0000	-0.0465	-0.0090	-0.0099	-0.0020	-0.0328	-0.0117	0.0000	0.0100
09 September 2013	0.0000	NA	0.0000	NA	0.0000	0.0090	0.0099	0.0040	0.0165	-0.0238	0.0000	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	ANT	WASSEL	WATANIYA
10 September 2013	0.0000	NA	0.0072	0.0072	0.0465	0.0089	0.0572	0.0159	0.0163	0.0238	0.0488	0.0293
11 September 2013	0.0000	NA	0.0420	-0.0108	0.0000	0.0088	-0.0093	-0.0020	NA	NA	-0.0488	0.0096
12 September 2013	NA	0.0572	0.0102	NA	-0.0465	0.0087	-0.0094	0.0020	0.0000	0.0000	NA	-0.0192
15 September 2013	NA	0.0000	-0.0034	NA	NA	0.0000	0.0094	0.0020	-0.0328	0.0000	0.0000	0.0097
16 September 2013	0.0000	-0.0572	-0.0206	0.0108	0.0465	NA	-0.0094	0.0000	0.0000	NA	0.0000	0.0000
17 September 2013	0.0198	0.0572	0.0069	0.0000	0.0000	NA	0.0000	-0.0039	0.0000	0.0233	0.0000	0.0284
18 September 2013	NA	-0.0572	0.0069	0.0000	-0.0465	-0.0175	-0.0095	0.0000	0.0165	0.0000	NA	-0.0189
19 September 2013	0.0098	0.0000	0.0034	-0.0108	NA	0.0088	0.0095	0.0079	-0.0165	0.0000	0.0000	0.0189
22 September 2013	-0.0098	0.0572	-0.0034	0.0000	NA	-0.0088	-0.0190	0.0000	0.0000	0.0000	NA	-0.0189
23 September 2013	0.0000	0.0541	0.0000	NA	0.0000	-0.0089	-0.0097	0.0000	0.0000	-0.0116	NA	0.0095
24 September 2013	NA	-0.0541	-0.0069	0.0036	0.0000	0.0000	0.0000	0.0000	NA	-0.0117	0.0000	-0.0095
25 September 2013	-0.0198	0.0000	0.0000	NA	NA	0.0000	-0.0098	0.0000	0.0328	0.0000	0.0000	0.0000
26 September 2013	NA	-0.0572	-0.0069	NA	0.0000	0.0000	0.0000	-0.0099	-0.0328	0.0460	0.0368	-0.0096
29 September 2013	NA	NA	-0.0105	0.0214	0.0465	0.0000	0.0000	0.0000	-0.0168	-0.0343	NA	-0.0097
30 September 2013	0.0000	NA	0.0105	0.0035	0.0000	-0.0090	0.0000	-0.0080	-0.0171	-0.0117	-0.0368	-0.0196
01 October 2013	0.0000	0.0572	0.0000	NA	-0.0465	0.0090	0.0194	0.0000	0.0000	-0.0118	0.0000	0.0000
02 October 2013	0.0000	0.0000	0.0000	NA	0.0465	0.0177	0.0000	0.0000	-0.0174	NA	0.0000	0.0099
03 October 2013	0.0000	-0.0572	0.0000	0.0000	NA	-0.0088	-0.0097	0.0080	0.0345	0.0118	0.0000	0.0000
06 October 2013	NA	NA	-0.0035	0.0000	NA	0.0000	0.0000	-0.0040	NA	0.0000	NA	0.0000
07 October 2013	NA	0.0000	0.0000	0.0000	-0.0465	0.0601	0.0000	0.0040	0.0000	0.0000	0.0000	0.0000
08 October 2013	NA	NA	0.0035	NA	0.0465	NA	-0.0098	0.0020	0.0168	-0.0118	NA	0.0098

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
09 October 2013	NA	NA	-0.0035	0.0000	-0.0465	NA	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0296
10 October 2013	NA	0.0572	0.0104	NA	NA	NA	0.0000	0.0039	0.0165	0.0690	NA	0.0000
20 October 2013	NA	0.0000	-0.0104	NA	0.0000	NA	-0.0198	-0.0059	-0.0333	-0.0455	0.0000	0.0000
21 October 2013	NA	0.0000	0.0000	NA	-0.0488	-0.0084	0.0000	0.0000	-0.0345	0.0000	0.0124	0.0100
22 October 2013	0.0296	0.0541	0.0035	NA	0.0488	NA	0.0000	0.0000	0.0345	0.0000	-0.0124	0.0000
23 October 2013	0.0000	0.0000	-0.0035	0.0139	0.0000	-0.0255	0.0000	0.0059	-0.0171	0.0000	NA	-0.0100
24 October 2013	0.0000	NA	0.0000	0.0035	0.0000	NA	0.0000	0.0000	NA	0.0000	0.0000	0.0100
27 October 2013	NA	-0.0541	0.0104	0.0103	-0.0488	0.0255	0.0000	0.0039	0.0171	0.0455	0.0000	0.0000
28 October 2013	0.0192	NA	-0.0104	NA	0.0000	0.0000	-0.0202	0.0136	NA	0.0000	0.0000	-0.0100
29 October 2013	0.0000	NA	0.0035	-0.0034	0.0488	-0.0169	0.0000	-0.0117	0.0333	0.0000	0.0000	0.0000
30 October 2013	0.0000	NA	0.0138	0.0034	NA	0.0000	0.0302	0.0020	0.0000	0.0000	0.0000	0.0000
31 October 2013	0.0000	0.0000	0.0000	0.0000	-0.0488	0.0000	0.0196	0.0039	-0.0165	0.0000	0.0000	0.0000
03 November 2013	NA	-0.0572	-0.0069	-0.0068	0.0488	0.0000	0.0192	0.0000	-0.0168	0.0000	NA	0.0100
04 November 2013	0.0095	0.0000	0.0000	-0.0138	0.0000	NA	-0.0192	-0.0039	0.0000	0.0000	0.0000	-0.0100
05 November 2013	0.0187	0.0000	-0.0035	-0.0070	0.0000	0.0000	0.0097	0.0000	0.0000	0.0000	0.0000	0.0000
06 November 2013	0.0183	NA	0.0035	NA	0.0000	0.0085	-0.0097	0.0000	0.0000	0.0000	0.0000	0.0000
10 November 2013	0.0445	0.0000	0.0000	0.0174	NA	NA	0.0381	0.0058	NA	0.0110	0.0000	0.0000
11 November 2013	0.0000	NA	0.0069	-0.0174	0.0000	0.0415	0.0721	0.0474	0.0333	0.0430	0.0000	0.0198
12 November 2013	0.0000	0.0000	0.0170	0.0174	0.0000	0.0241	0.0673	0.0092	-0.0165	0.0412	0.0000	-0.0099
13 November 2013	0.0087	0.0572	0.0067	0.0000	0.0000	0.0079	0.0000	-0.0092	0.0488	0.0000	0.0368	0.0293
14 November 2013	-0.0087	NA	0.0329	0.0137	0.0000	-0.0159	0.0000	0.0000	0.0313	0.0000	-0.0368	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
17 November 2013	0.0426	-0.0572	-0.0032	NA	-0.0488	0.0000	-0.0082	0.0000	0.0000	0.0000	NA	0.0000
18 November 2013	0.0567	0.0000	-0.0033	NA	0.0488	0.0237	0.0082	0.0000	0.0000	0.0101	0.0000	0.0000
19 November 2013	0.0000	0.0000	-0.0065	0.0202	0.0000	0.0155	0.0000	0.0092	0.0000	0.0198	NA	0.0190
20 November 2013	-0.0239	0.0000	0.0033	0.0165	0.0000	0.0377	0.0398	0.0272	0.0303	0.0098	0.0000	0.0187
21 November 2013	-0.0328	0.0572	0.0065	NA	-0.0488	0.0000	0.0000	0.0177	-0.0150	0.0000	0.0000	0.0092
24 November 2013	0.0165	NA	0.0032	0.0000	0.0000	0.0220	0.0232	0.0000	0.0000	0.0000	0.0000	-0.0092
25 November 2013	0.0163	-0.0572	0.0032	-0.0066	-0.0513	0.0356	0.0226	0.0000	0.0299	0.0287	0.0000	-0.0187
26 November 2013	0.0000	-0.0606	0.0000	0.0000	0.0000	0.0000	0.0074	0.0000	0.0146	0.0187	0.0247	0.0187
27 November 2013	-0.0081	0.0000	-0.0065	0.0066	-0.0541	-0.0212	-0.0225	-0.0035	-0.0294	-0.0093	-0.0247	-0.0187
28 November 2013	-0.0164	NA	-0.0065	-0.0066	NA	0.0000	0.0150	-0.0088	0.0000	0.0093	0.0000	0.0000
01 December 2013	-0.0083	NA	0.0000	NA	NA	0.0000	0.0148	-0.0053	NA	0.0092	0.0000	0.0000
02 December 2013	0.0000	0.0000	0.0000	0.0066	0.0541	0.0071	-0.0074	0.0000	-0.0150	0.0000	0.0000	0.0094
03 December 2013	-0.0168	NA	0.0130	-0.0066	0.0000	0.0141	-0.0074	0.0000	0.0000	-0.0185	0.0000	NA
04 December 2013	-0.0258	NA	-0.0130	NA	NA	-0.0070	-0.0075	0.0000	-0.0153	0.0093	NA	-0.0189
05 December 2013	0.0000	NA	0.0000	NA	0.0000	0.0000	-0.0075	-0.0036	-0.0473	0.0000	NA	0.0095
08 December 2013	NA	0.0000	0.0000	NA	-0.0541	0.0000	0.0150	-0.0018	0.0160	0.0092	0.0000	-0.0190
09 December 2013	0.0342	0.0606	0.0000	NA	0.0000	0.0346	-0.0075	0.0054	0.0313	0.0091	0.0000	0.0000
10 December 2013	NA	-0.0606	0.0000	0.0033	0.0541	-0.0068	0.0000	0.0124	NA	0.0000	NA	0.0096
11 December 2013	NA	NA	0.0000	0.0033	NA	-0.0208	0.0075	0.0053	NA	-0.0277	NA	0.0000
17 December 2013	-0.0429	0.0606	-0.0033	NA	-0.0541	0.0139	0.0074	0.0070	NA	0.0093	0.0000	0.0095
18 December 2013	0.0429	0.0000	-0.0033	NA	0.0000	0.0069	0.0074	-0.0070	NA	-0.0187	NA	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
19 December 2013	NA	NA	0.0098	-0.0165	0.0000	0.0000	-0.0148	0.0018	-0.0155	0.0279	0.0000	-0.0095
22 December 2013	-0.0429	NA	0.0257	NA	0.0000	0.0270	0.0074	0.0087	NA	-0.0092	0.0000	0.0000
23 December 2013	0.0087	NA	0.0157	0.0066	0.0000	-0.0134	0.0074	0.0069	0.0000	0.0274	NA	0.0095
24 December 2013	0.0258	-0.0606	0.0000	0.0132	0.0000	0.0134	0.0146	0.0017	0.0155	0.0612	0.0000	-0.0095
26 December 2013	0.0000	0.0000	0.0124	-0.0033	0.0000	0.0000	0.0000	-0.0017	0.0000	0.0084	0.0368	0.0000
29 December 2013	NA	0.0000	0.0000	NA	0.0000	0.0000	-0.0146	0.0034	0.0000	-0.0084	-0.0368	0.0000
30 December 2013	-0.0085	0.0000	-0.0031	NA	0.0000	0.0000	-0.0074	-0.0086	-0.0155	-0.0171	0.0488	-0.0096
31 December 2013	-0.0172	NA	-0.0093	-0.0066	0.0000	0.0263	0.0000	0.0052	0.0308	0.0086	0.0118	-0.0194
02 January 2014	0.0426	NA	-0.0031	-0.0066	0.0000	-0.0263	0.0364	0.0034	0.0000	-0.0086	NA	0.0000
05 January 2014	-0.0168	0.0606	-0.0190	0.0033	-0.0572	NA	0.0000	0.0086	-0.0153	0.0086	NA	0.0000
06 January 2014	NA	-0.0606	0.0000	0.0000	0.0000	0.0328	0.0000	0.0068	0.0000	0.0000	-0.0482	0.0000
08 January 2014	0.0000	0.0606	0.0127	0.0033	0.0000	-0.0328	0.0142	0.0084	0.0000	0.0253	0.0123	-0.0099
09 January 2014	NA	-0.0606	0.0063	0.0000	0.0000	0.0066	-0.0071	-0.0050	-0.0155	0.0083	NA	0.0000
12 January 2014	-0.0171	NA	-0.0063	NA	0.0572	-0.0066	0.0000	0.0050	0.0155	0.0082	-0.0247	0.0000
14 January 2014	0.0000	0.0606	-0.0063	0.0000	0.0541	0.0066	0.0071	0.0067	0.0153	0.0402	-0.0126	0.0196
15 January 2014	NA	-0.0606	-0.0064	0.0066	0.0513	-0.0066	0.0140	0.0033	0.0000	-0.0239	0.0126	-0.0196
16 January 2014	0.0171	NA	0.0064	0.0000	0.0488	0.0198	0.0341	0.0033	0.0150	0.0000	0.0000	0.0000
19 January 2014	NA	0.0000	0.0032	NA	0.0465	-0.0265	0.0133	0.0017	0.0148	0.0080	0.0000	0.0099
20 January 2014	-0.0171	0.0000	0.0126	-0.0033	0.0445	0.0000	0.0516	0.0148	0.0000	-0.0080	0.0000	-0.0099
21 January 2014	0.0086	0.0000	0.0000	-0.0066	0.0000	0.0067	0.0551	0.0257	0.0432	0.0080	0.0000	0.0099
22 January 2014	NA	-0.0645	0.0031	0.0132	-0.0445	-0.0339	0.0059	0.0157	0.0414	0.0159	0.0000	0.0194

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
23 January 2014	0.0085	0.0645	0.0000	0.0258	-0.0465	0.0000	0.0292	0.0308	0.0397	-0.0159	0.0000	0.0000
26 January 2014	NA	-0.0645	-0.0031	NA	-0.0488	0.0339	-0.0058	0.0150	0.0000	0.0545	0.0124	-0.0097
27 January 2014	0.0000	0.0000	-0.0031	-0.0128	0.0000	-0.0067	0.0000	-0.0075	-0.0131	-0.0153	0.0123	0.0000
28 January 2014	-0.0085	0.0000	-0.0063	0.0000	0.0000	0.0067	0.0341	0.0075	-0.0132	0.0153	-0.0123	0.0097
29 January 2014	0.0000	0.0000	0.0000	0.0000	0.0000	NA	0.0000	0.0000	-0.0270	0.0225	0.0000	-0.0194
30 January 2014	0.0000	-0.0690	0.0031	-0.0032	0.0000	-0.0202	0.0056	-0.0030	0.0000	0.0220	0.0000	0.0000
02 February 2014	0.0085	0.0690	0.0187	0.0032	0.0000	0.0202	0.0110	0.0030	-0.0138	-0.0146	0.0000	0.0098
03 February 2014	NA	0.0000	-0.0156	0.0000	0.0000	-0.0202	-0.0450	-0.0226	-0.0426	-0.0223	0.0000	0.0097
04 February 2014	-0.0085	0.0000	0.0031	-0.0032	0.0000	0.0202	-0.0058	-0.0169	0.0144	0.0149	NA	0.0000
05 February 2014	0.0661	0.0000	0.0031	0.0192	NA	0.0000	0.0115	0.0016	0.0000	-0.0377	NA	-0.0097
06 February 2014	0.0000	0.0645	0.0031	-0.0128	-0.0513	NA	0.0226	0.0000	-0.0144	0.0077	0.0000	-0.0196
09 February 2014	-0.0080	-0.0645	0.0000	0.0128	0.0513	-0.0067	-0.0056	0.0000	0.0286	0.0076	0.0000	0.0000
10 February 2014	0.0000	0.0000	0.0245	NA	0.0000	-0.0067	-0.0170	-0.0016	0.0000	0.0225	0.0000	0.0000
11 February 2014	NA	-0.0690	0.0000	0.0095	0.0000	0.0134	-0.0057	0.0016	NA	-0.0149	0.0000	0.0099
12 February 2014	NA	NA	0.0000	NA	0.0000	0.0000	0.0057	0.0215	-0.0432	-0.0075	0.0000	0.0000
13 February 2014	NA	0.0000	-0.0061	NA	0.0000	0.0000	0.0114	0.0015	-0.0299	-0.0076	0.0000	-0.0099
16 February 2014	-0.0328	0.0000	0.0030	-0.0320	NA	NA	-0.0057	-0.0061	-0.0153	0.0076	NA	0.0000
17 February 2014	NA	0.0690	-0.0030	NA	0.0000	0.0000	-0.0288	-0.0092	0.0153	-0.0076	0.0123	0.0000
18 February 2014	-0.0253	-0.0690	0.0000	0.0225	0.0000	0.0000	0.0231	0.0077	-0.0153	-0.0154	0.0000	0.0000
19 February 2014	0.0253	0.0690	0.0000	0.0000	NA	0.0000	0.0282	0.0121	0.0451	-0.0235	0.0359	0.0000
20 February 2014	NA	NA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0146	0.0313	-0.0118	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
23 February 2014	NA	NA	0.0000	0.0000	0.0000	0.0000	0.0055	-0.0091	-0.0445	0.0000	0.0000	0.0000
24 February 2014	NA	-0.0690	0.0000	0.0313	0.0000	0.0000	-0.0055	0.0000	0.0000	0.0000	-0.0241	-0.0100
25 February 2014	-0.0084	NA	0.0000	NA	0.0000	-0.0202	0.0000	-0.0046	0.0000	-0.0313	0.0121	0.0100
26 February 2014	-0.0255	0.0000	-0.0031	-0.0218	-0.0513	NA	0.0165	-0.0046	-0.0153	0.0000	NA	-0.0100
27 February 2014	-0.0087	0.0000	-0.0061	-0.0127	0.0000	NA	-0.0055	-0.0031	0.0153	0.0079	0.0000	0.0000
02 March 2014	0.0000	-0.0741	0.0061	NA	0.0000	0.0000	0.0109	-0.0015	-0.0153	-0.0159	0.0000	0.0000
03 March 2014	0.0000	0.0741	-0.0031	0.0063	0.0000	NA	0.0054	0.0015	NA	0.0000	NA	0.0000
04 March 2014	0.0342	NA	0.0000	0.0032	0.0000	-0.0068	0.0000	0.0000	0.0153	0.0000	0.0355	0.0000
05 March 2014	NA	NA	0.0000	0.0000	NA	NA	-0.0109	0.0000	NA	-0.0080	-0.0355	0.0000
06 March 2014	-0.0084	0.0690	0.0000	0.0000	NA	-0.0138	-0.0110	0.0000	NA	-0.0328	NA	-0.0101
09 March 2014	NA	NA	-0.0031	-0.0063	-0.0541	-0.0070	-0.0055	-0.0015	-0.0465	0.0000	0.0000	0.0101
10 March 2014	-0.0171	-0.0690	0.0031	NA	0.0000	-0.0070	0.0110	-0.0062	0.0000	0.0000	0.0120	0.0000
11 March 2014	-0.0174	NA	0.0000	0.0157	0.0000	-0.0142	-0.0055	0.0000	0.0313	0.0000	0.0000	-0.0101
12 March 2014	-0.0177	NA	-0.0031	NA	NA	-0.0290	-0.0055	-0.0031	-0.0313	0.0408	0.0000	0.0101
13 March 2014	NA	NA	0.0000	NA	0.0000	0.0000	0.0000	-0.0047	0.0313	-0.0080	0.0000	0.0000
16 March 2014	0.0089	NA	0.0092	-0.0157	NA	-0.0223	-0.0056	-0.0016	-0.0155	0.0160	-0.0241	-0.0101
17 March 2014	NA	0.0000	-0.0031	NA	0.0541	NA	0.0056	-0.0094	0.0000	NA	0.0241	0.0101
18 March 2014	0.0175	NA	-0.0031	0.0282	0.0000	NA	-0.0056	-0.0048	-0.0157	-0.0323	0.0000	0.0000
19 March 2014	NA	0.0000	-0.0031	NA	-0.0541	0.0000	-0.0169	-0.0048	0.0000	0.0082	0.0000	-0.0101
20 March 2014	-0.0264	NA	-0.0062	NA	0.0000	0.0075	0.0113	0.0000	0.0157	0.0081	NA	0.0101
23 March 2014	NA	0.0000	-0.0062	-0.0124	0.0000	-0.0150	-0.0170	-0.0032	-0.0480	-0.0163	NA	-0.0202

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
24 March 2014	-0.0364	NA	-0.0031	NA	-0.0572	0.0075	0.0000	-0.0080	0.0000	-0.0249	-0.0241	0.0000
25 March 2014	0.0183	NA	0.0000	NA	0.0000	NA	0.0000	0.0160	0.0000	-0.0169	0.0000	0.0102
26 March 2014	NA	-0.0741	0.0000	0.0000	NA	0.0075	0.0000	NA	0.0000	0.0418	0.0241	-0.0102
27 March 2014	0.0180	NA	0.0000	NA	NA	NA	0.0000	-0.0775	NA	-0.0165	0.0000	NA
30 March 2014	NA	NA	0.0000	NA	NA	0.0000	-0.0173	-0.0138	-0.0165	-0.0168	-0.0120	0.0000
31 March 2014	NA	0.0741	-0.0126	NA	0.0000	0.0366	0.0058	-0.0193	-0.0168	0.0000	0.0000	-0.0103
01 April 2014	0.0000	0.0000	0.0000	-0.0317	0.0000	-0.0366	0.0115	0.0262	0.0333	0.0000	0.0120	0.0204
02 April 2014	NA	NA	-0.0032	NA	0.0000	NA	-0.0349	-0.0245	-0.0165	-0.0258	0.0000	-0.0102
03 April 2014	NA	0.0000	0.0000	0.0160	0.0000	NA	-0.0361	-0.0089	0.0328	NA	NA	-0.0103
06 April 2014	-0.0180	NA	-0.0032	NA	NA	NA	-0.0503	-0.0272	-0.0328	0.0258	-0.0241	-0.0208
07 April 2014	-0.0277	NA	-0.0032	NA	-0.0606	0.0074	0.0000	-0.0092	0.0000	NA	0.0000	-0.0430
08 April 2014	NA	0.0000	-0.0032	NA	0.0000	-0.0301	-0.0130	0.0000	0.0000	0.0000	0.0000	-0.0110
09 April 2014	NA	0.0000	-0.0064	0.0095	0.0000	-0.0077	-0.0265	0.0000	0.0000	NA	0.0000	0.0000
10 April 2014	0.0000	NA	0.0064	0.0000	0.0000	-0.0155	-0.0067	0.0000	0.0000	NA	NA	NA
13 April 2014	-0.0094	NA	0.0000	NA	0.0000	-0.0157	0.0201	-0.0074	-0.0168	NA	NA	0.0220
14 April 2014	-0.0095	-0.0741	0.0000	-0.0095	NA	0.0465	0.0453	0.0185	0.0168	NA	0.0121	-0.0109
15 April 2014	NA	0.0000	0.0000	NA	0.0000	-0.0386	0.0063	0.0253	0.0000	-0.0085	0.0000	-0.0110
16 April 2014	0.0000	NA	0.0000	0.0000	0.0000	NA	0.0310	0.0212	0.0328	0.0418	0.0000	0.0110
17 April 2014	NA	NA	0.0000	NA	NA	-0.0484	0.0061	-0.0035	-0.0163	-0.0165	0.0000	0.0430
20 April 2014	NA	NA	0.0064	-0.0160	0.0000	-0.0083	-0.0122	-0.0018	NA	0.0408	0.0000	-0.0321
21 April 2014	NA	-0.0800	0.0095	NA	0.0000	0.0488	-0.0186	-0.0071	-0.0165	-0.0408	0.0000	-0.0109

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
22 April 2014	0.0000	0.0800	0.0031	0.0160	NA	-0.0488	-0.0063	-0.0125	0.0488	0.0083	0.0000	0.0000
23 April 2014	0.0465	NA	0.0063	NA	-0.0645	NA	-0.0255	-0.0054	-0.0488	0.0164	0.0000	0.0217
24 April 2014	-0.0370	NA	0.0000	0.0000	0.0000	-0.0426	-0.0328	0.0000	0.0000	NA	0.0000	-0.0108
27 April 2014	0.0000	0.0000	-0.0847	0.0000	0.0000	0.0426	0.0000	-0.0182	0.0000	-0.0082	NA	-0.0109
28 April 2014	0.0000	0.0741	-0.0206	NA	0.0000	0.0000	-0.0067	-0.0092	NA	NA	0.0000	-0.0110
29 April 2014	0.0094	0.0690	0.0069	NA	0.0000	0.0247	0.0000	0.0000	0.0000	NA	NA	0.0000
30 April 2014	-0.0094	0.0645	0.0000	-0.0488	NA	-0.0247	-0.0067	0.0129	-0.0168	0.0000	0.0000	-0.0339
04 May 2014	0.0279	-0.0645	-0.0069	0.0132	0.0000	0.0000	0.0397	0.0145	0.0168	0.0000	0.0000	-0.0116
05 May 2014	NA	NA	-0.0035	0.0033	0.0000	0.0000	0.0065	0.0125	0.0000	0.0000	0.0000	0.0230
06 May 2014	0.0000	0.0000	-0.0211	-0.0099	0.0000	0.0000	-0.0065	0.0000	0.0165	0.0000	0.0000	0.0000
07 May 2014	NA	0.0000	0.0211	NA	0.0000	0.0000	-0.0330	-0.0036	0.0163	-0.0165	-0.0121	0.0000
08 May 2014	NA	0.0645	0.0000	-0.0066	-0.0690	0.0000	0.0000	-0.0018	NA	-0.0253	0.0000	0.0000
11 May 2014	0.0091	NA	-0.0035	NA	0.0000	0.0328	-0.0341	-0.0036	0.0160	0.0000	NA	-0.0114
12 May 2014	0.0000	-0.0645	0.0000	NA	0.0000	0.0000	0.0069	0.0018	-0.0488	0.0253	0.0000	0.0114
13 May 2014	-0.0091	0.0000	0.0000	NA	0.0690	NA	0.0339	-0.0054	0.0165	NA	0.0000	0.0000
14 May 2014	-0.0279	-0.0690	0.0035	0.0000	-0.0690	-0.0081	-0.0067	0.0000	0.0323	0.0000	0.0000	0.0000
15 May 2014	0.0370	0.0690	0.0000	0.0066	-0.0741	-0.0247	-0.0411	-0.0018	0.0000	-0.0253	0.0000	0.0000
18 May 2014	NA	-0.0690	-0.0070	0.0099	0.0000	NA	-0.0284	-0.0256	-0.0323	-0.0086	NA	-0.0114
19 May 2014	NA	0.0000	0.0000	NA	0.0000	0.0000	NA	0.0000	-0.0165	-0.0087	NA	0.0114
20 May 2014	NA	0.0000	0.0035	0.0000	0.0000	0.0000	-0.0072	0.0000	NA	0.0087	-0.0247	0.0000
21 May 2014	NA	0.0000	0.0035	0.0000	-0.0800	0.0000	0.0072	0.0037	NA	NA	0.0000	-0.0230

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
22 May 2014	0.0000	0.0000	0.0035	NA	0.0800	0.0000	-0.0145	-0.0037	-0.0168	-0.0087	0.0000	-0.0117
25 May 2014	NA	0.0000	0.0069	-0.0165	0.0000	-0.0339	0.0217	0.0165	0.0168	0.0426	NA	0.0000
27 May 2014	-0.0277	NA	-0.0035	NA	0.0741	NA	0.0000	0.0018	0.0000	NA	0.0000	0.0000
28 May 2014	0.0093	NA	-0.0035	NA	0.0000	0.0086	0.0000	0.0000	-0.0168	NA	0.0000	0.0000
29 May 2014	-0.0093	0.0000	0.0069	0.0165	-0.0741	0.0253	0.0690	0.0340	0.0000	-0.0253	0.0000	-0.0118
01 June 2014	0.0093	0.0690	-0.0035	NA	0.0741	NA	0.0132	-0.0177	0.0168	-0.0172	NA	0.0351
02 June 2014	-0.0187	0.0000	0.0000	NA	NA	0.0000	0.0066	-0.0018	0.0000	0.0087	NA	0.0114
03 June 2014	0.0279	0.0000	0.0000	0.0000	-0.0741	0.0083	0.0194	0.0089	0.0000	0.0000	0.0000	0.0000
04 June 2014	-0.0092	0.0000	0.0000	NA	0.0000	NA	0.0064	-0.0053	0.0000	NA	0.0000	0.0000
05 June 2014	0.0000	0.0000	0.0000	0.0000	NA	0.0325	0.0063	-0.0018	NA	-0.0087	0.0000	0.0225
08 June 2014	0.0000	0.0000	0.0000	0.0000	NA	NA	0.0063	0.0018	0.0000	0.0172	NA	-0.0112
09 June 2014	NA	-0.0690	-0.0069	-0.0165	0.0741	NA	0.0063	0.0000	0.0000	0.0000	0.0000	-0.0227
10 June 2014	0.0000	0.0000	0.0000	NA	-0.0741	NA	0.0000	-0.0054	-0.0168	NA	NA	-0.0233
11 June 2014	0.0000	0.0000	0.0000	0.0165	-0.0800	NA	0.0062	-0.0018	NA	-0.0172	0.0368	-0.0118
12 June 2014	-0.0093	-0.0741	0.0069	0.0000	0.0000	NA	0.0185	0.0000	0.0168	0.0000	-0.0494	0.0351
15 June 2014	0.0367	0.0741	-0.0139	NA	0.0000	-0.0161	-0.0760	-0.0127	-0.0339	0.0000	-0.0127	-0.0351
16 June 2014	-0.0274	NA	0.0000	0.0000	NA	0.0000	-0.0403	-0.0147	0.0171	0.0000	-0.0129	0.0000
17 June 2014	NA	NA	0.0105	NA	NA	NA	0.0662	0.0165	0.0000	0.0000	-0.0131	0.0351
18 June 2014	0.0000	0.0000	-0.0070	0.0000	0.0000	-0.0082	0.0064	0.0000	-0.0171	0.0000	-0.0132	NA
19 June 2014	0.0183	NA	0.0070	0.0000	0.0800	NA	-0.0324	-0.0036	0.0000	0.0000	NA	NA
22 June 2014	0.0000	-0.0741	-0.0105	NA	0.0000	NA	-0.0066	-0.0129	NA	0.0000	-0.0134	-0.0233

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
23 June 2014	NA	0.0741	0.0000	0.0000	0.0000	NA	0.0132	-0.0019	0.0000	0.0000	NA	0.0000
24 June 2014	NA	-0.0741	0.0000	0.0000	0.0000	-0.0165	0.0000	0.0000	0.0000	-0.0087	NA	-0.0118
25 June 2014	-0.0183	NA	0.0000	-0.0165	NA	0.0000	-0.0066	0.0000	0.0171	-0.0088	NA	-0.0120
26 June 2014	0.0183	0.0741	0.0000	NA	NA	0.0247	-0.0132	0.0092	-0.0171	-0.0089	-0.0136	-0.0244
29 June 2014	0.0000	-0.0741	0.0000	NA	0.0000	NA	-0.0270	-0.0055	0.0171	-0.0180	NA	0.0364
30 June 2014	NA	NA	-0.0177	NA	-0.0800	-0.0247	-0.0069	-0.0037	-0.0171	0.0702	NA	-0.0488
01 July 2014	-0.0370	0.0000	0.0000	0.0263	NA	NA	0.0000	0.0092	NA	NA	-0.0138	0.0000
02 July 2014	NA	0.0000	0.0000	NA	0.0000	NA	0.0272	-0.0037	-0.0174	-0.0433	NA	NA
03 July 2014	0.0461	NA	0.0000	NA	0.0000	0.0000	-0.0203	-0.0018	NA	NA	NA	0.0488
06 July 2014	NA	0.0741	0.0000	-0.0098	0.0000	0.0000	0.0136	0.0055	0.0000	0.0000	-0.0140	-0.0364
07 July 2014	NA	0.0000	0.0000	NA	NA	0.0083	-0.0205	-0.0092	0.0000	-0.0179	0.0140	0.0244
08 July 2014	-0.0461	NA	0.0000	NA	NA	NA	-0.0139	0.0019	0.0000	0.0090	NA	-0.0244
09 July 2014	NA	-0.0741	0.0000	0.0000	NA	NA	-0.0212	-0.0019	0.0000	0.0000	0.0000	-0.0124
10 July 2014	-0.0095	NA	NA	0.0000	NA	NA	0.0071	0.0019	NA	NA	NA	0.0000
13 July 2014	NA	0.0741	-0.0036	0.0000	NA	NA	0.0417	-0.0019	0.0174	0.0089	-0.0140	0.0000
14 July 2014	NA	NA	-0.0036	NA	NA	NA	-0.0068	0.0019	-0.0174	0.0088	NA	-0.0382
15 July 2014	NA	NA	0.0000	NA	NA	NA	0.0403	0.0037	0.0345	-0.0177	0.0140	0.0129
16 July 2014	NA	NA	0.0072	NA	NA	-0.0251	0.0066	-0.0055	0.0000	0.0177	NA	0.0377
17 July 2014	0.0095	0.0000	-0.0036	NA	NA	-0.0085	0.0065	0.0019	0.0000	NA	NA	0.0482
20 July 2014	0.0370	NA	0.0000	NA	0.0800	NA	-0.0197	0.0074	0.0168	-0.0267	0.0000	NA
22 July 2014	NA	0.0000	-0.0036	0.0000	-0.0800	NA	-0.0066	-0.0055	NA	0.0179	NA	-0.0118

Al-Quds trading date	AIB	AIG	BOP	BPC	мор	Yası	PADICO	PALTEL	PRICO	<b>HNB</b>	WASSEL	WATANIYA
23 July 2014	NA	NA	0.0036	NA	0.0800	0.0000	0.0000	0.0055	NA	NA	NA	-0.0120
24 July 2014	NA	NA	0.0000	NA	NA	NA	-0.0067	-0.0074	NA	-0.0089	NA	0.0000
03 August 2014	NA	NA	0.0000	0.0000	NA	0.0169	0.0067	-0.0019	NA	-0.0180	NA	0.0000
04 August 2014	NA	0.0000	-0.0036	0.0000	NA	NA	0.0000	0.0000	-0.0168	0.0000	NA	0.0000
05 August 2014	NA	0.0000	0.0036	0.0291	NA	0.0084	0.0456	0.0165	0.0168	0.0269	NA	-0.0121
06 August 2014	NA	NA	0.0000	-0.0291	NA	0.0000	0.0189	0.0127	0.0165	0.0517	NA	-0.0247
07 August 2014	NA	NA	0.0071	0.0000	NA	0.0000	-0.0189	0.0000	0.0163	-0.0169	NA	0.0124
10 August 2014	NA	0.0000	-0.0036	-0.0165	NA	NA	0.0127	-0.0018	-0.0328	NA	NA	-0.0124
11 August 2014	NA	-0.0741	0.0071	NA	NA	NA	0.0063	0.0090	NA	-0.0260	NA	0.0124
12 August 2014	-0.0091	0.0741	0.0071	0.0000	NA	NA	0.0000	-0.0018	NA	0.0087	NA	0.0000
13 August 2014	-0.0092	NA	0.0000	0.0456	NA	NA	-0.0063	0.0018	NA	0.0258	NA	NA
14 August 2014	NA	NA	0.0070	NA	NA	0.0083	0.0063	0.0000	NA	0.0000	NA	-0.0377
17 August 2014	-0.0187	NA	-0.0070	-0.0096	-0.0800	0.0000	0.0000	0.0000	0.0000	0.0000	NA	0.0253
18 August 2014	0.0187	0.0000	0.0000	-0.0032	NA	NA	-0.0126	-0.0090	0.0000	-0.0258	NA	-0.0126
19 August 2014	NA	0.0000	0.0000	NA	-0.0870	0.0000	0.0250	0.0090	0.0328	0.0258	NA	0.0000
20 August 2014	-0.0093	NA	0.0000	0.0000	0.0000	NA	-0.0442	-0.0090	-0.0496	-0.0345	NA	0.0126
21 August 2014	0.0093	NA	-0.0142	0.0000	NA	0.0000	0.0064	0.0090	0.0168	NA	NA	0.0124
24 August 2014	-0.0282	NA	0.0107	NA	0.0870	0.0245	0.0127	-0.0072	NA	NA	NA	NA
25 August 2014	0.0282	0.0000	-0.0035	0.0000	NA	-0.0081	0.0063	0.0018	0.0000	0.0513	NA	NA
26 August 2014	0.0092	NA	-0.0036	0.0000	0.0800	NA	0.0125	-0.0018	0.0328	0.0165	NA	0.0000
27 August 2014	-0.0092	0.0000	0.0036	0.0032	-0.0800	0.0000	0.0123	0.0072	0.0317	-0.0082	NA	0.0123
Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
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28 August 2014	NA	NA	-0.0036	NA	-0.0870	NA	-0.0062	-0.0036	-0.0317	-0.0596	NA	0.0241
31 August 2014	0.0000	NA	-0.0036	NA	-0.0953	-0.0082	0.0062	-0.0018	-0.0163	0.0000	NA	0.0000
01 September 2014	0.0000	NA	0.0000	-0.0032	0.0000	0.0000	0.0061	0.0054	0.0000	0.0000	NA	-0.0364
02 September 2014	0.0183	NA	0.0000	NA	NA	NA	0.0000	0.0018	0.0000	0.0000	NA	0.0123
03 September 2014	0.0000	NA	0.0000	0.0000	NA	0.0243	-0.0061	-0.0018	0.0163	0.0000	NA	0.0121
04 September 2014	0.0000	NA	0.0000	NA	NA	0.0000	0.0000	0.0000	-0.0163	0.0174	NA	-0.0121
07 September 2014	NA	0.0000	0.0036	0.0032	NA	0.0080	-0.0186	0.0000	NA	-0.0087	NA	-0.0247
08 September 2014	0.0000	NA	-0.0036	NA	0.0953	0.0235	-0.0063	-0.0090	-0.0165	0.0258	NA	0.0000
09 September 2014	0.0090	0.0000	0.0036	0.0000	0.0000	0.0154	-0.0063	0.0072	0.0328	-0.0085	NA	-0.0253
10 September 2014	NA	NA	0.0000	0.0032	0.0000	-0.0077	0.0000	-0.0072	-0.0163	0.0169	NA	0.0000
11 September 2014	0.0090	NA	-0.0036	0.0000	NA	NA	0.0000	0.0072	NA	-0.0084	NA	0.0000
14 September 2014	NA	NA	0.0000	0.0064	NA	0.0228	0.0000	-0.0072	0.0000	-0.0258	NA	0.0000
15 September 2014	NA	NA	0.0000	-0.0064	-0.0953	0.0149	-0.0127	-0.0036	-0.0165	-0.0354	NA	NA
16 September 2014	NA	NA	0.0000	NA	0.0000	-0.0301	-0.0064	-0.0073	-0.0168	-0.0090	NA	NA
17 September 2014	NA	NA	0.0036	0.0064	-0.1054	0.0000	-0.0065	-0.0018	0.0168	0.0000	NA	-0.0129
18 September 2014	NA	NA	0.0000	0.0032	0.1054	NA	0.0193	0.0036	-0.0168	0.0445	NA	NA
21 September 2014	0.0000	0.0000	-0.0036	0.0000	-0.1054	-0.0310	-0.0064	-0.0128	NA	0.0087	NA	0.0129
22 September 2014	-0.0180	NA	0.0036	0.0000	NA	NA	-0.0064	0.0219	0.0000	0.0000	NA	0.0000
23 September 2014	NA	NA	0.0000	NA	0.1054	-0.0159	0.0000	-0.0127	NA	0.0086	NA	0.0000
24 September 2014	-0.0465	0.0000	-0.0036	0.0000	NA	0.0159	0.0000	-0.0055	0.0000	0.0000	NA	0.0253
25 September 2014	0.0465	0.0000	0.0071	NA	0.0000	0.0000	-0.0130	0.0055	0.0168	0.0253	NA	-0.0253

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
28 September 2014	NA	0.0000	-0.0071	0.0000	-0.1054	0.0000	0.0065	-0.0073	NA	0.0083	NA	0.0000
29 September 2014	NA	NA	0.0071	NA	0.1054	0.0233	0.0000	0.0018	-0.0168	-0.0251	NA	0.0000
30 September 2014	0.0180	NA	0.0035	0.0000	-0.1054	-0.0233	0.0193	-0.0074	0.0168	-0.0171	NA	0.0253
01 October 2014	0.0000	NA	-0.0071	NA	NA	NA	-0.0128	0.0074	-0.0513	0.0339	NA	-0.0126
02 October 2014	NA	0.0000	0.0036	NA	0.0000	NA	0.0128	0.0000	0.0000	0.0083	NA	-0.0256
08 October 2014	-0.0457	-0.0741	0.0000	0.0000	NA	0.0000	-0.0193	0.0182	NA	-0.0083	NA	0.0000
09 October 2014	0.0457	0.0000	0.0000	0.0000	NA	NA	0.0000	0.0000	0.0345	0.0000	NA	0.0129
12 October 2014	-0.0090	0.0000	0.0000	0.0000	0.0000	NA	0.0000	0.0054	NA	0.0000	NA	-0.0129
13 October 2014	NA	NA	0.0000	0.0000	0.0000	NA	0.0000	-0.0090	-0.0345	-0.0168	NA	0.0000
14 October 2014	NA	NA	0.0000	0.0000	0.0000	NA	0.0000	0.0000	NA	0.0000	NA	-0.0131
15 October 2014	-0.0090	NA	0.0141	0.0095	NA	0.0078	-0.0065	-0.0036	NA	0.0251	NA	0.0131
19 October 2014	0.0090	NA	-0.0176	-0.0095	0.1054	NA	0.0000	0.0036	0.0174	-0.0251	NA	0.0000
20 October 2014	-0.0090	0.0000	0.0000	NA	0.0000	-0.0157	-0.0066	-0.0054	-0.0351	0.0168	NA	0.0000
21 October 2014	0.0090	NA	-0.0071	0.0032	NA	0.0389	-0.0267	-0.0018	0.0000	-0.0084	NA	-0.0263
22 October 2014	-0.0182	-0.0800	0.0000	-0.0032	NA	NA	0.0000	0.0000	-0.0180	0.0084	NA	0.0000
23 October 2014	0.0182	0.0800	-0.0072	NA	-0.1054	-0.0077	-0.0068	0.0000	0.0000	NA	NA	0.0263
26 October 2014	0.0000	NA	0.0000	NA	NA	NA	0.0000	-0.0018	0.0000	-0.0339	NA	NA
27 October 2014	-0.0182	0.0741	0.0000	0.0000	NA	NA	-0.0068	0.0036	NA	0.0000	NA	-0.0263
28 October 2014	0.0182	0.0690	0.0072	NA	0.0000	-0.0233	-0.0069	-0.0018	0.0357	0.0339	NA	-0.0134
29 October 2014	0.0000	0.0000	0.0036	0.0032	NA	NA	0.0000	0.0000	-0.0177	-0.0339	NA	0.0267
30 October 2014	0.0000	0.0645	0.0000	0.0000	0.1054	NA	-0.0139	-0.0073	NA	-0.0087	NA	-0.0403

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
02 November 2014	0.0090	0.0606	0.0000	-0.0032	NA	NA	0.0208	0.0055	0.0351	-0.0087	0.2772	-0.0278
03 November 2014	NA	NA	0.0000	NA	NA	NA	-0.0278	0.0036	0.0000	0.0345	NA	0.0278
04 November 2014	NA	NA	0.0000	NA	NA	0.0233	-0.0358	0.0000	-0.0351	-0.0258	0.0000	0.0000
05 November 2014	NA	0.0000	0.0071	0.0000	NA	NA	-0.0372	-0.0110	0.0177	-0.0087	-0.0430	0.0000
06 November 2014	NA	-0.0606	-0.0071	0.0000	NA	NA	-0.0625	0.0000	NA	0.0000	NA	0.0000
09 November 2014	0.0000	NA	-0.0036	-0.0064	NA	-0.0233	0.0473	0.0018	-0.0357	0.0174	NA	-0.0278
10 November 2014	NA	NA	0.0036	0.0064	NA	-0.0159	0.0153	0.0000	0.0180	-0.0174	NA	0.0000
11 November 2014	-0.0090	0.0000	0.0000	NA	-0.1054	NA	0.0075	-0.0018	NA	0.0087	NA	0.0000
12 November 2014	0.0090	-0.0645	-0.0036	0.0000	-0.1178	0.0000	0.0000	0.0018	NA	-0.0087	NA	0.0000
13 November 2014	NA	-0.0690	0.0036	0.0000	NA	NA	-0.0075	-0.0037	NA	NA	NA	0.0140
16 November 2014	-0.0180	0.0000	-0.0072	NA	0.1178	-0.0080	-0.0230	0.0000	NA	NA	NA	-0.0140
17 November 2014	0.0090	0.0000	0.0072	NA	-0.1178	NA	-0.0235	0.0000	NA	-0.0267	NA	0.0000
18 November 2014	NA	NA	0.0000	0.0000	NA	NA	0.0000	-0.0018	-0.0364	0.0354	NA	-0.0142
19 November 2014	0.0090	0.0690	0.0000	NA	0.0000	0.0317	0.0079	0.0000	0.0000	NA	NA	0.0000
20 November 2014	-0.0090	0.0000	0.0036	NA	0.0000	-0.0317	0.0000	0.0018	NA	-0.0445	-0.0450	0.0142
23 November 2014	0.0000	NA	-0.0036	0.0000	0.0000	-0.0081	0.0233	0.0000	NA	0.0000	NA	0.0000
24 November 2014	NA	NA	0.0000	0.0095	NA	0.0081	NA	-0.0018	NA	0.0357	NA	NA
25 November 2014	0.0000	NA	0.0000	0.0000	-0.1335	-0.0163	-0.0392	-0.0018	0.0000	-0.0177	NA	NA
26 November 2014	0.0000	NA	0.0000	0.0000	0.1335	NA	0.0080	0.0037	NA	NA	NA	NA
27 November 2014	NA	0.0000	-0.0072	-0.0583	-0.1335	0.0480	-0.0080	-0.0055	0.0000	0.0177	NA	-0.0142
30 November 2014	-0.0090	0.0000	0.0000	NA	-0.1542	-0.0398	-0.0243	0.0000	-0.0187	-0.0177	NA	0.0000

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	INB	WASSEL	WATANIYA
01 December 2014	0.0180	NA	0.0036	0.0488	0.1542	-0.0082	0.0402	0.0074	-0.0190	0.0437	NA	0.0000
02 December 2014	-0.0272	NA	0.0000	NA	0.0000	0.0000	-0.0159	0.0091	NA	-0.0437	0.0000	NA
03 December 2014	-0.0185	NA	0.0000	NA	0.1335	NA	0.0080	0.0054	NA	0.0000	NA	-0.0438
04 December 2014	NA	NA	0.0000	0.0000	0.1178	0.0000	-0.0080	0.0000	NA	0.0177	NA	-0.0303
07 December 2014	NA	0.0645	-0.0036	0.0000	NA	-0.0165	0.0000	0.0054	NA	-0.0177	NA	0.0451
08 December 2014	0.0367	NA	-0.0292	NA	NA	NA	0.0000	0.0000	NA	0.0000	NA	0.0000
09 December 2014	0.0000	NA	0.0037	0.0095	NA	0.0165	-0.0161	0.0000	-0.0194	0.0000	NA	0.0146
10 December 2014	NA	-0.0645	0.0255	NA	NA	NA	0.0320	-0.0090	-0.0400	0.0089	NA	-0.0294
11 December 2014	-0.0090	0.0000	0.0000	NA	NA	-0.0165	0.0233	0.0000	0.0000	-0.0269	NA	NA
14 December 2014	0.0090	0.0000	0.0000	NA	NA	0.0165	-0.0077	0.0054	0.0000	0.0180	0.0227	0.0000
15 December 2014	NA	NA	-0.0255	-0.0095	NA	-0.0165	0.0000	0.0000	0.0000	0.0264	0.0112	-0.0458
16 December 2014	NA	0.0000	0.0147	NA	NA	NA	-0.0078	-0.0036	NA	-0.0087	0.0110	0.0000
17 December 2014	-0.0274	0.0000	-0.0073	NA	-0.1178	NA	0.0078	0.0018	0.0000	0.0000	0.0324	0.0458
18 December 2014	NA	NA	-0.0037	0.0000	NA	NA	0.0305	0.0036	0.0000	0.0000	0.0314	0.0438
21 December 2014	NA	-0.0690	0.0000	NA	0.0000	NA	-0.0152	0.0018	-0.0206	0.0000	0.0305	0.0420
22 December 2014	NA	0.0000	-0.0074	0.0000	0.1178	0.0165	0.0226	-0.0090	0.0408	0.0087	0.0000	0.0403
23 December 2014	0.0183	NA	0.0074	0.0000	0.0000	0.0000	0.0366	0.0000	0.0392	0.0172	0.0000	0.0387
24 December 2014	0.0090	0.0000	-0.0037	0.0000	NA	NA	-0.0292	0.0000	-0.0194	-0.0172	0.0198	0.0373
28 December 2014	NA	0.0000	0.0037	0.0465	NA	0.0000	0.0000	0.0090	NA	0.0087	0.0000	0.0241
29 December 2014	0.0000	0.0000	-0.0037	NA	-0.1178	-0.0082	0.0000	-0.0018	NA	0.0086	0.0098	-0.0488
30 December 2014	NA	0.0000	0.0327	NA	0.0000	NA	-0.0074	0.0000	0.0000	0.0253	0.0192	0.0488

Al-Quds trading date	AIB	AIG	BOP	BPC	GCOM	ISBK	PADICO	PALTEL	PRICO	<b>HNI</b>	WASSEL	WATANIYA
31 December 2014	NA	0.0000	0.0000	0.0000	0.0000	0.0000	0.0148	0.0285	0.0385	0.0723	0.0465	0.0118

## **Appendix (E): Positive word series**

Appendix E: shows a sample of 4 positive word which have a highest frequency in the economic media from 1 January 2011 to 31 December 2014. Because the volume of the table is very big, the researcher takes one quarter for each year as a sample. The data contain the number of pages in each newspaper and in a total, the total number of words in the economic content in each newspaper and in a total, and the number of occurrence for each word in each newspaper and in a total. The denotations (A), (B), and (C) represent Al-Hayaa, Al-Ayyam, and Felesteen newspapers respectively.

date	ec	nun conor	ıber nic p	of ages	То	otal numb	er of wo	rds		gr	owth			orga	anizin	g		suj	pport			r	aise	
unit	Α	В	С	total	Α	В	С	total	A	В	С	total	Α	В	С	total	A	В	С	total	Α	В	С	total
01 January 2011	0	1	0	1	0	2,824	0	2,824	0	59	0	59	0	33	0	33	0	29	0	29	0	40	0	40
02 January 2011	0	2	0	2	0	3,471	0	3,471	0	31	0	31	0	5	0	5	0	7	0	7	0	30	0	30
03 January 2011	2	2	0	4	6,953	5,981	0	12,934	7	7	0	14	0	7	0	7	3	5	0	8	5	7	0	12
04 January 2011	2	2	0	4	6,964	5,438	0	12,402	19	10	0	29	9	6	0	15	4	4	0	8	11	13	0	24
05 January 2011	2	2	0	4	5,643	4,878	0	10,521	15	26	0	41	3	5	0	8	4	4	0	8	17	14	0	31
06 January 2011	2	2	0	4	6,035	3,325	0	9,360	2	7	0	9	13	2	0	15	7	2	0	9	2	7	0	9
07 January 2011	2	2	0	4	7,329	4,020	0	11,349	11	10	0	21	3	2	0	5	6	6	0	12	18	13	0	31
08 January 2011	0	1	0	1	0	2,559	0	2,559	0	7	0	7	0	6	0	6	0	3	0	3	0	11	0	11
09 January 2011	0	3	0	3	0	5,736	0	5,736	0	10	0	10	0	1	0	1	0	1	0	1	0	9	0	9
10 January 2011	2	2	0	4	6,379	5,773	0	12,152	10	6	0	16	4	2	0	6	7	12	0	19	2	7	0	9
11 January 2011	2	2	0	4	6,464	6,167	0	12,631	1	11	0	12	13	7	0	20	15	7	0	22	9	22	0	31
12 January 2011	2	2	0	4	6,490	3,730	0	10,220	5	15	0	20	7	7	0	14	3	9	0	12	8	16	0	24
13 January 2011	3	2	0	5	10,275	6,190	0	16,465	9	6	0	15	13	11	0	24	20	7	0	27	30	10	0	40
14 January 2011	2	2	0	4	7,129	2,728	0	9,857	5	5	0	10	10	7	0	17	12	11	0	23	14	12	0	26
15 January 2011	0	2	0	2	0	5,890	0	5,890	0	15	0	15	0	9	0	9	0	17	0	17	0	18	0	18
16 January 2011	0	2	0	2	0	3,536	0	3,536	0	3	0	3	0	4	0	4	0	0	0	0	0	4	0	4
17 January 2011	3	2	0	5	9,551	5,155	0	14,706	9	16	0	25	11	5	0	16	10	9	0	19	9	3	0	12
18 January 2011	2	2	0	4	7,004	5,429	0	12,433	11	23	0	34	10	7	0	17	18	8	0	26	1	3	0	4
19 January 2011	3	3	0	6	10,239	9,105	0	19,344	15	3	0	18	15	11	0	26	14	13	0	27	13	14	0	27

date	e	nun conoi	ıber nic p	of ages	То	otal numbe	er of wo	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uate	A	В	C	total	Α	В	С	total	Α	В	С	total	Α	В	С	total	А	В	С	total	Α	В	С	total
20 January 2011	3	3	0	6	10,638	8,447	0	19,085	55	37	0	92	8	11	0	19	6	20	0	26	23	5	0	28
21 January 2011	2	2	0	4	6,016	5,438	0	11,454	11	2	0	13	9	4	0	13	6	3	0	9	11	3	0	14
22 January 2011	0	1	0	1	0	2,851	0	2,851	0	4	0	4	0	4	0	4	0	3	0	3	0	8	0	8
23 January 2011	0	2	0	2	0	3,373	0	3,373	0	5	0	5	0	7	0	7	0	0	0	0	0	10	0	10
24 January 2011	2	2	0	4	6,973	2,162	0	9,135	16	2	0	18	5	13	0	18	1	1	0	2	3	8	0	11
25 January 2011	2	2	0	4	5,908	5,560	0	11,468	11	6	0	17	16	2	0	18	0	4	0	4	4	7	0	11
26 January 2011	2	2	0	4	6,264	5,260	0	11,524	6	0	0	6	4	5	0	9	8	5	0	13	7	3	0	10
27 January 2011	4	2	0	6	12,976	3,648	0	16,624	15	1	0	16	19	8	0	27	23	5	0	28	20	5	0	25
28 January 2011	2	2	0	4	6,161	5,185	0	11,346	11	2	0	13	5	3	0	8	7	7	0	14	11	2	0	13
29 January 2011	0	1	0	1	0	2,483	0	2,483	0	3	0	3	0	2	0	2	0	3	0	3	0	3	0	3
30 January 2011	0	2	0	2	0	3,880	0	3,880	0	1	0	1	0	2	0	2	0	0	0	0	0	3	0	3
31 January 2011	2	2	0	4	6,894	5,192	0	12,086	9	2	0	11	2	3	0	5	5	3	0	8	3	4	0	7
01 February 2011	2	2	0	4	5,964	5,136	0	11,100	4	3	0	7	6	6	0	12	0	4	0	4	7	12	0	19
02 February 2011	2	2	0	4	6,698	5,508	0	12,206	6	5	0	11	14	9	0	23	10	1	0	11	4	10	0	14
03 February 2011	2	2	0	4	3,669	5,509	0	9,178	6	4	0	10	7	8	0	15	5	2	0	7	7	7	0	14
04 February 2011	1	2	0	3	2,536	6,493	0	9,029	3	6	0	9	4	0	0	4	8	0	0	8	2	1	0	3
05 February 2011	0	1	0	1	0	2,575	0	2,575	0	2	0	2	0	1	0	1	0	1	0	1	0	5	0	5
06 February 2011	0	2	0	2	0	4,089	0	4,089	0	1	0	1	0	8	0	8	0	1	0	1	0	5	0	5
07 February 2011	2	2	0	4	6,869	5,380	0	12,249	8	0	0	8	6	6	0	12	6	1	0	7	7	0	0	7
08 February 2011	2	2	0	4	6,149	5,208	0	11,357	7	1	0	8	12	10	0	22	6	6	0	12	5	1	0	6
09 February 2011	2	2	0	4	6,394	6,112	0	12,506	8	5	0	13	6	7	0	13	8	11	0	19	2	1	0	3
10 February 2011	2	2	0	4	5,967	6,735	0	12,702	10	6	0	16	5	3	0	8	20	4	0	24	9	2	0	11
11 February 2011	1	1	0	2	2,872	2,257	0	5,129	3	4	0	7	4	4	0	8	2	0	0	2	0	3	0	3
12 February 2011	0	1	0	1	0	2,135	0	2,135	0	0	0	0	0	4	0	4	0	1	0	1	0	2	0	2
13 February 2011	0	2	0	2	0	3,792	0	3,792	0	6	0	6		5	0	5	0	4	0	4	0	1	0	1
14 February 2011	2	2	0	4	6,687	5,857	0	12,544	13	1	0	14	1	6	0	7	4	1	0	5	7	4	0	11

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uate	A	В	С	total	Α	В	С	total	Α	В	С	total	Α	В	С	total	Α	В	С	total	Α	B	С	total
15 February 2011	2	2	0	4	6,770	6,586	0	13,356	1	2	0	3	2	7	0	9	10	2	0	12	19	7	0	26
16 February 2011	2	1	0	3	7,704	1,518	0	9,222	4	3	0	7	11	5	0	16	8	3	0	11	6	1	0	7
17 February 2011	3	3	0	6	10,230	6,511	0	16,741	5	4	0	9	5	2	0	7	6	5	0	11	4	3	0	7
18 February 2011	2	2	0	4	5,860	6,195	0	12,055	3	6	0	9	6	5	0	11	7	0	0	7	7	5	0	12
19 February 2011	0	1	0	1	0	2,662	0	2,662	0	5	0	5	0	8	0	8	0	1	0	1	0	2	0	2
20 February 2011	0	2	0	2	0	4,036	0	4,036	0	7	0	7	0	5	0	5	0	3	0	3	0	8	0	8
21 February 2011	2	2	0	4	6,312	5,709	0	12,021	5	3	0	8	10	6	0	16	3	5	0	8	1	6	0	7
22 February 2011	2	2	0	4	6,198	5,795	0	11,993	4	2	0	6	7	11	0	18	4	1	0	5	7	4	0	11
23 February 2011	2	2	0	4	5,870	3,678	0	9,548	3	6	0	9	4	2	0	6	1	5	0	6	2	1	0	3
24 February 2011	3	2	0	5	7,008	3,652	0	10,660	11	6	0	17	14	2	0	16	8	5	0	13	7	4	0	11
25 February 2011	1	2	0	3	2,441	6,470	0	8,911	1	0	0	1	2	7	0	9	4	0	0	4	5	5	0	10
26 February 2011	0	1	0	1	0	2,466	0	2,466	0	1	0	1	0	4	0	4	0	1	0	1	0	4	0	4
27 February 2011	0	2	0	2	0	3,652	0	3,652	0	2	0	2	0	0	0	0	0	6	0	6	0	8	0	8
28 February 2011	2	3	0	5	5,916	2,161	0	8,077	1	7	0	8	6	6	0	12	5	6	0	11	6	4	0	10
01 March 2011	2	1	2	5	6,268	3,904	2,580	12,752	2	7	6	15	5	2	1	8	3	3	7	13	4	4	4	12
02 March 2011	2	2	2	6	6,141	5,537	2,647	14,325	2	2	0	4	1	7	3	11	6	3	2	11	1	4	0	5
03 March 2011	2	3	2	7	5,918	8,679	2,402	16,999	5	4	2	11	3	4	0	7	0	1	0	1	6	8	3	17
04 March 2011	2	1	1	4	4,193	472	1,141	5,806	13	3	0	16	3	0	0	3	5	3	1	9	5	8	3	16
05 March 2011	0	2	2	4	0	3,366	2,829	6,195	0	2	0	2	0	6	1	7	0	7	0	7	0	3	5	8
06 March 2011	0	2	2	4	0	1,550	2,371	3,921	0	7	2	9	0	2	2	4	0	7	1	8	0	4	2	6
07 March 2011	2	2	2	6	6,294	6,350	2,441	15,085	6	1	1	8	7	7	1	15	14	6	6	26	5	6	0	11
08 March 2011	2	2	2	6	5,908	4,038	2,361	12,307	4	9	0	13	9	1	2	12	8	4	2	14	4	7	1	12
09 March 2011	2	2	2	6	6,505	5,825	2,510	14,840	8	14	2	24	18	10	2	30	5	3	4	12	5	7	2	14
10 March 2011	2	2	2	6	6,247	5,434	2,127	13,808	2	3	1	6	3	13	3	19	3	2	0	5	3	4	2	9
11 March 2011	2	1	1	4	4,951	2,793	1,015	8,759	6	9	1	16	2	6	1	9	6	1	1	8	11	8	0	19
12 March 2011	0	1	2	3	0	2,483	2,690	5,173	0	7	2	9	0	4	4	8	0	5	1	6	0	1	0	1

date	e	nun conoi	ıber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			org	anizin	g		suj	pport			r	aise	
uute	A	В	С	total	А	В	С	total	Α	В	С	total	A	В	C	total	A	В	С	total	Α	В	С	total
13 March 2011	0	2	2	4	0	4,320	2,102	6,422	0	0	0	0	0	1	6	7	0	5	0	5	0	2	0	2
14 March 2011	2	4	2	8	5,790	6,821	2,235	14,846	8	7	1	16	3	1	0	4	4	5	0	9	2	1	3	6
15 March 2011	2	2	2	6	5,966	2,246	2,510	10,722	6	10	2	18	3	0	3	6	0	0	2	2	9	1	4	14
16 March 2011	2	2	2	6	6,038	5,484	2,580	14,102	0	5	1	6	12	2	3	17	5	9	3	17	2	3	3	8
17 March 2011	3	2	2	7	9,734	4,885	2,569	17,188	6	2	7	15	6	2	2	10	10	1	0	11	12	2	0	14
18 March 2011	2	1	1	4	3,737	2,749	1,400	7,886	8	3	1	12	2	8	0	10	6	4	0	10	7	13	1	21
19 March 2011	0	1	2	3	0	2,485	2,385	4,870	0	3	1	4	0	14	1	15	0	7	0	7	0	16	5	21
20 March 2011	0	1	2	3	0	1,822	2,645	4,467	0	7	3	10	0	8	2	10	0	4	0	4	0	4	2	6
21 March 2011	2	2	2	6	5,644	5,147	2,645	13,436	5	7	1	13	3	6	0	9	2	5	2	9	1	1	0	2
22 March 2011	2	2	2	6	5,577	5,654	2,588	13,819	4	2	2	8	14	4	8	26	1	4	2	7	4	4	2	10
23 March 2011	2	2	0	4	6,052	5,252	0	11,304	1	8	0	9	12	7		19	3	9	0	12	1	3	0	4
24 March 2011	2	2	2	6	4,997	5,603	2,383	12,983	13	1	0	14	3	1	3	7	6	0	1	7	1	2	4	7
25 March 2011	2	2	1	5	5,488	5,506	1,210	12,204	7	5	5	17	4	4	1	9	12	1	0	13	2	7	2	11
26 March 2011	0	1	2	3	0	2,815	2,419	5,234	0	9	1	10	0	9	13	22	0	10	0	10	0	1	2	3
27 March 2011	0	0	2	2	0	0	2,637	2,637	0	4	2	6	0 0	1	1	2	0	3	1	4	0	5	1	6
28 March 2011	2	3	2	7	5,829	7,925	2,393	16,147	5	3	2	10	2	2	1	5	2	0	1	3	5	4	2	11
29 March 2011	3	3	2	8	9,859	8,282	2,589	20,730	14	9	1	24	8	5	1	14	6	2	1	9	5	2	1	8
30 March 2011	3	2	2	7	9,531	2,373	2,306	14,210	5	6	8	19	6	4	0	10	7	4	2	13	2	3	0	5
31 March 2011	3	2	1	6	8,737	4,248	1,050	14,035	16	0	0	16	10	2	1	13	10	0	0	10	5	2	1	8
01 April 2012	0	3	2	5	0	6,951	2,419	9,370	0	10	0	10	0	9	3	12	0	9	1	10	0	8	2	10
02 April 2012	2	2	2	6	5,879	6,131	2,538	14,548	1	5	1	7	4	2	0	6	6	1	2	9	2	7	9	18
03 April 2012	2	2	2	6	5,580	6,812	2,699	15,091	6	1	0	7	2	2	1	5	2	4	1	7	1	3	11	15
04 April 2012	2	2	2	6	5,391	3,406	2,192	10,989	8	3	1	12	13	10	0	23	4	2	0	6	4	3	13	20
05 April 2012	2	3	2	7	3,401	6,261	2,953	12,615	10	0	1	11	8	9	2	19	18	12	4	34	4	8	8	20
06 April 2012	2	2	2	6	4,132	4,017	2,782	10,931	12	0	0	12	10	6	4	20	1	2	1	4	6	7	0	13

date	ec	nun conor	ıber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uate	A	В	С	total	Α	В	C	total	Α	B	С	total	A	В	С	total	A	В	С	total	A	В	С	total
07 April 2012	0	1	2	3	0	2,370	2,671	5,041	0	9	1	10	0	0	1	1	0	2	1	3	0	7	0	7
08 April 2012	0	2	2	4	0	2,952	2,637	5,589	0	9	6	15	0	0	1	1	0	6	3	9	0	5	4	9
09 April 2012	2	2	2	6	6,127	4,520	2,644	13,291	2	0	0	2	7	1	2	10	0	0	4	4	4	4	4	12
10 April 2012	3	3	2	8	8,409	8,328	2,743	19,480	15	6	0	21	4	9	0	13	9	12	0	21	15	3	0	18
11 April 2012	2	3	2	7	5,829	8,188	2,173	16,190	4	2	0	6	4	5	0	9	7	4	0	11	0	3	0	3
12 April 2012	3	2	2	7	7,334	4,892	2,467	14,693	9	24	0	33	20	14	0	34	6	5	0	11	6	1	0	7
13 April 2012	2	2	2	6	3,911	4,157	2,796	10,864	7	9	0	16	7	7	0	14	5	5	0	10	5	10	0	15
14 April 2012	0	1	2	3	0	2,289	2,551	4,840	0	4	0	4	0	0	0	0	0	0	0	0	0	2	0	2
15 April 2012	0	2	2	4	0	4,300	2,186	6,486	0	5	0	5	0	1	0	1	0	0	0	0	0	4	0	4
16 April 2012	2	2	2	6	5,684	4,308	2,294	12,286	3	8	0	11	8	4	0	12	5	5	0	10	1	1	0	2
17 April 2012	2	2	2	6	4,885	2,777	2,915	10,577	6	4	0	10	9	1	0	10	5	5	0	10	1	1	0	2
18 April 2012	2	2	2	6	3,619	5,340	2,130	11,089	1	11	0	12	4	8	0	12	7	8	0	15	1	5	0	6
19 April 2012	3	2	2	7	8,900	5,451	2,249	16,600	16	6	0	22	4	5	0	9	14	8	0	22	3	3	0	6
20 April 2012	2	2	2	6	5,969	5,869	2,522	14,360	17	8	0	25	5	8	0	13	3	4	0	7	4	4	0	8
21 April 2012	0	1	2	3	0	2,595	2,551	5,146	0	19	0	19	0	1	0	1	0	0	0	0	0	2	0	2
22 April 2012	0	2	2	4	0	3,088	2,312	5,400	0	9	0	9	0	2	0	2	0	3	0	3	0	1	0	1
23 April 2012	2	2	2	6	5,544	5,543	2,427	13,514	5	2	0	7	3	5	0	8	15	10	0	25	2	4	0	6
24 April 2012	3	2	2	7	7,389	5,885	2,567	15,841	14	5	0	19	14	9	0	23	11	8	0	19	1	2	0	3
25 April 2012	2	2	2	6	5,005	3,708	2,442	11,155	9	4	0	13	1	7	0	8	9	0	0	9	4	4	0	8
26 April 2012	3	2	2	7	7,680	4,450	2,187	14,317	8	6	0	14	12	5	0	17	12	5	0	17	9	2	0	11
27 April 2012	2	2	2	6	5,794	5,877	2,728	14,399	2	6	0	8	1	2	0	3	5	8	0	13	5	2	0	7
28 April 2012	0	1	2	3	0	2,437	2,668	5,105	0	6	0	6	0	1	0	1	0	4	0	4	0	5	0	5
29 April 2012	0	2	2	4	0	3,086	2,115	5,201	0	4	0	4	0	1	0	1	0	1	0	1	0	1	0	1
30 April 2012	3	3	2	8	7,466	8,761	2,291	18,518	3	5	0	8	6	11	0	17	10	4	0	14	6	9	0	15
01 May 2012	3	2	2	7	9,264	5,868	2,770	17,902	12	5	0	17	6	4	0	10	5	2	0	7	2	1	0	3
02 May 2012	2	2	2	6	6,374	5,757	2,230	14,361	11	2	0	13	3	6	0	9	3	4	0	7	3	1	0	4

date	e	nun conoi	nber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			org	anizin	g		suj	pport			r	aise	
uait	А	В	C	total	Α	В	C	total	Α	В	С	total	Α	В	C	total	A	В	С	total	Α	В	С	total
03 May 2012	3	2	2	7	8,281	2,741	2,565	13,587	10	11	0	21	3	1	0	4	14	9	0	23	5	3	0	8
04 May 2012	2	1	2	5	4,036	2,282	2,767	9,085	7	3	0	10	3	2	0	5	7	1	0	8	6	2	0	8
05 May 2012	0	1	2	3	0	2,197	2,799	4,996	0	9	0	9	0	1	0	1	0	1	0	1	0	3	0	3
06 May 2012	0	2	2	4	0	1,349	1,960	3,309	0	5	0	5	0	2	0	2	0	4	0	4	0	2	0	2
07 May 2012	3	2	2	7	7,695	5,580	2,414	15,689	9	2	0	11	8	3	0	11	6	6	0	12	9	4	0	13
08 May 2012	2	2	2	6	5,976	3,163	2,637	11,776	9	6	0	15	9	2	0	11	2	0	0	2	3	4	0	7
09 May 2012	2	3	2	7	5,779	7,213	2,627	15,619	15	3	0	18	15	7	0	22	6	11	0	17	4	10	0	14
10 May 2012	2	2	2	6	5,145	2,392	2,671	10,208	3	11	0	14	13	4	0	17	1	2	0	3	4	5	0	9
11 May 2012	2	2	2	6	5,810	3,851	2,482	12,143	13	5	0	18	4	7	0	11	12	11	0	23	9	10	0	19
12 May 2012	0	1	2	3	0	2,515	2,980	5,495	0	11	0	11	0	1	0	1	0	1	0	1	0	8	0	8
13 May 2012	0	2	2	4	0	1,029	2,493	3,522	0	1	0	1	0	6	0	6	0	7	0	7	0	1	0	1
14 May 2012	2	2	2	6	5,821	5,643	3,267	14,731	4	0	0	4	7	2	0	9	11	7	0	18	5	10	0	15
15 May 2012	3	2	2	7	8,822	6,061	3,262	18,145	16	8	2	26	19	6	2	27	10	14	2	26	7	1	0	8
16 May 2012	2	2	2	6	4,362	5,977	2,491	12,830	11	13	4	28	6	5	3	14	9	4	2	15	5	4	16	25
17 May 2012	2	2	2	6	2,836	5,839	2,747	11,422	9	10	1	20	18	16	1	35	9	8	9	26	1	1	2	4
18 May 2012	1	2	2	5	2,910	6,141	2,433	11,484	5	4	0	9	5	5	1	11	1	5	2	8	1	6	1	8
19 May 2012	0	1	2	3	0	2,277	2,298	4,575	0	1	10	11	0	9	2	11	0	5	0	5	0	0	5	5
20 May 2012	0	2	2	4	0	3,780	50	3,830	0	14	0	14	0	1	0	1	0	6	0	6	0	1	0	1
21 May 2012	2	2	2	6	5,838	5,713	2,628	14,179	8	4	1	13	9	1	1	11	7	6	0	13	7	3	1	11
22 May 2012	3	2	2	7	9,318	3,285	2,983	15,586	9	1	3	13	5	3	0	8	8	2	5	15	9	1	0	10
23 May 2012	3	3	2	8	8,325	6,948	2,438	17,711	12	14	0	26	5	5	2	12	11	11	2	24	3	6	1	10
24 May 2012	2	2	2	6	4,996	4,687	2,343	12,026	1	5	3	9	1	4	6	11	12	7	6	25	1	1	0	2
25 May 2012	2	2	2	6	5,971	5,142	2,703	13,816	12	6	0	18	6	12	5	23	6	7	1	14	3	4	1	8
26 May 2012	0	1	2	3	0	2,390	2,406	4,796	0	17	0	17	0	10	4	14	0	2	0	2	0	0	0	0
27 May 2012	0	2	2	4	0	3,526	2,777	6,303	0	4	1	5	0	4	21	25	0	0	8	8	0	2	2	4
28 May 2012	2	2	2	6	4,870	4,627	2,453	11,950	10	22	0	32	5	8	7	20	12	16	1	29	4	9	0	13

date	ec	nun conor	ıber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uate	A	В	С	total	Α	В	С	total	A	В	С	total	Α	В	С	total	A	В	С	total	A	В	С	total
29 May 2012	3	2	2	7	8,232	5,341	2,927	16,500	9	5	1	15	17	17	2	36	11	11	0	22	4	5	3	12
30 May 2012	2	2	2	6	5,432	5,462	2,394	13,288	14	6	2	22	2	3	3	8	20	17	1	38	9	6	4	19
31 May 2012	2	2	2	6	5,362	3,401	2,573	11,336	13	6	1	20	7	6	4	17	14	6	1	21	3	5	1	9
01 June 2012	2	2	1	5	5,162	5,602	1,285	12,049	10	15	1	26	4	3	2	9	14	1	0	15	0	4	0	4
02 June 2012	0	1	2	3	0	1,585	2,249	3,834	0	4	2	6	0	6	1	7	0	16	0	16	0	3	1	4
03 June 2012	0	2	2	4	0	3,922	2,889	6,811	0	6	1	7	0	3	0	3	0	2	1	3	0	0	1	1
04 June 2012	2	2	2	6	4,980	4,831	2,953	12,764	5	2	0	7	7	2	2	11	8	6	3	17	7	2	1	10
05 June 2012	3	2	2	7	6,237	6,092	2,471	14,800	20	3	0	23	10	10	1	21	7	8	1	16	2	5	4	11
06 June 2012	2	2	2	6	5,997	4,856	2,535	13,388	11	2	5	18	12	11	12	35	2	5	5	12	2	3	2	7
07 June 2012	2	2	2	6	4,243	5,929	2,266	12,438	13	7	5	25	9	7	1	17	5	7	4	16	3	4	0	7
08 June 2012	2	2	2	6	5,991	2,491	2,574	11,056	11	8	0	19	8	6	3	17	17	10	0	27	3	2	0	5
09 June 2012	0	1	2	3	0	2,657	2,682	5,339	0	4	3	7	0	0	1	1	0	0	4	4	0	3	2	5
10 June 2012	0	2	2	4	0	900	2,659	3,559	0	15	0	15	0	6	1	7	0	1	4	5	0	0	7	7
11 June 2012	3	3	2	8	7,635	7,043	2,488	17,166	5	5	5	15	8	14	0	22	6	5	4	15	6	2	3	11
12 June 2012	3	2	2	7	5,664	5,598	2,668	13,930	13	4	0	17	11	8	4	23	12	8	4	24	1	2	1	4
13 June 2012	2	3	2	7	4,964	6,534	3,184	14,682	3	8	7	18	21	2	1	24	5	0	4	9	2	2	4	8
14 June 2012	3	3	2	8	6,809	7,079	2,401	16,289	8	17	9	34	10	0	5	15	11	0	3	14	0	0	1	1
15 June 2012	3	2	2	7	7,076	6,081	2,442	15,599	10	8	0	18	8	0	8	16	12	0	1	13	6	0	0	6
16 June 2012	0	1	2	3	0	3,032	2,710	5,742	0	6	7	13	0	0	2	2	0	0	1	1	0	0	9	9
17 June 2012	0	2	2	4	0	3,166	2,245	5,411	0	1	1	2	0	0	6	6	0	0	1	1	0	0	0	0
18 June 2012	0	2	2	4	0	3,594	2,345	5,939	0	13	2	15	0	0	0	0	0	0	0	0	0	0	4	4
19 June 2012	2	2	2	6	5,904	5,827	2,794	14,525	13	2	10	25	4	0	2	6	5	0	1	6	1	0	0	1
20 June 2012	3	2	2	7	8,144	5,595	2,753	16,492	7	4	0	11	5	0	0	5	7	0	0	7	6	0	4	10
21 June 2012	2	2	2	6	5,534	5,338	2,545	13,417	12	12	0	24	3	0	0	3	16	0	0	16	1	0	5	6
22 June 2012	2	2	2	6	5,411	1,669	2,328	9,408	12	7	0	19	10	0	7	17	9	0	0	9	0	0	0	0
23 June 2012	0	1	2	3	0	2,149	2,699	4,848	0	4	2	6	0	0	2	2	0	0	3	3	0	0	0	0

data	e	nun conoi	ıber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			org	anizin	g		suj	pport			r	aise	
uaic	А	В	C	total	Α	В	С	total	Α	В	С	total	A	В	С	total	А	В	С	total	Α	В	С	total
24 June 2012	0	2	2	4	0	4,055	2,690	6,745	0	5	1	6	0	0	3	3	0	0	9	9	0	0	2	2
25 June 2012	3	2	2	7	7,011	4,160	54	11,225	6	25	0	31	16	0	0	16	4	0	0	4	1	0	0	1
26 June 2012	2	2	2	6	4,759	3,116	3,145	11,020	11	10	0	21	4	0	9	13	10	0	1	11	3	0	1	4
27 June 2012	2	2	2	6	5,269	3,286	3,109	11,664	3	3	0	6	6	0	6	12	9	0	0	9	1	0	0	1
28 June 2012	2	3	2	7	5,401	9,055	3,175	17,631	3	3	0	6	1	0	4	5	14	0	0	14	3	0	0	3
29 June 2012	2	2	2	6	4,855	5,778	2,612	13,245	2	8	0	10	5	6	13	24	1	2	0	3	0	3	0	3
30 June 2012	0	1	2	3	0	2,864	2,130	4,994	0	4	2	6	0	0	4	4	0	1	2	3	0	6	4	10
01 July 2013	3	2	2	7	6,146	4,909	2,003	13,058	5	6	0	11	6	6	8	20	0	2	0	2	4	7	2	13
02 July 2013	3	2	2	7	6,545	4,346	2,301	13,192	6	6	1	13	8	10	0	18	6	3	1	10	2	0	0	2
03 July 2013	3	3	2	8	5,749	6,327	2,451	14,527	0	1	3	4	9	9	2	20	8	13	0	21	2	5	0	7
04 July 2013	3	4	2	9	4,946	6,209	2,368	13,523	5	12	0	17	9	3	5	17	10	10	1	21	3	7	2	12
05 July 2013	2	2	2	6	3,173	1,281	2,423	6,877	1	3	4	8	1	6	2	9	2	2	2	6	3	5	1	9
06 July 2013	0	1	2	3	0	2,974	2,130	5,104	0	3	4	7	0	6	11	17	0	1	0	1	0	3	0	3
07 July 2013	0	3	2	5	0	3,373	2,479	5,852	0	1	0	1	0	4	3	7	0	2	0	2	0	5	2	7
08 July 2013	3	3	2	8	5,963	4,776	2,442	13,181	4	1	3	8	2	3	5	10	0	5	0	5	2	3	2	7
09 July 2013	3	3	2	8	5,155	4,812	2,597	12,564	4	2	1	7	1	3	0	4	4	5	1	10	1	1	0	2
10 July 2013	3	4	1	8	7,007	8,405	1,416	16,828	12	16	0	28	2	5	0	7	10	6	1	17	3	6	2	11
11 July 2013	2	3	1	6	3,570	4,859	1,098	9,527	6	12	2	20	2	2	8	12	9	5	1	15	2	7	0	9
12 July 2013	2	1	1	4	3,906	1,608	1,459	6,973	5	0	1	6	6	1	4	11	4	3	2	9	2	0	1	3
13 July 2013	0	2	1	3	0	5,487	1,504	6,991	0	19	1	20	0	7	6	13	0	3	1	4	0	1	0	1
14 July 2013	0	3	1	4	0	3,098	1,444	4,542	0	6	0	6	0	3	2	5	0	5	1	6	0	9	1	10
15 July 2013	2	3	1	6	4,148	5,876	1,445	11,469	3	3	0	6	4	8	3	15	2	10	1	13	6	7	1	14
16 July 2013	2	3	1	6	4,166	6,583	1,120	11,869	3	10	0	13	5	8	1	14	14	6	1	21	4	6	0	10
17 July 2013	2	3	1	6	3,973	5,902	1,334	11,209	5	19	2	26	0	6	9	15	3	6	3	12	1	1	1	3
18 July 2013	2	3	1	6	3,866	7,780	1,529	13,175	5	16	1	22	6	9	2	17	7	11	0	18	2	3	4	9
19 July 2013	2	1	1	4	3,960	2,300	1,325	7,585	3	7	4	14	0	0	3	3	6	1	0	7	6	2	2	10

date	e	nun conoi	nber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uare	А	В	C	total	Α	В	С	total	A	В	С	total	A	В	С	total	A	В	С	total	Α	В	С	total
20 July 2013	0	2	1	3	0	4,220	1,354	5,574	0	7	0	7	0	2	4	6	0	1	0	1	0	1	0	1
21 July 2013	0	3	1	4	0	5,330	1,375	6,705	0	16	0	16	0	10	1	11	0	6	1	7	0	4	0	4
22 July 2013	2	3	1	6	4,607	6,444	1,322	12,373	2	14	0	16	0	4	3	7	2	5	0	7	3	4	6	13
23 July 2013	2	3	1	6	3,782	5,101	1,346	10,229	3	15	0	18	0	2	0	2	0	3	0	3	3	5	0	8
24 July 2013	2	3	1	6	3,578	6,506	1,134	11,218	1	8	0	9	3	3	1	7	4	1	4	9	2	4	0	6
25 July 2013	2	3	1	6	3,611	8,882	1,400	13,893	1	2	0	3	2	5	21	28	0	6	0	6	4	4	1	9
26 July 2013	2	2	1	5	2,443	4,722	1,435	8,600	8	10	1	19	1	6	2	9	4	12	0	16	2	5	5	12
27 July 2013	0	2	1	3	0	2,769	1,258	4,027	0	15	1	16	0	2	1	3	0	8	0	8	0	6	0	6
28 July 2013	0	3	1	4	0	3,712	1,295	5,007	0	5	0	5	0	8	3	11	0	3	0	3	0	1	1	2
29 July 2013	2	2	1	5	3,356	4,156	1,113	8,625	4	5	1	10	2	2	3	7	0	5	0	5	8	3	0	11
30 July 2013	2	3	1	6	4,252	5,442	1,211	10,905	1	6	0	7	7	10	1	18	3	8	0	11	4	6	3	13
31 July 2013	2	3	1	6	3,956	4,163	1,420	9,539	11	9	1	21	4	4	14	22	4	1	1	6	0	8	0	8
01 August 2013	2	3	1	6	4,086	6,321	1,183	11,590	8	10	1	19	3	5	9	17	8	10	0	18	2	3	0	5
02 August 2013	2	1	1	4	4,464	1,988	1,467	7,919	9	0	0	9	4	2	2	8	1	1	0	2	2	1	0	3
03 August 2013	0	1	1	2	0	2,566	1,461	4,027	0	5	2	7	0	3	2	5	0	3	0	3	0	3	2	5
04 August 2013	0	3	1	4	0	5,546	1,031	6,577	0	2	0	2	0	5	1	6	0	2	0	2	0	1	0	1
05 August 2013	3	2	1	6	6,050	5,910	1,352	13,312	5	0	0	5	3	2	2	7	2	4	0	6	5	5	0	10
06 August 2013	2	2	1	5	4,265	3,093	1,127	8,485	1	1	0	2	3	3	6	12	3	1	0	4	4	0	0	4
07 August 2013	2	2	1	5	4,608	3,590	1,449	9,647	0	2	0	2	0	0	1	1	0	5	0	5	3	1	0	4
08 August 2013	1	2	1	4	2,580	6,674	1,365	10,619	3	12	1	16	0	4	6	10	0	3	1	4	2	5	2	9
09 August 2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 August 2013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 August 2013	0	2	2	4	0	434	2,562	2,996	0	5	0	5	0	4	4	8	0	2	0	2	0	1	3	4
12 August 2013	0	2	2	4	0	5,698	2,212	7,910	0	4	1	5	0	11	2	13	0	8	2	10	0	6	1	7
13 August 2013	2	2	2	6	3,913	5,507	2,058	11,478	1	11	1	13	5	6	0	11	2	4	2	8	3	8	3	14
14 August 2013	3	2	2	7	6,723	4,689	2,700	14,112	0	3	0	3	5	1	6	12	4	3	0	7	5	1	1	7

date	ec	nun conor	ıber nic p	of ages	Та	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uate	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	В	С	total	А	В	С	total	Α	В	С	total
15 August 2013	2	2	2	6	3,947	5,507	2,398	11,852	4	5	3	12	0	5	1	6	4	0	0	4	10	13	4	27
16 August 2013	3	2	2	7	6,820	5,839	2,471	15,130	2	0	2	4	7	5	0	12	1	1	0	2	4	4	0	8
17 August 2013	0	2	2	4	0	5,141	2,657	7,798	0	17	3	20	0	7	5	12	0	3	0	3	0	3	2	5
18 August 2013	0	2	2	4	0	6,249	2,118	8,367	0	3	2	5	0	6	0	6	0	0	1	1	0	6	1	7
19 August 2013	4	3	2	9	8,055	7,597	2,258	17,910	8	12	0	20	9	7	0	16	6	12	0	18	4	10	3	17
20 August 2013	3	3	2	8	6,379	6,502	2,327	15,208	2	5	0	7	2	5	0	7	0	1	0	1	5	5	2	12
21 August 2013	3	3	2	8	6,027	6,484	2,824	15,335	8	28	1	37	11	8	3	22	4	3	0	7	2	5	0	7
22 August 2013	3	3	2	8	4,205	7,550	2,345	14,100	3	13	0	16	10	2	3	15	0	7	1	8	3	0	2	5
23 August 2013	2	2	2	6	2,745	5,543	2,227	10,515	3	5	2	10	7	5	3	15	2	6	2	10	3	4	0	7
24 August 2013	0	2	2	4	0	4,522	2,153	6,675	0	9	0	9	0	3	6	9	0	0	0	0	0	4	0	4
25 August 2013	0	2	2	4	0	2,351	2,235	4,586	0	3	5	8	0	4	2	6	0	3	4	7	0	6	0	6
26 August 2013	2	2	2	6	2,161	2,261	2,372	6,794	1	10	6	17	10	10	3	23	2	5	3	10	2	8	1	11
27 August 2013	4	3	2	9	7,530	6,699	3,049	17,278	8	5	3	16	10	4	1	15	7	10	1	18	3	4	3	10
28 August 2013	3	3	2	8	5,126	6,100	2,857	14,083	17	15	0	32	13	8	7	28	14	5	3	22	1	5	0	6
29 August 2013	3	3	2	8	5,949	8,104	2,274	16,327	4	8	3	15	2	3	12	17	2	3	0	5	7	11	2	20
30 August 2013	2	2	2	6	3,730	3,816	2,233	9,779	9	9	0	18	4	3	1	8	2	2	0	4	2	4	2	8
31 August 2013	0	2	2	4	0	5,072	2,322	7,394	0	7	0	7	0	3	0	3	0	6	1	7	0	3	2	5
01 September 2013	0	2	2	4	0	6,473	2,470	8,943	0	6	1	7	0	1	0	1	0	0	8	8	0	12	2	14
02 September 2013	2	2	2	6	3,901	4,815	2,469	11,185	5	7	1	13	3	3	2	8	0	2	1	3	4	8	1	13
03 September 2013	3	3	2	8	5,894	5,392	2,861	14,147	7	2	0	9	6	14	2	22	6	14	1	21	3	4	4	11
04 September 2013	3	3	2	8	5,670	4,455	2,742	12,867	9	18	6	33	4	11	1	16	10	9	0	19	4	3	0	7
05 September 2013	3	1	2	6	6,427	1,980	2,763	11,170	3	3	1	7	9	3	0	12	4	5	0	9	2	0	2	4
06 September 2013	2	2	2	6	4,291	6,168	2,279	12,738	6	11	5	22	1	4	1	6	6	3	2	11	2	4	2	8
07 September 2013	0	2	2	4	0	3,246	2,476	5,722	0	16	2	18	0	5	10	15	0	14	0	14	0	4	2	6
08 September 2013	0	3	2	5	0	4,348	2,483	6,831	0	13	7	20	0	5	1	6	0	6	1	7	0	4	1	5
09 September 2013	3	3	2	8	4,754	6,167	2,906	13,827	9	4	0	13	15	12	0	27	11	17	0	28	2	7	4	13

date	e	nun conoi	nber mic p	of ages	То	otal numb	er of wo	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uare	Α	В	C	total	Α	В	С	total	A	В	С	total	A	В	С	total	A	В	С	total	А	В	С	total
10 September 2013	4	4	2	10	7,705	7,255	2,497	17,457	9	9	0	18	9	3	9	21	8	7	0	15	3	4	4	11
11 September 2013	3	3	2	8	5,080	8,333	2,711	16,124	8	17	0	25	5	6	10	21	4	7	0	11	3	9	2	14
12 September 2013	3	3	2	8	6,733	3,844	2,908	13,485	8	8	1	17	7	8	6	21	6	3	0	9	3	2	10	15
13 September 2013	2	2	2	6	3,531	4,833	2,050	10,414	8	12	0	20	2	4	3	9	5	10	0	15	4	4	4	12
14 September 2013	0	2	2	4	0	5,997	2,368	8,365	0	23	0	23	0	6	2	8	0	5	0	5	0	4	0	4
15 September 2013	0	3	2	5	0	5,221	2,337	7,558	0	11	7	18	0	0	4	4	0	3	0	3	0	3	0	3
16 September 2013	3	3	2	8	5,906	9,011	2,464	17,381	2	13	1	16	21	9	0	30	2	17	8	27	2	5	4	11
17 September 2013	2	3	2	7	1,738	6,789	2,312	10,839	3	12	2	17	5	6	0	11	0	4	1	5	1	2	1	4
18 September 2013	3	3	2	8	6,389	6,328	2,623	15,340	8	4	2	14	1	14	1	16	4	6	1	11	2	3	0	5
19 September 2013	5	3	2	10	10,175	7,977	2,390	20,542	8	11	4	23	14	14	1	29	9	9	1	19	1	1	0	2
20 September 2013	2	2	2	6	3,579	3,300	2,604	9,483	1	0	2	3	3	9	2	14	2	5	1	8	0	1	8	9
21 September 2013	0	2	2	4	0	5,491	2,554	8,045	0	11	16	27	0	4	4	8	0	1	0	1	0	4	5	9
22 September 2013	0	4	2	6	0	6,371	2,020	8,391	0	9	2	11	0	3	2	5	0	6	3	9	0	16	1	17
23 September 2013	3	3	2	8	5,869	3,986	2,822	12,677	5	17	2	24	5	8	1	14	6	9	0	15	2	11	4	17
24 September 2013	3	3	2	8	4,715	6,795	2,572	14,082	12	16	3	31	5	10	1	16	7	7	7	21	2	12	4	18
25 September 2013	3	3	2	8	6,277	6,530	2,321	15,128	11	12	0	23	10	12	8	30	4	7	2	13	1	2	0	3
26 September 2013	3	3	2	8	6,034	7,611	2,443	16,088	9	17	4	30	5	12	2	19	6	9	0	15	5	6	6	17
27 September 2013	2	2	2	6	3,733	5,488	2,567	11,788	2	11	0	13	3	6	3	12	4	3	0	7	3	1	3	7
28 September 2013	0	2	2	4	0	4,719	2,358	7,077	0	16	5	21	0	4	5	9	0	1	8	9	0	6	1	7
29 September 2013	0	3	2	5	0	5,602	2,487	8,089	0	5	3	8	0	9	8	17	0	1	0	1	0	3	2	5
30 September 2013	3	4	2	9	4,440	8,564	2,814	15,818	1	27	0	28	3	11	0	14	6	7	2	15	1	13	3	17
01 October 2014	3	3	2	8	6,061	5,480	2,852	14,393	7	4	0	11	4	1	0	5	10	5	1	16	1	1	2	4
02 October 2014	2	3	2	7	4,129	7,371	2,888	14,388	2	13	0	15	2	7	10	19	2	11	0	13	2	2	0	4
03 October 2014	2	2	2	6	4,737	6,049	2,471	13,257	1	17	0	18	4	7	2	13	5	4	7	16	10	2	2	14
04 October 2014	0	2	0	2	0	4,060	0	4,060	0	21	0	21	0	5	0	5	0	1	0	1	0	7	0	7
05 October 2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

date	e	nun conoi	nber nic p	of ages	To	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uate	A	В	С	total	Α	В	C	total	Α	B	С	total	Α	В	С	total	А	В	С	total	A	В	С	total
06 October 2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07 October 2014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08 October 2014	2	2	2	6	5,355	6,972	2,063	14,390	8	17	3	28	1	4	1	6	6	11	4	21	5	4	2	11
09 October 2014	2	2	2	6	4,037	2,462	2,914	9,413	4	38	2	44	7	7	1	15	1	0	0	1	1	4	0	5
10 October 2014	2	2	2	6	3,687	4,563	2,193	10,443	2	20	1	23	6	3	1	10	6	1	2	9	2	6	1	9
11 October 2014	0	2	2	4	0	5,716	2,312	8,028	0	22	1	23	0	12	0	12	0	2	0	2	0	4	5	9
12 October 2014	0	2	2	4	0	5,630	2,743	8,373	0	7	0	7	0	5	4	9	0	3	9	12	0	2	3	5
13 October 2014	2	2	2	6	4,183	2,777	2,746	9,706	11	7	0	18	16	10	0	26	8	4	12	24	3	5	1	9
14 October 2014	2	3	2	7	3,817	7,348	2,587	13,752	3	18	0	21	2	7	9	18	5	7	1	13	2	5	1	8
15 October 2014	3	3	2	8	5,380	4,201	2,597	12,178	0	9	0	9	5	16	2	23	5	4	0	9	3	8	1	12
16 October 2014	3	3	2	8	6,198	7,226	2,738	16,162	6	16	0	22	7	16	0	23	19	10	9	38	6	10	3	19
17 October 2014	2	2	2	6	5,758	5,263	2,405	13,426	22	15	0	37	3	6	1	10	9	1	0	10	15	6	0	21
18 October 2014	0	2	2	4	0	5,239	2,498	7,737	0	15	2	17	0	1	0	1	0	3	2	5	0	10	4	14
19 October 2014	0	2	2	4	0	3,300	2,807	6,107	0	3	1	4	0	2	3	5	0	0	0	0	0	0	7	7
20 October 2014	2	3	2	7	3,647	7,119	2,911	13,677	3	11	0	14	5	6	0	11	4	4	1	9	1	2	1	4
21 October 2014	3	3	2	8	5,712	6,882	2,885	15,479	1	6	0	7	2	7	2	11	3	9	4	16	4	7	4	15
22 October 2014	3	3	2	8	5,985	6,619	2,814	15,418	10	19	7	36	5	10	0	15	13	25	2	40	1	3	1	5
23 October 2014	3	2	2	7	5,961	2,159	3,021	11,141	4	11	1	16	1	4	4	9	2	4	3	9	0	2	2	4
24 October 2014	2	2	2	6	2,867	5,832	2,302	11,001	13	13	2	28	3	11	0	14	8	2	1	11	4	4	1	9
25 October 2014	0	2	2	4	0	6,407	1,897	8,304	0	17	1	18	0	8	0	8	0	6	0	6	0	10	1	11
26 October 2014	0	3	2	5	0	5,470	2,270	7,740	0	7	0	7	0	0	5	5	0	1	0	1	0	5	1	6
27 October 2014	3	3	2	8	6,135	7,762	3,164	17,061	6	8	7	21	2	7	0	9	9	19	1	29	2	4	3	9
28 October 2014	3	4	2	9	6,347	9,531	2,410	18,288	10	27	0	37	6	15	0	21	5	10	0	15	6	14	0	20
29 October 2014	3	3	2	8	4,249	5,294	3,136	12,679	6	11	1	18	10	10	0	20	6	20	1	27	2	7	1	10
30 October 2014	3	3	2	8	6,226	7,156	2,375	15,757	5	6	0	11	6	8	3	17	18	11	1	30	3	7	0	10
31 October 2014	2	2	2	6	4,700	5,930	1,810	12,440	9	4	2	15	2	2	0	4	4	3	0	7	1	3	0	4

date	e	nun conoi	ıber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
unic	Α	В	С	total	Α	В	С	total	Α	В	С	total	Α	В	С	total	А	В	С	total	A	В	С	total
01 November 2014	0	2	2	4	0	3,650	2,390	6,040	0	11	1	12	0	6	0	6	0	3	1	4	0	3	0	3
02 November 2014	0	3	2	5	0	4,823	3,133	7,956	0	4	1	5	0	5	0	5	0	1	0	1	0	2	0	2
03 November 2014	4	3	2	9	8,426	5,002	2,816	16,244	7	8	3	18	9	4	8	21	5	7	0	12	3	4	1	8
04 November 2014	3	3	2	8	6,425	7,374	2,793	16,592	6	9	1	16	4	10	0	14	14	27	0	41	4	9	0	13
05 November 2014	3	3	2	8	4,773	7,144	2,698	14,615	2	10	1	13	11	7	13	31	5	6	6	17	0	2	0	2
06 November 2014	3	3	2	8	6,051	6,649	2,962	15,662	2	7	1	10	11	14	1	26	6	11	1	18	7	1	1	9
07 November 2014	2	2	2	6	3,059	3,300	2,379	8,738	0	6	8	14	10	13	5	28	7	10	3	20	3	5	2	10
08 November 2014	0	2	2	4	0	5,235	1,970	7,205	0	6	1	7	0	2	0	2	0	1	1	2	0	4	8	12
09 November 2014	0	3	2	5	0	4,070	2,801	6,871	0	0	2	2	0	4	6	10	0	3	1	4	0	1	4	5
10 November 2014	3	3	2	8	5,353	3,788	2,777	11,918	2	4	2	8	4	6	3	13	1	5	1	7	2	5	2	9
11 November 2014	4	3	2	9	8,021	6,839	3,174	18,034	5	6	3	14	11	6	9	26	6	5	1	12	2	1	0	3
12 November 2014	3	3	2	8	4,346	5,584	2,659	12,589	0	14	1	15	14	9	6	29	7	6	1	14	3	7	1	11
13 November 2014	2	4	2	8	4,172	7,134	2,611	13,917	1	2	5	8	1	9	0	10	6	6	0	12	1	2	5	8
14 November 2014	2	2	2	6	4,402	2,516	2,509	9,427	4	4	1	9	6	3	0	9	5	7	0	12	7	6	6	19
15 November 2014	0	2	2	4	0	5,756	2,290	8,046	0	25	7	32	0	5	0	5	0	7	1	8	0	6	1	7
16 November 2014	0	3	2	5	0	7,988	2,167	10,155	0	14	2	16	0	6	1	7	0	2	3	5	0	4	5	9
17 November 2014	3	3	2	8	5,480	7,601	2,809	15,890	12	11	2	25	4	16	0	20	5	6	0	11	2	1	1	4
18 November 2014	3	3	2	8	6,572	7,463	2,966	17,001	5	6	0	11	5	6	7	18	9	9	0	18	7	8	1	16
19 November 2014	2	3	2	7	4,081	6,640	3,219	13,940	5	13	3	21	8	10	7	25	4	3	0	7	0	0	1	1
20 November 2014	3	4	2	9	6,264	9,542	2,827	18,633	2	5	0	7	14	15	3	32	1	4	3	8	5	3	1	9
21 November 2014	2	2	2	6	3,917	5,286	2,520	11,723	0	7	0	7	4	8	0	12	9	9	0	18	3	8	0	11
22 November 2014	0	2	2	4	0	4,914	2,382	7,296	0	13	2	15	0	3	0	3		21	3	24		5	1	6
23 November 2014	0	3	2	5	0	4,025	2,847	6,872	0	2	6	8	0	1	4	5		1	2	3		6	1	7
24 November 2014	3	3	2	8	5,507	7,454	2,523	15,484	1	10	1	12	8	4	3	15	4	3	1	8	3	0	0	3
25 November 2014	4	3	2	9	5,996	6,299	2,591	14,886	7	13	1	21	8	9	1	18	7	8	0	15	6	0	0	6
26 November 2014	3	3	2	8	6,603	3,924	2,815	13,342	5	7	3	15	4	6	5	15	5	11	0	16	3	3	1	7

date	e	nun conoi	nber nic p	of ages	То	otal numb	er of wor	rds		gr	owth			orga	nizin	g		suj	pport			r	aise	
uare	A	В	С	total	Α	В	C	total	Α	B	С	total	Α	В	С	total	А	В	С	total	A	В	С	total
27 November 2014	3	4	2	9	5,749	6,311	2,710	14,770	8	20	2	30	1	16	3	20	9	16	1	26	1	9	0	10
28 November 2014	2	2	2	6	4,384	4,577	2,531	11,492	2	8	4	14	1	12	7	20	11	3	0	14	0	4	2	6
29 November 2014	0	2	2	4	0	5,475	2,484	7,959	0	12	4	16	0	7	1	8	0	12	0	12	0	1	1	2
30 November 2014	0	3	2	5	0	5,272	2,284	7,556	0	10	3	13	0	7	0	7	0	6	1	7	0	3	8	11
01 December 2014	3	3	2	8	6,280	6,977	3,012	16,269	2	4	7	13	4	14	8	26	3	8	3	14	2	3	0	5
02 December 2014	3	0	2	5	5,369	0	3,142	8,511	4	11	7	22	8	6	0	14	3	2	0	5	9	1	0	10
03 December 2014	3	0	2	5	5,882	0	2,676	8,558	2	10	0	12	4	5	2	11	5	3	0	8	1	6	1	8
04 December 2014	3	0	2	5	4,914	0	3,093	8,007	4	2	1	7	2	2	11	15	6	3	1	10	1	2	1	4
05 December 2014	2	4	2	8	4,128	2,460	2,920	9,508	4	13	1	18	2	13	3	18	2	11	0	13	3	5	3	11
06 December 2014	0	2	2	4	0	6,007	2,193	8,200	0	2	0	2	0	4	0	4	0	8	0	8	0	0	0	0
07 December 2014	0	3	2	5	0	3,095	2,620	5,715	0	18	8	26	0	10	3	13	0	6	0	6	0	2	0	2
08 December 2014	3	4	2	9	5,704	7,215	2,874	15,793	6	19	2	27	7	5	3	15	3	3	1	7	0	5	1	6
09 December 2014	3	3	2	8	5,960	7,171	2,732	15,863	8	2	0	10	7	5	0	12	8	5	0	13	4	5	0	9
10 December 2014	2	2	2	6	3,615	4,226	3,111	10,952	10	19	0	29	9	9	3	21	4	3	1	8	1	3	0	4
11 December 2014	2	3	2	7	3,856	3,334	2,379	9,569	5	6	0	11	3	3	1	7	2	4	0	6	1	4	0	5
12 December 2014	2	3	2	7	3,270	6,308	2,276	11,854	4	13	3	20	12	5	6	23	10	7	0	17	7	7	4	18
13 December 2014	0	2	2	4	0	5,846	2,301	8,147	0	8	1	9	0	3	0	3	0	4	1	5	0	1	0	1
14 December 2014	0	3	2	5	0	6,014	2,256	8,270	0	13	3	16	0	11	0	11	0	5	3	8	0	2	5	7
15 December 2014	2	3	2	7	3,852	4,246	2,328	10,426	5	8	2	15	3	3	0	6	6	6	3	15	6	4	1	11
16 December 2014	2	2	2	6	3,246	3,849	2,914	10,009	3	4	9	16	4	5	4	13	1	5	0	6	3	2	6	11
17 December 2014	3	3	2	8	6,490	6,175	2,760	15,425	12	14	1	27	5	4	2	11	7	3	2	12	3	10	1	14
18 December 2014	2	3	2	7	3,371	7,147	2,930	13,448	4	9	9	22	5	10	5	20	2	24	0	26	2	14	4	20
19 December 2014	2	2	2	6	3,799	4,089	2,327	10,215	6	8	1	15	2	17	5	24	6	8	2	16	1	8	1	10
20 December 2014	0	2	2	4	0	5,747	2,386	8,133	0	13	6	19	0	13	1	14	0	4	0	4	0	5	4	9
21 December 2014	0	3	2	5	0	7,033	2,395	9,428	0	18	1	19	0	5	1	6	0	7	1	8	0	3	3	6
22 December 2014	3	3	2	8	4,121	9,775	1,306	15,202	6	16	2	24	16	9	14	39	8	11	1	20	5	2	1	8

date	e	nun conor	ıber nic p	of ages	То	otal numb	er of wo	rds		gr	owth			orga	anizin	g		suj	pport			r	aise	
unit	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	В	С	total	A	В	С	total	А	В	С	total
23 December 2014	3	3	2	8	6,838	6,353	2,595	15,786	1	3	0	4	7	4	1	12	11	5	1	17	1	4	1	6
24 December 2014	3	3	2	8	4,481	5,075	2,760	12,316	9	4	0	13	5	5	5	15	7	7	0	14	7	1	1	9
25 December 2014	2	3	2	7	4,006	5,935	2,412	12,353	4	3	1	8	3	5	5	13	2	13	2	17	3	5	2	10
26 December 2014	1	2	2	5	1,402	2,222	2,606	6,230	12	8	3	23	3	1	2	6	1	1	2	4	2	4	5	11
27 December 2014	1	2	2	5	1,728	6,103	2,646	10,477	0	18	2	20	0	2	1	3	0	1	3	4	4	2	4	10
28 December 2014	0	2	2	4	0	4,273	2,791	7,064	0	1	1	2	0	0	3	3	0	4	8	12	0	5	2	7
29 December 2014	2	3	2	7	3,940	6,428	2,890	13,258	2	5	0	7	3	10	5	18	6	8	1	15	2	1	3	6
30 December 2014	3	3	2	8	6,724	5,944	2,847	15,515	4	3	2	9	6	7	0	13	4	4	0	8	6	3	0	9
31 December 2014	3	4	2	9	7,220	10,199	2,712	20,131	3	13	7	23	7	13	2	22	11	12	0	23	12	18	2	32

## **Appendix (F): Negative word series**

Appendix F: shows a sample of 4 negative words which have a highest frequency in the economic media from 1 January 2011 to 31 December 2014. Because the volume of the table is very big, the researcher takes one quarter for each year as a sample. The data contain the number of pages in each newspaper and in a total, the total number of words in the economic content in each newspaper and in a total, and the number of occurrence for each word in each newspaper and in a total. The denotations (A), (B), and (C) represent Al-Hayaa, Al-Ayyam, and Felesteen newspapers respectively.

date	ec	nun conor	iber ( nic p	of ages	То	tal numb	er of woi	ds		de	cline			occu	ipatio	n		re	treat			С	risis	
uute	A	В	С	total	А	В	С	total	A	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
01 October 2011	0	1	2	3	0	3,147	2,278	5,425	0	5	0	5	0	1	5	6	0	0	1	1	0	2	5	7
02 October 2011	0	2	2	4	0	3,501	2,928	6,429	0	4	3	7	0	0	15	15	0	0	1	1	0	0	7	7
03 October 2011	2	2	2	6	3,507	5,124	2,864	11,495	5	8	2	15	1	1	10	12	0	5	1	6	2	2	6	10
04 October 2011	2	2	2	6	5,344	5,099	2,449	12,892	1	5	4	10	1	2	3	6	1	0	0	1	0	6	0	6
05 October 2011	2	2	2	6	5,687	5,034	2,772	13,493	0	1	0	1	2	0	4	6	1	4	0	5	1	1	0	2
06 October 2011	3	2	2	7	8,394	3,481	2,770	14,645	2	10	9	21	4	2	0	6	1	0	1	2	1	3	20	24
07 October 2011	2	1	1	4	5,519	146	984	6,649	3	1	0	4	5	1	3	9	1	2	2	5	0	1	0	1
08 October 2011	0	1	2	3	0	1,595	2,444	4,039	0	0	4	4	0	3	2	5	0	0	0	0	0	0	1	1
09 October 2011	0	2	2	4	0	3,600	2,548	6,148	0	10	1	11	0	0	9	9	0	1	1	2	0	4	20	24
10 October 2011	2	1	2	5	6,001	1,373	2,276	9,650	3	8	3	14	2	2	0	4	3	0	0	3	4	0	1	5
11 October 2011	3	2	2	7	7,141	3,716	2,303	13,160	5	5	3	13	12	0	9	21	3	3	1	7	5	1	3	9
12 October 2011	2	2	2	6	5,924	4,656	2,470	13,050	5	4	1	10	5	2	2	9	3	5	0	8	9	9	6	24
13 October 2011	2	2	2	6	4,339	4,264	2,368	10,971	3	3	2	8	2	3	3	8	1	2	0	3	2	0	7	9
14 October 2011	2	1	1	4	6,106	3,787	1,330	11,223	9	8	5	22	2	1	0	3	2	1	0	3	2	3	2	7
15 October 2011	0	1	2	3	0	3,083	2,057	5,140	0	4	0	4	0	2	0	2	0	2	2	4	0	1	0	1
16 October 2011	0	2	2	4	0	3,668	2,727	6,395	0	2	0	2	0	5	2	7	0	2	2	4	0	2	0	2
17 October 2011	2	2	1	5	6,043	5,943	974	12,960	1	8	0	9	4	1	0	5	2	6	3	11	1	2	4	7
18 October 2011	2	2	1	5	5,786	5,606	1,404	12,796	1	2	0	3	3	6	5	14	1	1	0	2	2	0	0	2
19 October 2011	2	2	0	4	4,946	2,661	0	7,607	2	4	0	6	9	0	0	9	3	0	0	3	2	1	0	3

date	ec	nun conor	iber ( nic p	of ages	То	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			C	risis	
uare	А	В	C	total	Α	В	C	total	Α	В	С	total	Α	В	С	total	Α	В	С	total	Α	B	С	total
20 October 2011	2	2	2	6	5,635	5,512	2,378	13,525	2	5	2	9	3	0	3	6	1	7	0	8	1	4	0	5
21 October 2011	2	3	1	6	6,473	5,347	1,138	12,958	2	1	1	4	9	4	1	14	0	1	1	2	1	1	2	4
22 October 2011	0	1	2	3	0	65	2,384	2,449	0	0	10	10	0	1	0	1	0	0	1	1	0	0	3	3
23 October 2011	17	2	2	21	17,415	4,264	2,279	23,958	8	5	4	17	12	2	3	17	3	0	0	3	6	0	3	9
24 October 2011	2	2	1	5	6,411	5,781	1,230	13,422	8	6	3	17	0	5	1	6	0	24	0	24	1	3	0	4
25 October 2011	3	2	2	7	7,689	5,540	2,084	15,313	1	1	0	2	4	1	3	8	4	0	0	4	6	0	0	6
26 October 2011	2	2	2	6	4,535	2,382	2,670	9,587	5	7	0	12	1	2	2	5	5	1	0	6	0	2	5	7
27 October 2011	2	2	2	6	6,222	4,420	2,347	12,989	3	3	0	6	1	2	3	6	0	3	0	3	2	0	0	2
28 October 2011	2	2	1	5	6,100	6,287	1,190	13,577	4	1	0	5	5	0	0	5	3	0	2	5	6	2	0	8
29 October 2011	0	1	2	3	0	3,917	2,594	6,511	0	4	7	11	0	1	0	1	0	2	0	2	0	1	3	4
30 October 2011	18	2	2	22	15,120	4,255	2,192	21,567	5	5	0	10	11	5	6	22	5	0	3	8	14	1	0	15
31 October 2011	2	3	0	5	6,006	9,304	0	15,310	3	10	0	13	1	0	0	1	0	7	0	7	0	1	0	1
01 November 2011	2	3	2	7	6,381	9,158	2,179	17,718	3	8	8	19	2	4	0	6	3	0	2	5	0	0	2	2
02 November 2011	2	2	2	6	5,954	5,907	2,803	14,664	1	5	0	6	4	3	5	12	3	7	0	10	1	0	0	1
03 November 2011	3	3	2	8	7,614	2,483	2,208	12,305	2	2	6	10	1	4	0	5	0	0	3	3	0	8	2	10
04 November 2011	2	2	1	5	5,396	2,525	1,283	9,204	4	7	1	12	3	4	0	7	6	2	0	8	0	9	0	9
05 November 2011	0	1	2	3	0	2,600	2,079	4,679	0	0	0	0	0	0	5	5	0	0	2	2	0	2	1	3
06 November 2011	0	3	2	5	0	2,434	2,241	4,675	0	3	7	10	0	1	3	4	0	5	2	7	0	2	18	20
07 November 2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08 November 2011	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0
09 November 2011	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
10 November 2011	0	2	0	2	0	6,787	0	6,787	0	14	7	21	0	2	3	5	0	2	2	4	0	8	18	26
11 November 2011	2	2	2	6	4,982	4,821	2,525	12,328	8	3	1	12	0	0	3	3	15	9	10	34	13	7	5	25
12 November 2011	0	2	2	4	0	3,520	2,483	6,003	0	6	3	9	0	2	0	2	0	10	3	13	0	1	7	8
13 November 2011	19	2	2	23	17,155	4,117	2,870	24,142	12	0	1	13	10	1	0	11	2	1	2	5	9	0	18	27
14 November 2011	2	2	2	6	6,332	5,351	2,813	14,496	5	2	1	8	1	2	7	10	4	6	4	14	1	6	4	11

data	ec	nun conor	iber o nic p	of ages	To	tal numb	er of wor	ds		de	cline			occu	patio	n		re	treat			c	risis	
uarc	Α	В	C	total	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	В	С	total	Α	B	С	total
15 November 2011	2	2	2	6	6,326	5,230	2,650	14,206	5	4	5	14	0	0	12	12	4	2	6	12	2	2	0	4
16 November 2011	2	2	2	6	6,204	6,156	2,977	15,337	3	7	1	11	0	1	6	7	4	3	0	7	12	0	3	15
17 November 2011	2	2	2	6	5,111	3,445	2,926	11,482	0	5	1	6	10	2	1	13	0	4	0	4	1	6	2	9
18 November 2011	2	2	1	5	5,747	5,074	1,490	12,311	7	1	0	8	1	0	2	3	5	2	0	7	5	2	0	7
19 November 2011	0	1	2	3	0	3,531	2,344	5,875	0	4	3	7	0	4	6	10	0	0	4	4	0	2	9	11
20 November 2011	18	2	1	21	16,296	6,191	1,110	23,597	3	7	2	12	30	2	2	34	4	5	3	12	15	11	7	33
21 November 2011	2	2	1	5	5,672	5,789	1,387	12,848	0	0	0	0	5	2	3	10	1	0	0	1	2	3	0	5
22 November 2011	3	2	2	7	8,417	5,306	2,114	15,837	3	0	5	8	4	0	4	8	1	1	1	3	15	4	0	19
23 November 2011	2	2	2	6	5,779	5,186	3,037	14,002	3	5	3	11	3	2	3	8	3	3	1	7	0	10	0	10
24 November 2011	2	2	2	6	5,446	5,052	2,352	12,850	0	6	2	8	3	0	2	5	1	4	1	6	0	7	3	10
25 November 2011	2	2	1	5	5,791	6,419	1,328	13,538	8	1	3	12	6	1	1	8	2	5	0	7	4	2	0	6
26 November 2011	0	1	2	3	0	3,065	2,022	5,087	0	11	4	15	0	0	11	11	0	0	8	8	0	13	7	20
27 November 2011	18	2	2	22	15,139	3,589	2,550	21,278	20	5	2	27	17	2	13	32	11	3	1	15	13	2	22	37
28 November 2011	3	2	2	7	5,730	6,030	2,360	14,120	3	6	0	9	2	0	10	12	5	0	3	8	3	10	0	13
29 November 2011	3	2	2	7	9,271	5,579	1,244	16,094	6	7	2	15	6	5	2	13	5	4	0	9	5	6	1	12
30 November 2011	3	2	2	7	9,628	6,940	2,496	19,064	2	11	1	14	11	4	2	17	0	3	0	3	2	9	0	11
01 December 2011	2	3	2	7	5,661	5,931	2,324	13,916	10	5	6	21	1	2	3	6	1	8	1	10	0	3	3	6
02 December 2011	2	2	1	5	5,921	5,060	1,286	12,267	1	21	0	22	3	0	3	6	4	1	1	6	2	0	0	2
03 December 2011	0	1	2	3	0	3,540	2,561	6,101	0	7	0	7	0	2	0	2	0	1	0	1	0	3	11	14
04 December 2011	19	1	1	21	17,696	3,209	1,474	22,379	11	2	2	15	1	0	0	1	1	1	1	3	31	3	10	44
05 December 2011	3	2	2	7	7,830	4,994	3,144	15,968	4	4	0	8	4	4	6	14	1	1	0	2	3	0	0	3
06 December 2011	2	2	2	6	3,211	3,921	2,111	9,243	2	4	0	6	0	1	13	14	1	0	0	1	2	3	2	7
07 December 2011	2	2	2	6	4,451	5,574	2,652	12,677	2	3	0	5	8	1	10	19	0	2	0	2	2	3	0	5
08 December 2011	3	3	2	8	8,037	3,547	2,159	13,743	8	3	0	11	0	4	15	19	3	0	1	4	1	0	1	2
09 December 2011	2	2	1	5	5,779	6,280	1,397	13,456	2	3	0	5	4	0	5	9	2	3	0	5	8	3	0	11
10 December 2011	0	1	2	3	0	2,804	2,126	4,930	0	14	0	14	0	0	8	8	0	2	0	2	0	6	1	7

date	ec	nun conor	ıber ( nic p	of ages	To	tal numb	er of wor	ds		de	cline			occu	patio	n		re	treat			c	risis	
uarc	Α	В	C	total	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	В	С	total	Α	B	С	total
11 December 2011	17	2	2	21	17,667	1,446	2,781	21,894	10	5	0	15	3	0	3	6	7	5	0	12	5	0	6	11
12 December 2011	2	2	2	6	5,708	4,266	2,987	12,961	0	8	0	8	2	1	9	12	1	7	2	10	1	2	2	5
13 December 2011	3	2	2	7	7,698	6,070	2,332	16,100	11	11	4	26	6	2	9	17	4	3	1	8	1	6	1	8
14 December 2011	3	2	2	7	5,705	5,608	2,471	13,784	9	17	1	27	2	1	8	11	9	0	0	9	4	4	0	8
15 December 2011	4	2	2	8	10,786	4,756	2,738	18,280	11	3	9	23	6	1	5	12	1	1	0	2	6	2	6	14
16 December 2011	2	2	1	5	6,451	4,986	1,186	12,623	11	2	4	17	11	0	2	13	14	8	0	22	5	2	0	7
17 December 2011	0	1	2	3	0	2,482	2,523	5,005	0	14	1	15	0	5	4	9	0	1	3	4	0	0	1	1
18 December 2011	0	2	2	4	0	3,852	2,591	6,443	0	2	2	4	0	4	6	10	0	6	1	7	0	6	20	26
19 December 2011	2	2	2	6	5,098	2,128	2,527	9,753	3	7	0	10	0	2	3	5	2	3	1	6	2	10	20	32
20 December 2011	3	2	2	7	8,586	5,205	2,209	16,000	12	2	1	15	2	0	5	7	11	4	0	15	7	4	0	11
21 December 2011	2	2	2	6	5,712	3,638	2,302	11,652	3	1	0	4	8	4	14	26	0	1	0	1	0	0	1	1
22 December 2011	2	2	2	6	5,465	5,105	2,716	13,286	1	6	4	11	4	6	1	11	2	1	0	3	1	2	2	5
23 December 2011	2	2	1	5	5,219	5,344	1,396	11,959	0	1	1	2	6	1	2	9	5	7	2	14	6	3	3	12
24 December 2011	0	1	2	3	0	2,812	2,583	5,395	0	5	2	7	0	5	0	5	0	2	3	5	0	5	0	5
25 December 2011	0	3	2	5	0	2,927	2,688	5,615	0	4	0	4	0	2	18	20	0	3	1	4	0	8	0	8
26 December 2011	0	2	2	4	0	3,330	2,439	5,769	0	2	1	3	0	0	5	5	0	2	1	3	0	3	0	3
27 December 2011	3	2	2	7	8,416	4,893	2,385	15,694	5	1	2	8	1	6	8	15	0	0	1	1	3	0	1	4
28 December 2011	2	2	2	6	5,760	5,582	3,049	14,391	15	3	8	26	2	2	6	10	0	2	1	3	0	0	13	13
29 December 2011	3	3	2	8	6,413	3,195	2,939	12,547	3	6	2	11	3	2	13	18	0	0	0	0	1	1	7	9
30 December 2011	1	2	1	4	1,001	5,981	1,258	8,240	8	11	7	26	3	0	3	6	0	3	1	4	0	9	0	9
31 December 2011	0	3	2	5	0	3,359	2,345	5,704	0	5	2	7	0	3	2	5	0	7	1	8	0	4	3	7
01 July 2012	0	2	2	4	0	3,584	2,524	6,108	0	8	4	12	0	0	0	0	0	0	0	0	0	4	2	6
02 July 2012	2	2	2	6	5,101	4,680	2,647	12,428	2	1	2	5	11	1	0	12	1	0	0	1	1	4	0	5
03 July 2012	3	2	2	7	7,585	4,941	2,464	14,990	1	6	5	12	1	1	3	5	1	1	1	3	1	2	0	3
04 July 2012	3	2	2	7	7,703	2,526	2,569	12,798	3	2	0	5	5	1	0	6	4	2	0	6	1	2	2	5
05 July 2012	3	3	2	8	8,011	7,866	2,639	18,516	3	6	3	12	8	6	2	16	3	3	1	7	1	5	6	12

date	ec	nun conor	ıber ( nic p	of ages	To	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			c	risis	
uart	Α	В	C	total	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
06 July 2012	1	2	2	5	2,211	3,817	2,417	8,445	1	11	0	12	1	0	4	5	1	1	1	3	0	4	2	6
07 July 2012	0	1	2	3	0	2,382	2,332	4,714	0	12	2	14	0	0	3	3	0	4	0	4	0	5	4	9
08 July 2012	0	2	2	4	0	3,431	2,586	6,017	0	3	0	3	0	0	1	1	0	3	0	3	0	0	3	3
09 July 2012	3	2	2	7	7,847	5,208	2,582	15,637	4	5	0	9	9	4	3	16	2	1	0	3	6	1	11	18
10 July 2012	2	2	2	6	5,008	3,008	2,517	10,533	3	4	0	7	2	4	13	19	2	3	0	5	3	4	11	18
11 July 2012	2	2	2	6	3,382	4,550	2,525	10,457	3	2	1	6	3	2	1	6	4	3	0	7	0	3	6	9
12 July 2012	2	2	2	6	5,369	4,397	2,961	12,727	1	3	0	4	8	1	6	15	0	0	0	0	3	3	10	16
13 July 2012	2	2	2	6	5,387	4,850	2,573	12,810	6	7	0	13	4	6	0	10	4	2	0	6	2	0	1	3
14 July 2012	0	2	2	4	0	5,629	2,378	8,007	0	7	0	7	0	0	1	1	0	13	0	13	0	6	0	6
15 July 2012	0	3	2	5	0	4,260	1,937	6,197	0	5	0	5	0	3	16	19	0	4	0	4	0	2	0	2
16 July 2012	2	2	2	6	5,441	1,636	2,924	10,001	2	3	0	5	4	0	1	5	0	6	0	6	2	6	0	8
17 July 2012	3	3	2	8	7,033	2,547	2,750	12,330	7	8	5	20	3	0	5	8	6	7	0	13	3	6	3	12
18 July 2012	3	4	2	9	8,253	6,517	2,565	17,335	0	4	2	6	13	0	6	19	1	2	4	7	2	5	5	12
19 July 2012	3	3	2	8	5,763	5,515	3,220	14,498	5	4	2	11	9	2	4	15	0	0	1	1	4	1	1	6
20 July 2012	2	1	1	4	3,731	3,136	1,437	8,304	0	2	3	5	2	0	4	6	0	2	0	2	0	3	2	5
21 July 2012	0	2	1	3	0	2,539	1,218	3,757	0	1	0	1	0	0	0	0	0	1	0	1	0	7	0	7
22 July 2012	0	3	0	3	0	5,148	0	5,148	0	17	0	17	0	0	0	0	0	5	0	5	0	3	0	3
23 July 2012	2	3	1	6	5,552	2,570	1,435	9,557	14	2	1	17	1	1	5	7	1	3	0	4	0	3	0	3
24 July 2012	2	3	0	5	5,151	3,818	0	8,969	1	3	0	4	0	1	0	1	4	0	0	4	1	1	0	2
25 July 2012	2	3	1	6	5,637	4,684	1,364	11,685	3	4	0	7	1	3	4	8	4	0	0	4	0	2	1	3
26 July 2012	2	3	1	6	5,345	5,030	1,343	11,718	16	22	9	47	0	0	1	1	3	1	2	6	2	13	1	16
27 July 2012	2	2	1	5	5,367	5,049	1,477	11,893	7	7	2	16	4	1	11	16	2	6	0	8	10	1	0	11
28 July 2012	0	2	1	3	0	3,820	1,283	5,103	0	5	2	7	0	0	0	0	0	10	0	10	0	11	1	12
29 July 2012	0	3	1	4	0	6,660	1,239	7,899	0	11	14	25	0	2	0	2	0	4	3	7	0	7	0	7
30 July 2012	1	3	1	5	2,250	4,805	1,294	8,349	4	4	4	12	0	0	4	4	0	0	1	1	0	5	0	5
31 July 2012	2	2	1	5	4,816	4,057	1,307	10,180	3	2	2	7	2	0	0	2	2	6	2	10	1	3	2	6

date	ec	nun conor	iber ( nic p	of ages	To	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			c	risis	
uarc	А	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
01 August 2012	1	2	1	4	2,010	1,693	1,429	5,132	0	8	0	8	6	0	3	9	1	8	0	9	0	5	10	15
02 August 2012	2	2	1	5	5,351	3,773	1,494	10,618	1	3	5	9	2	0	7	9	1	3	3	7	6	2	2	10
03 August 2012	2	2	1	5	3,971	5,677	1,423	11,071	7	10	0	17	6	4	7	17	1	6	0	7	6	4	0	10
04 August 2012	0	2	1	3	0	3,664	1,353	5,017	0	3	0	3	0	2	0	2	0	4	1	5	0	10	3	13
05 August 2012	0	3	0	3	0	5,940	0	5,940	0	18	0	18	0	0	0	0	0	8	0	8	0	10	0	10
06 August 2012	2	2	1	5	3,394	3,333	1,429	8,156	4	3	3	10	5	3	3	11	0	0	0	0	0	1	1	2
07 August 2012	2	2	1	5	4,048	3,632	1,331	9,011	1	4	1	6	4	0	3	7	0	0	0	0	1	6	1	8
08 August 2012	2	2	1	5	5,250	3,619	1,463	10,332	1	2	1	4	7	1	1	9	2	0	1	3	4	4	4	12
09 August 2012	2	2	1	5	2,501	3,454	1,268	7,223	6	1	1	8	3	0	1	4	2	0	0	2	2	4	0	6
10 August 2012	1	2	1	4	1,857	5,567	1,141	8,565	3	12	1	16	1	0	2	3	3	10	2	15	2	12	4	18
11 August 2012	0	2	1	3	0	2,743	1,277	4,020	0	2	3	5	0	1	6	7	0	1	2	3	0	1	1	2
12 August 2012	0	3	1	4	0	4,752	1,175	5,927	0	6	0	6	0	1	1	2	0	8	0	8	0	4	0	4
13 August 2012	2	2	1	5	4,076	4,360	1,482	9,918	1	1	1	3	2	0	5	7	0	0	1	1	0	4	1	5
14 August 2012	2	3	1	6	6,184	5,250	1,537	12,971	2	4	0	6	3	1	1	5	2	4	2	8	4	2	0	6
15 August 2012	2	3	1	6	5,025	7,309	1,291	13,625	7	8	5	20	4	0	0	4	2	0	0	2	1	0	0	1
16 August 2012	2	3	1	6	5,795	8,498	1,271	15,564	9	13	3	25	2	0	0	2	1	3	2	6	2	0	0	2
17 August 2012	2	2	1	5	5,944	3,637	1,453	11,034	3	5	1	9	7	5	0	12	1	8	0	9	1	10	0	11
18 August 2012	0	2	0	2	0	3,474	0	3,474	0	4	0	4	0	0	2	2	0	5	0	5	0	2	0	2
19 August 2012	0	2	2	4	0	4,216	2,417	6,633	0	11	0	11	0	0	0	0	0	3	3	6	0	4	1	5
20 August 2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 August 2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 August 2012	0	2	2	4	0	3,010	2,974	5,984	0	5	2	7	0	0	0	0	0	5	0	5	0	11	0	11
23 August 2012	2	3	2	7	6,044	4,872	2,178	13,094	8	8	1	17	0	0	3	3	15	11	1	27	7	5	0	12
24 August 2012	2	2	1	5	5,502	5,694	1,245	12,441	11	13	8	32	4	1	2	7	6	6	4	16	5	8	0	13
25 August 2012	0	2	2	4	0	5,668	2,369	8,037	0	10	2	12	0	0	2	2	0	7	1	8	0	17	8	25
26 August 2012	0	3	0	3	0	6,167	0	6,167	0	7	0	7	0	0	0	0	0	9	0	9	0	4	0	4

date	ec	nun conor	iber o nic pa	of ages	To	otal numb	er of wor	ds		de	cline			occu	patio	n		re	treat			CI	risis	
uarc	A	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	В	С	total	Α	В	С	total
27 August 2012	2	3	2	7	5,033	6,154	2,236	13,423	15	21	8	44	6	3	6	15	0	3	0	3	15	12	3	30
28 August 2012	2	3	2	7	5,423	6,101	2,669	14,193	3	4	2	9	1	1	0	2	4	5	0	9	0	2	1	3
29 August 2012	2	2	2	6	3,804	3,662	2,703	10,169	1	6	5	12	2	0	2	4	0	3	1	4	0	3	4	7
30 August 2012	3	3	2	8	5,559	7,354	2,426	15,339	5	4	3	12	3	0	7	10	1	2	1	4	8	2	1	11
31 August 2012	1	2	1	4	2,541	3,426	1,247	7,214	1	4	1	6	0	0	6	6	1	2	4	7	0	7	1	8
01 September 2012	0	2	2	4	0	4,869	2,563	7,432	0	5	2	7	0	0	0	0	0	7	1	8	0	5	3	8
02 September 2012	0	2	2	4	0	717	2,370	3,087	0	10	3	13	0	0	3	3	0	4	2	6	0	6	2	8
03 September 2012	2	2	2	6	5,913	3,483	2,504	11,900	8	6	2	16	0	0	0	0	2	0	3	5	3	3	3	9
04 September 2012	3	3	2	8	9,102	7,630	2,431	19,163	2	6	2	10	4	2	4	10	1	2	1	4	0	8	1	9
05 September 2012	3	2	2	7	7,176	2,217	2,415	11,808	4	3	1	8	6	1	8	15	4	1	0	5	9	8	0	17
06 September 2012	4	3	2	9	10,534	6,621	2,292	19,447	10	7	2	19	17	7	13	37	13	12	1	26	17	16	3	36
07 September 2012	2	2	1	5	2,549	5,466	1,279	9,294	3	12	1	16	0	2	7	9	0	4	3	7	2	7	1	10
08 September 2012	0	2	2	4	0	5,100	2,415	7,515	0	4	3	7	0	0	0	0	0	7	0	7	0	3	6	9
09 September 2012	0	3	0	3	0	4,658	0	4,658	0	6	0	6	0	0	0	0	0	4	0	4	0	15	0	15
10 September 2012	2	2	2	6	4,297	4,348	2,371	11,016	6	4	0	10	4	2	5	11	2	2	0	4	2	7	8	17
11 September 2012	2	3	2	7	4,868	6,459	2,255	13,582	3	8	0	11	7	7	2	16	0	5	0	5	7	8	4	19
12 September 2012	3	2	2	7	8,677	4,361	2,493	15,531	2	1	0	3	5	2	4	11	0	6	1	7	5	6	4	15
13 September 2012	2	3	2	7	5,275	6,719	2,236	14,230	5	8	0	13	5	4	10	19	3	13	0	16	3	4	1	8
14 September 2012	2	2	1	5	4,809	5,597	1,266	11,672	9	2	6	17	1	0	1	2	0	3	0	3	4	5	3	12
15 September 2012	0	2	2	4	0	4,377	2,607	6,984	0	3	0	3	0	1	8	9	0	1	0	1	0	9	13	22
16 September 2012	0	3	0	3	0	2,983	0	2,983	0	6	0	6	0	1	0	1	0	0	0	0	0	4	0	4
17 September 2012	3	3	2	8	7,653	8,112	2,742	18,507	2	5	0	7	13	2	5	20	1	9	0	10	1	4	5	10
18 September 2012	2	3	2	7	4,491	3,574	2,197	10,262	3	3	1	7	4	2	5	11	3	0	0	3	1	1	1	3
19 September 2012	2	3	2	7	4,284	7,517	2,201	14,002	3	10	3	16	4	4	0	8	2	8	0	10	1	10	3	14
20 September 2012	3	3	2	8	8,412	6,369	2,211	16,992	1	5	3	9	8	0	3	11	0	4	1	5	6	9	5	20
21 September 2012	2	2	0	4	5,249	5,618	0	10,867	2	4	0	6	8	1	0	9	2	0	0	2	2	14	0	16

date	e	nun conor	ıber nic p	of ages	To	tal numb	er of wor	ds		de	cline			occu	patio	n		re	treat			c	risis	
uare	А	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
22 September 2012	0	2	0	2	0	4,496	0	4,496	0	8	0	8	0	1	0	1	0	7	0	7	0	6	0	6
23 September 2012	0	6	0	6	0	12,894	0	12,894	0	15	0	15	0	2	0	2	0	8	0	8	0	17	0	17
24 September 2012	3	4	2	9	7,193	7,831	2,421	17,445	3	11	8	22	5	2	4	11	2	0	0	2	13	14	3	30
25 September 2012	2	4	2	8	5,548	7,167	2,772	15,487	1	8	3	12	3	2	12	17	0	1	1	2	3	19	2	24
26 September 2012	3	3	2	8	8,751	9,474	2,168	20,393	6	7	5	18	11	7	2	20	1	1	0	2	12	9	0	21
27 September 2012	3	2	0	5	8,758	4,446	0	13,204	3	2	0	5	10	0	0	10	3	3	0	6	6	8	0	14
28 September 2012	2	2	1	5	3,493	6,096	1,338	10,927	5	4	2	11	3	2	1	6	1	2	0	3	2	13	0	15
29 September 2012	0	2	2	4	0	6,286	2,114	8,400	0	12	1	13	0	2	8	10	0	7	1	8	0	5	3	8
30 September 2012	0	4	0	4	0	7,235	0	7,235	0	12	0	12	0	0	0	0	0	4	0	4	0	4	0	4
01 April 2013	2	4	2	8	4,243	5,437	2,836	12,516	4	9	6	19	1	0	2	3	3	7	0	10	3	4	0	7
02 April 2013	3	4	2	9	6,688	8,776	2,209	17,673	2	0	0	2	0	0	0	0	4	7	2	13	2	4	1	7
03 April 2013	2	2	2	6	3,885	5,419	2,491	11,795	2	3	0	5	3	0	0	3	2	4	0	6	1	4	0	5
04 April 2013	3	3	2	8	5,494	6,586	2,397	14,477	7	3	0	10	1	3	2	6	11	2	4	17	0	2	0	2
05 April 2013	2	2	2	6	4,321	5,586	2,319	12,226	5	11	0	16	3	4	2	9	1	2	0	3	0	2	0	2
06 April 2013	0	2	2	4	0	3,317	2,041	5,358	0	7	2	9	0	0	3	3	0	6	0	6	0	1	0	1
07 April 2013	0	3	2	5	0	3,538	2,069	5,607	0	6	3	9	0	0	2	2	0	1	0	1	0	0	0	0
08 April 2013	2	3	2	7	4,048	7,946	2,360	14,354	1	2	0	3	2	1	1	4	0	2	1	3	0	1	0	1
09 April 2013	3	4	2	9	6,539	7,485	2,655	16,679	4	8	0	12	4	3	0	7	4	14	0	18	1	2	0	3
10 April 2013	2	3	2	7	1,939	2,578	2,656	7,173	2	5	0	7	5	2	0	7	2	1	0	3	1	3	0	4
11 April 2013	2	3	2	7	2,603	4,933	2,683	10,219	1	6	1	8	5	10	3	18	0	3	0	3	1	2	0	3
12 April 2013	2	2	2	6	2,540	6,450	2,569	11,559	1	4	1	6	3	2	2	7	1	1	0	2	0	0	0	0
13 April 2013	0	2	2	4	0	5,450	2,326	7,776	0	6	3	9	0	0	4	4	0	9	0	9	0	2	0	2
14 April 2013	0	4	2	6	0	6,530	2,757	9,287	0	9	0	9	0	1	0	1	0	10	0	10	0	8	1	9
15 April 2013	2	3	2	7	3,581	4,963	2,669	11,213	3	6	2	11	0	6	1	7	0	6	1	7	0	3	0	3
16 April 2013	2	3	2	7	3,431	5,001	2,541	10,973	1	4	0	5	0	2	3	5	0	4	5	9	0	0	0	0
17 April 2013	3	3	2	8	6,281	7,398	2,570	16,249	5	8	0	13	3	1	3	7	1	4	3	8	6	9	0	15

date	ec	nun conor	ıber nic p	of ages	To	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			C	risis	
uare	Α	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
18 April 2013	2	3	2	7	4,737	6,902	2,719	14,358	1	4	0	5	3	1	7	11	1	4	0	5	2	7	0	9
19 April 2013	2	2	2	6	3,816	3,563	2,587	9,966	2	5	1	8	4	2	5	11	1	3	1	5	0	1	0	1
20 April 2013	0	2	2	4	0	5,303	2,551	7,854	0	6	0	6	0	0	4	4	0	5	0	5	0	3	0	3
21 April 2013	0	4	2	6	0	5,978	2,736	8,714	0	13	0	13	0	1	0	1	0	3	1	4	0	1	0	1
22 April 2013	2	3	2	7	4,211	7,290	2,983	14,484	5	9	0	14	0	2	1	3	0	1	0	1	0	9	0	9
23 April 2013	3	3	2	8	6,555	6,079	2,615	15,249	3	6	0	9	1	3	6	10	3	5	2	10	2	5	0	7
24 April 2013	3	3	2	8	5,898	7,560	2,239	15,697	3	4	0	7	3	5	2	10	0	0	2	2	0	2	0	2
25 April 2013	3	4	2	9	6,167	8,952	2,825	17,944	8	14	0	22	1	2	1	4	0	0	0	0	0	0	0	0
26 April 2013	2	2	2	6	2,959	5,132	2,257	10,348	5	5	0	10	1	2	0	3	0	1	2	3	0	7	0	7
27 April 2013	0	2	2	4	0	5,409	2,143	7,552	0	3	1	4	0	1	0	1	0	6	0	6	0	2	0	2
28 April 2013	0	4	2	6	0	6,403	2,730	9,133	0	10	0	10	0	1	0	1	0	1	0	1	0	2	1	3
29 April 2013	3	4	2	9	6,213	7,234	2,570	16,017	5	6	12	23	2	0	0	2	1	4	1	6	5	2	0	7
30 April 2013	4	4	2	10	5,972	7,156	2,567	15,695	5	5	0	10	2	0	9	11	0	0	0	0	0	1	0	1
01 May 2013	3	3	2	8	6,329	4,851	2,946	14,126	1	5	0	6	2	2	1	5	0	2	3	5	2	1	1	4
02 May 2013	2	3	2	7	4,411	7,285	2,229	13,925	10	19	2	31	2	6	3	11	1	4	0	5	0	0	0	0
03 May 2013	2	2	2	6	4,371	6,205	1,926	12,502	5	4	0	9	4	3	1	8	1	2	0	3	0	2	0	2
04 May 2013	0	2	2	4	0	5,094	2,269	7,363	0	17	1	18	0	0	2	2	0	7	0	7	0	5	1	6
05 May 2013	0	3	2	5	0	4,482	2,520	7,002	0	10	3	13	0	1	0	1	0	1	0	1	0	12	1	13
06 May 2013	3	2	2	7	7,060	4,568	2,145	13,773	7	1	1	9	5	0	0	5	1	1	1	3	1	0	0	1
07 May 2013	2	3	2	7	2,477	7,548	2,646	12,671	2	3	0	5	0	6	5	11	7	2	1	10	0	2	0	2
08 May 2013	2	3	2	7	3,757	6,320	2,686	12,763	2	7	0	9	0	7	4	11	2	3	1	6	1	5	0	6
09 May 2013	2	3	2	7	3,919	6,925	2,612	13,456	1	3	0	4	3	3	1	7	0	1	0	1	0	0	0	0
10 May 2013	2	2	2	6	3,549	5,470	2,626	11,645	1	4	2	7	2	4	3	9	4	2	0	6	0	2	0	2
11 May 2013	0	2	2	4	0	2,513	2,352	4,865	0	7	6	13	0	0	4	4	0	10	0	10	0	4	0	4
12 May 2013	0	3	2	5	0	6,814	2,489	9,303	0	8	1	9	0	5	0	5	0	4	1	5	0	1	0	1
13 May 2013	3	3	2	8	6,039	6,678	2,962	15,679	4	4	0	8	2	1	0	3	4	1	0	5	1	3	0	4

date	ec	nun conor	ıber nic p	of ages	To	otal numb	er of wor	ds		de	cline			occu	patio	n		re	treat			C	risis	
uart	А	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
14 May 2013	3	3	2	8	6,277	8,257	2,771	17,305	5	9		14	0	1	2	3	0	5	0	5	0	3	0	3
15 May 2013	2	3	2	7	2,371	8,685	2,627	13,683	9	15	19	43	0	0	2	2	1	7	0	8	1	4	0	5
16 May 2013	2	2	2	6	3,620	4,740	2,542	10,902	2	4	0	6	0	1	1	2	0	6	0	6	1	1	3	5
17 May 2013	2	2	2	6	3,920	3,504	2,731	10,155	7	4	3	14	2	0	1	3	1	1	0	2	2	1	4	7
18 May 2013	0	2	2	4	0	6,500	2,244	8,744	0	19	1	20	0	1	6	7	0	4	0	4	0	3	0	3
19 May 2013	0	3	2	5	0	5,861	2,126	7,987	0	7	0	7	0	2	2	4	0	5	0	5	0	3	1	4
20 May 2013	2	3	2	7	4,333	8,553	2,409	15,295	3	9	3	15	2	6	1	9	0	2	1	3	0	3	0	3
21 May 2013	2	3	2	7	3,504	2,995	2,784	9,283	1	6	0	7	2	0	1	3	0	3	2	5	1	4	0	5
22 May 2013	2	3	2	7	4,074	6,740	2,501	13,315	1	5	0	6	0	0	6	6	0	3	2	5	0	0	0	0
23 May 2013	2	3	2	7	3,985	7,881	2,668	14,534	2	5	0	7	5	2	2	9	4	4	1	9	1	1	0	2
24 May 2013	2	2	2	6	4,105	3,579	2,263	9,947	7	23	0	30	0	8	1	9	4	4	0	8	1	1	0	2
25 May 2013	0	2	2	4	0	5,420	2,160	7,580	0	7	0	7	0	2	1	3	0	4	0	4	0	1	0	1
26 May 2013	0	3	2	5	0	6,752	2,663	9,415	0	4	1	5	0	1	7	8	0	0	1	1	0	1	0	1
27 May 2013	2	3	2	7	1,779	7,307	2,480	11,566	14	18	0	32	0	1	9	10	1	7	0	8	1	0	0	1
28 May 2013	3	2	2	7	6,221	595	2,074	8,890	3	3	0	6	11	1	3	15	0	2	0	2	0	0	0	0
29 May 2013	3	3	2	8	5,772	7,900	2,754	16,426	0	4	4	8	1	1	2	4	0	5	1	6	1	2	0	3
30 May 2013	3	3	2	8	3,358	4,030	2,053	9,441	4	12	3	19	0	0	0	0	1	4	0	5	0	10	0	10
31 May 2013	2	2	2	6	4,411	5,735	2,069	12,215	1	5	0	6	1	1	1	3	1	5	1	7	1	1	0	2
01 June 2013	0	2	2	4	0	5,991	2,372	8,363	0	4	5	9	0	0	4	4	2	8	0	10	0	1	0	1
02 June 2013	0	3	2	5	0	5,101	2,299	7,400	0	3	2	5	0	1	9	10	0	1	0	1	0	6	0	6
03 June 2013	3	3	2	8	6,753	7,912	2,598	17,263	5	6	0	11	3	2	2	7	2	6	0	8	0	1	0	1
04 June 2013	3	4	2	9	6,365	10,463	2,162	18,990	3	4	0	7	5	4	2	11	0	3	0	3	1	0	0	1
05 June 2013	3	3	2	8	6,041	4,694	2,483	13,218	1	3	8	12	0	0	0	0	2	4	0	6	1	0	0	1
06 June 2013	3	3	2	8	5,195	6,065	2,290	13,550	1	3	0	4	4	2	1	7	0	6	0	6	2	4	0	6
07 June 2013	1	2	2	5	2,370	6,342	2,469	11,181	0	8	0	8	4	0	0	4	1	10	0	11	0	0	0	0
08 June 2013	0	2	2	4	0	5,677	2,275	7,952	0	9	1	10	0	0	0	0	0	12	0	12	0	0	2	2

date	ec	nun conor	iber ( nic p	of ages	To	tal numb	er of woi	rds		de	cline			occu	patio	n		re	treat			c	risis	
uate	Α	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
09 June 2013	0	2	2	4	0	3,261	2,298	5,559	0	1	1	2	0	2	5	7	0	3	0	3	0	8	0	8
10 June 2013	1	3	2	6	780	5,938	2,869	9,587	0	8	5	13	1	3	0	4	1	4	1	6	0	2	0	2
11 June 2013	2	2	2	6	3,747	5,114	2,605	11,466	1	3	0	4	1	1	5	7	3	11	0	14	0	0	0	0
12 June 2013	2	2	2	6	4,012	6,125	2,798	12,935	0	3	4	7	0	1	4	5	0	4	0	4	1	1	0	2
13 June 2013	3	3	2	8	4,332	8,106	2,710	15,148	1	8	0	9	3	5	1	9	0	9	2	11	0	3	0	3
14 June 2013	2	2	2	6	2,620	3,936	2,215	8,771	5	6	0	11	5	6	4	15	3	4	0	7	0	2	0	2
15 June 2013	0	2	2	4	0	4,897	2,248	7,145	0	6	2	8	0	0	1	1	0	3	0	3	0	3	2	5
16 June 2013	0	2	2	4	0	3,386	2,265	5,651	0	3	2	5	0	0	1	1	0	0	0	0	0	2	0	2
17 June 2013	3	3	2	8	3,672	7,943	2,783	14,398	2	10	1	13	0	0	3	3	0	0	1	1	0	33	0	33
18 June 2013	3	3	2	8	6,619	3,436	2,898	12,953	3	10	0	13	3	0	2	5	5	3	1	9	0	10	0	10
19 June 2013	2	4	2	8	2,080	8,227	2,197	12,504	2	5	9	16	3	4	0	7	1	5	0	6	3	2	0	5
20 June 2013	3	2	2	7	5,110	5,426	2,690	13,226	1	1	4	6	2	0	0	2	3	4	0	7	1	0	0	1
21 June 2013	2	2	2	6	4,473	4,326	2,369	11,168	3	5	2	10	1	0	4	5	5	9	0	14	0	0	0	0
22 June 2013	0	2	2	4	0	5,407	2,422	7,829	0	3	0	3	0	1	1	2	0	4	1	5	0	3	0	3
23 June 2013	0	3	2	5	0	3,254	2,433	5,687	0	8	0	8	0	1	9	10	0	0	1	1	0	1	0	1
24 June 2013	2	3	2	7	3,622	4,266	3,016	10,904	1	10	0	11	1	0	1	2	2	8	0	10	3	5	0	8
25 June 2013	2	3	2	7	3,793	7,553	2,281	13,627	2	7	0	9	1	1	0	2	1	8	6	15	0	2	0	2
26 June 2013	3	2	2	7	6,339	4,868	2,898	14,105	1	1	1	3	1	3	2	6	0	1	3	4	0	1	0	1
27 June 2013	3	3	2	8	5,780	5,247	2,231	13,258	9	14	1	24	5	6	2	13	1	1	0	2	4	17	0	21
28 June 2013	2	2	2	6	3,951	4,820	2,343	11,114	1	3	2	6	3	7	0	10	0	1	0	1	0	0	0	0
29 June 2013	0	2	2	4	0	6,129	2,387	8,516	0	4	0	4	0	1	2	3	0	7	0	7	0	0	2	2
30 June 2013	0	3	2	5	0	4,878	2,809	7,687	0	18	14	32	0	0	1	1	0	4	0	4	0	8	0	8
01 January 2014	2	3	2	7	4,456	6,547	2,686	13,689	1	11	0	12	2	1	1	4	0	11	0	11	0		1	1
02 January 2014	2	2	2	6	4,069	3,281	2,038	9,388	0	4	1	5	0	0	0	0	0	4	3	7	0	0	5	5
03 January 2014	2	2	2	6	3,820	4,797	2,459	11,076	5	5	3	13	0	1	0	1	3	1	4	8	0		6	6
04 January 2014	0	2	2	4	0	5,029	2,311	7,340	0	12	5	17	0	0	7	7	0	7	1	8	0	3	5	8

date	ec	nun conor	iber ( nic p	of ages	То	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			C	risis	
uarc	A	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	В	С	total	Α	B	С	total
05 January 2014	0	3	2	5	0	3,918	1,374	5,292	0	7	0	7	0	0	1	1	0	4	1	5	0	9	17	26
06 January 2014	2	3	2	7	6,412	5,906	2,757	15,075	4	5	2	11	9	1	0	10	4	10	0	14	9	0	0	9
07 January 2014	2	3	2	7	4,481	8,288	2,339	15,108	3	10	0	13	0	1	0	1	0	10	0	10	0	2	0	2
08 January 2014	1	2	2	5	2,054	6,197	2,169	10,420	0	8	0	8	3	1	0	4	0	16	0	16	0	3	0	3
09 January 2014	2	3	2	7	2,526	9,596	2,826	14,948	3	10	1	14	2	0	0	2	1	7	2	10	0	0	0	0
10 January 2014	1	2	2	5	1,548	5,492	2,528	9,568	1	6	4	11	2	1	0	3	2	4	0	6	0	0	2	2
11 January 2014	0	2	2	4	0	5,547	2,637	8,184	0	11	7	18	0	0	6	6	0	0	2	2	0	1	2	3
12 January 2014	0	4	2	6	0	8,051	1,226	9,277	0	7	0	7	0	0	0	0	0	8	0	8	0	3	0	3
13 January 2014	2	2	2	6	4,244	4,588	2,740	11,572	2	4	0	6	0	0	1	1	1	8	1	10	3	2	1	6
14 January 2014	2	2	2	6	4,785	6,189	1,451	12,425	2	5	0	7	3	2	4	9	2	3	0	5	0	1	1	2
15 January 2014	3	3	2	8	5,744	7,188	2,762	15,694	8	11	3	22	1	4	3	8	2	2	0	4	1	2	0	3
16 January 2014	3	3	2	8	6,219	7,107	2,706	16,032	4	5	2	11	1	4	4	9	4	3	2	9	0	3	7	10
17 January 2014	2	2	2	6	3,809	3,320	2,700	9,829	7	8	3	18	4	0	0	4	4	10	0	14	2	2	1	5
18 January 2014	0	2	2	4	0	5,755	2,700	8,455	0	3	1	4	0	3	0	3	0	4	2	6	0	3	0	3
19 January 2014	0	3	2	5	0	6,291	2,816	9,107	0	13	5	18	0	0	2	2	0	11	4	15	0	3	2	5
20 January 2014	3	3	0	6	6,252	8,692	0	14,944	9	12	0	21	1	1	0	2	1	3	0	4	1	1	0	2
21 January 2014	3	3	2	8	7,834	7,112	2,404	17,350	4	4	0	8	2	1	3	6	3	3	3	9	0	1	0	1
22 January 2014	2	3	2	7	4,094	8,741	2,722	15,557	7	15	0	22	0	0	0	0	2	7	0	9	1	1	2	4
23 January 2014	3	3	2	8	4,676	6,470	2,473	13,619	8	5	1	14	0	5	8	13	2	9	0	11	2	3	3	8
24 January 2014	2	2	2	6	4,302	5,087	2,628	12,017	5	4	1	10	2	4	0	6	3	3	0	6	0	0	0	0
25 January 2014	0	2	2	4	0	6,009	2,614	8,623	0	2	2	4	0	0	0	0	0	9	2	11	0	0	1	1
26 January 2014	0	3	2	5	0	1,716	2,295	4,011	0	5	0	5	0	0	0	0	0	6	0	6	0	6	0	6
27 January 2014	4	3	2	9	6,790	9,131	2,749	18,670	2	12	0	14	1	0	4	5	2	9	1	12	1	10	1	12
28 January 2014	3	3	2	8	6,168	5,352	2,902	14,422	3	18	3	24	0	0	3	3	3	4	0	7	1	5	8	14
29 January 2014	3	3	2	8	6,055	8,117	2,557	16,729	4	7	0	11	1	2	7	10	3	3	0	6	0	3	2	5
30 January 2014	3	2	2	7	7,344	3,476	2,366	13,186	3	5	2	10	3	0	0	3	0	0	0	0	0	1	1	2

date	ec	nun conor	nber ( nic p	of ages	To	otal numb	er of woi	rds		de	cline			occu	ipatio	n		re	treat			c	risis	
uate	Α	В	C	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
31 January 2014	2	2	2	6	3,449	4,215	2,161	9,825	2	5	2	9	1	0	2	3	2	6	0	8	1	2	2	5
01 February 2014	0	2	2	4	0	5,079	2,568	7,647	0	8	3	11	0	0	11	11	0	12	5	17	0	2	3	5
02 February 2014	0	3	2	5	0	3,285	2,483	5,768	0	7	1	8	0	0	0	0	0	17	0	17	0	4	2	6
03 February 2014	2	2	2	6	4,048	5,087	2,672	11,807	1	3	0	4	3	3	4	10	0	0	0	0	0	0	2	2
04 February 2014	3	3	2	8	8,066	7,767	2,522	18,355	1	4	4	9	2	2	12	16	1	3	1	5	1	1	1	3
05 February 2014	4	4	2	10	10,306	11,225	2,846	24,377	4	8	1	13	0	2	1	3	4	10	0	14	1	3	1	5
06 February 2014	4	3	2	9	9,886	9,135	2,531	21,552	14	9	1	24	5	8	1	14	0	0	0	0	2	1	0	3
07 February 2014	2	2	2	6	3,635	5,607	2,295	11,537	3	5	1	9	3	3	3	9	1	3	0	4	1	1	1	3
08 February 2014	0	2	2	4	0	2,977	2,622	5,599	0	8	2	10	0	0	1	1	0	14	0	14	0	4	0	4
09 February 2014	0	3	2	5	0	5,607	2,957	8,564	0	9	0	9	0	0	16	16	0	4	0	4	0	3	3	6
10 February 2014	2	2	2	6	3,708	3,876	2,814	10,398	1	3	1	5	2	1	0	3	0	2	0	2	0	0	9	9
11 February 2014	3	3	2	8	5,965	8,573	2,628	17,166	2	9	0	11	11	4	3	18	0	5	0	5	1	2	1	4
12 February 2014	4	4	2	10	7,372	6,163	2,647	16,182	3	8	0	11	11	6	7	24	4	3	0	7	2	1	1	4
13 February 2014	2	3	2	7	4,533	8,571	2,151	15,255	7	7	3	17	0	0	1	1	1	3	0	4	3	1	0	4
14 February 2014	3	3	2	8	7,533	7,152	2,678	17,363	5	8	6	19	2	1	1	4	0	2	4	6	0	1	1	2
15 February 2014	0	2	2	4	0	5,904	2,465	8,369	0	7	1	8	0	0	4	4	0	7	1	8	0	0	0	0
16 February 2014	0	3	2	5	0	5,915	2,822	8,737	0	4	0	4	0	0	1	1	0	3	0	3	0	2	0	2
17 February 2014	4	3	2	9	8,124	9,777	2,572	20,473	3	4	6	13	4	3	4	11	1	4	1	6	1	3	2	6
18 February 2014	3	3	2	8	5,987	7,714	2,334	16,035	2	2	0	4	5	1	0	6	2	0	0	2	0	1	0	1
19 February 2014	3	3	2	8	6,400	8,314	2,056	16,770	4	9	0	13	3	0	0	3	2	5	0	7	1	1	0	2
20 February 2014	3	3	2	8	6,189	8,167	2,544	16,900	2	3	0	5	6	6	1	13	3	4	4	11	1	6	0	7
21 February 2014	2	2	0	4	4,307	2,893	0	7,200	3	3	0	6	0	0	0	0	10	13	0	23	2	3	0	5
22 February 2014	0	2	2	4	0	6,482	2,486	8,968	0	5	0	5	0	0	0	0	0	11	1	12	0	5	5	10
23 February 2014	0	3	2	5	0	6,629	3,374	10,003	0	9	0	9	0	0	3	3	0	6	0	6	0	4	1	5
24 February 2014	2	3	2	7	3,977	6,635	2,803	13,415	1	4	1	6	0	0	3	3	0	1	0	1	0	1	0	1
25 February 2014	2	3	2	7	5,726	6,624	2,584	14,934	7	7	6	20	0	1	3	4	1	1	1	3	0	8	3	11

date	ec	nun conor	iber ( nic p	of ages	To	otal numb	er of woi	ds		de	cline			occu	patio	n		re	treat			C	risis	
uait	Α	В	C	total	Α	В	С	total	Α	В	С	total	Α	B	С	total	Α	B	С	total	Α	B	С	total
26 February 2014	3	3	2	8	7,848	7,579	2,516	17,943	7	11	0	18	5	2	0	7	1	3	0	4	0	3	0	3
27 February 2014	3	3	2	8	6,182	7,772	2,280	16,234	6	5	2	13	6	2	4	12	0	1	0	1	0	4	0	4
28 February 2014	2	2	2	6	3,538	5,001	2,161	10,700	4	6	5	15	2	0	0	2	3	4	2	9	0	1	3	4
01 March 2014	0	2	2	4	0	7,188	2,146	9,334	0	3	5	8	0	0	1	1	0	9	0	9	0	1	2	3
02 March 2014	0	3	2	5	0	7,373	2,156	9,529	0	20	1	21	0	0	2	2	0	8	1	9	0	1	0	1
03 March 2014	3	3	2	8	6,851	5,702	2,490	15,043	2	10	3	15	7	0	5	12	2	7	1	10	1	1	1	3
04 March 2014	2	3	2	7	2,275	6,895	2,824	11,994	3	8	0	11	3	0	7	10	1	5	0	6	1	4	0	5
05 March 2014	2	3	1	6	3,968	5,169	865	10,002	2	8	0	10	0	0	0	0	1	7	0	8	0	5	0	5
06 March 2014	3	3	2	8	5,501	5,941	2,726	14,168	1	5	0	6	0	0	0	0	0	4	0	4	0	1	0	1
07 March 2014	2	2	2	6	2,485	4,937	2,477	9,899	4	4	1	9	1	1	2	4	0	0	0	0	1	1	0	2
08 March 2014	0	2	2	4	0	6,645	2,117	8,762	0	3	0	3	0	0	0	0	0	5	3	8	0	0	5	5
09 March 2014	0	4	2	6	0	5,342	2,687	8,029	0	8	0	8	0	0	1	1	0	6	0	6	0	3	22	25
10 March 2014	3	3	2	8	5,848	6,348	2,654	14,850	3	4	3	10	5	1	0	6	0	0	9	9	1	4	1	6
11 March 2014	3	3	2	8	5,670	6,747	2,338	14,755	7	5	0	12	5	3	0	8	3	2	0	5	3	0	0	3
12 March 2014	3	3	2	8	6,177	6,879	2,344	15,400	0	2	2	4	4	6	0	10	2	4	0	6	1	0	0	1
13 March 2014	2	3	2	7	4,292	7,941	2,367	14,600	2	8	0	10	3	1	0	4	2	10	1	13	0	1	1	2
14 March 2014	2	2	2	6	4,078	2,376	2,359	8,813	3	3	6	12	1	1	9	11	0	1	0	1	0	2	0	2
15 March 2014	0	2	2	4	0	5,474	2,542	8,016	0	9	0	9	0	1	5	6	0	8	3	11	0	4	3	7
16 March 2014	0	3	2	5	0	2,781	2,265	5,046	0	3	2	5	0	0	3	3	0	5	4	9	0	1	1	2
17 March 2014	3	3	2	8	5,576	6,562	2,938	15,076	4	5	1	10	1	2	1	4	0	5	1	6	0	4	0	4
18 March 2014	3	4	2	9	6,786	9,565	2,497	18,848	6	7	0	13	5	2	0	7	2	6	0	8	2	1	0	3
19 March 2014	3	4	2	9	6,320	8,823	2,248	17,391	1	6	0	7	2	6	0	8	1	3	0	4	2	4	0	6
20 March 2014	3	4	2	9	3,186	9,610	2,832	15,628	0	3	4	7	1	4	4	9	0	1	0	1	0	4	2	6
21 March 2014	2	2	2	6	4,457	5,261	2,680	12,398	5	1	0	6	1	1	13	15	2	3	0	5	0	0	0	0
22 March 2014	0	2	2	4	0	6,544	2,725	9,269	0	6	0	6	0	2	13	15	0	6	0	6	0	3	1	4
23 March 2014	0	3	2	5	0	5,003	2,234	7,237	0	8	0	8	0	0	0	0	0	2	0	2	0	0	0	0

date	ec	nun conor	ıber nic p	of ages	To	otal numb	er of wo	rds		de	cline			occu	ipatio	n		re	treat			C	risis	
uute	А	В	С	total	А	В	С	total	Α	B	С	total	Α	В	C	total	Α	В	С	total	Α	B	С	total
24 March 2014	3	3	2	8	6,417	7,347	2,400	16,164	3	6	1	10	4	2	1	7	0	10	0	10	1	3	0	4
25 March 2014	3	3	2	8	6,558	5,549	2,236	14,343	1	4	1	6	6	2	1	9	0	7	1	8	1	0	0	1
26 March 2014	3	3	2	8	6,124	4,278	2,128	12,530	3	7	0	10	2	1	0	3	2	2	0	4	4	7	0	11
27 March 2014	3	3	2	8	6,105	5,523	2,198	13,826	1	4	0	5	3	3	4	10	1	3	0	4	2	9	0	11
28 March 2014	2	2	2	6	4,202	5,705	2,344	12,251	3	10	4	17	2	0	15	17	2	1	0	3	0	1	3	4
29 March 2014	0	2	2	4	0	3,239	2,435	5,674	0	6	0	6	0	0	14	14	0	9	0	9	0	12	0	12
30 March 2014	0	4	2	6	0	7,318	2,280	9,598	0	11	0	11	0	0	1	1	0	6	0	6	0	5	0	5
31 March 2014	3	3	2	8	6,178	7,403	2,667	16,248	7	11	3	21	5	5	3	13	1	5	0	6	0	6	0	6