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**THE AMMAN FINANCIAL MARKET -
INSTITUTIONAL FEATURES AND CALANDAR EFFECTS**

Khalil Khoury

**A Thesis
In
The Faculty
of
Commerce and Administration**

**Presented in Partial Fulfilment of the Requirements
for the Degree of Master of Science in Administration at
Concordia University
Montreal, Quebec, Canada**

August 2000

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ABSTRACT

The Amman Financial Market – Institutional Features and Calendar Effects

Khalil Khoury

The aim of this paper is to provide the reader an insight into a relatively little known market in a developing country. The purpose of the study is to look at the market from an investor's / portfolio manager's perspective. Most investors are used to operating in a developed, mature market such as the New York Stock Exchange or the London Stock Exchange where trading rules, processes and regulations are well understood and familiar. On the other hand, the Amman Financial Market operates under a different set of trading rules and regulations. These different rules and regulations may cause concern to the western investor over market transparency, liquidity, foreign investment restrictions, taxes, and repatriation of profits. This in turn might discourage him/her from entering a market that may have potential for high returns and opportunities to explore a market that holds potentially exploitable inefficiencies. An important part of the analysis will investigate the existence of these inefficiencies.

The Amman Financial Market operates in an Islamic country, whereby the religious holidays are based on a lunar calendar, and come at different times of the year every year. Therefore, unlike stock exchanges in the Western world, whereby all holidays are known and set in advance, the Amman Financial Exchange closes its doors on different days of the year every year. Furthermore, the weekend in the Middle East falls on a Thursday and Friday, and not Saturday and Sunday. These facts provide an opportunity to examine such market anomalies as the day of the week, month of the year, and holiday effect. We use the Amman Financial Market Index daily closing prices for the years 1987 through 1995 to perform the market anomaly tests. The results indicate no significant holiday or day of the week effects. However, significant results were obtained for the months of April, July, August and December which we endeavor to explain.

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This paper is dedicated to my mother, who, after the tragic loss of her beloved husband and youngest son, was able to continue providing the strength, love and stability that the family needed. Her ingenious ability to guide and raise her children through difficult times has helped us become strong individuals, able to face the world with the knowledge that whenever the going goes tough, there is a warm kind hearted person always ready to give the support and guidance that is needed.

Thank you mother, we love you.

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Section I - Introduction

Investment in the Middle East

Foreign investors are turning to the Middle East because it offers investment opportunities in new or relatively un-played markets. Nowhere is this more apparent than in the region's 14 stock exchanges. Currently less than 10% of these markets' \$13 billion combined market capitalization is held by foreign investors, although foreign investor participation could grow substantially in the next few years. The upside potential of the region's equity markets is enormous. Since 1989, market capitalization in Jordan has more than doubled, in Turkey it tripled and in Oman it quadrupled.

For western investors, there has been a marked improvement in international information about Middle Eastern markets. The International Financial Corporation (IFC), for example, has included certain stocks from the Amman Financial Market as part of its IFC Emerging Markets Index since the early 1980s. Western investment in the region's equity markets has risen from less than \$200 million in 1992 to almost \$1 billion in 1995¹. Bankers and market analysts cite three main reasons for this investment boom:

1. Their own need to globalize portfolios.
2. The momentum of the Middle East peace (underscored at the Middle East economic summit in Amman where bankers, business leaders and diplomats gathered towards the end of October 1995 to map out the region's future).
3. More blue-chip shares are now available and are being traded in markets that have trading systems with improved reliability.

Despite recent reforms and general improvement in the region's economic outlook, many bankers and investment advisers remain cautious. They, along with a growing number of political leaders in the region, see four basic conditions that need to be met if markets are to thrive:

¹ Source: Euromoney 1995

1. A stable political and economic environment. This means the realization of a comprehensive peace agreement between the Arab nations and Israel.
2. Local markets need to adopt internationally accepted accounting standards and market regulatory structures (including efficient clearing and settlement, and custodial services).
3. Barriers to cross-border investment flows need to be eliminated.
4. Governments need to abandon their role as significant owners of industrial or commercial property.

Objectives of this Study

The aim of this paper is to provide the reader an insight into a relatively little known market in a developing country. The purpose of the study is to look at the market from an investor's / portfolio manager's perspective. Most investors are used to operating in a developed, mature market such as the New York Stock Exchange or the London Stock Exchange where trading rules, processes and regulations are well understood and familiar. On the other hand, the Amman Financial Market operates under a different set of trading rules and regulations. These different rules and regulations may cause concern to the western investor over market transparency, liquidity, foreign investment restrictions, taxes, and repatriation of profits. This in turn might discourage him/her from entering a market that may have potential for high returns and opportunities to explore a market that holds potentially exploitable inefficiencies. An important part of the analysis will investigate the existence of these inefficiencies.

Therefore, the aim is to provide the user with useful background information and test for market anomalies to provide investors, portfolio managers, and future researchers a basis from which to explore the opportunities offered by this market. It will be especially interesting to evaluate the day-of-the-week effect in the Amman Financial Markets since the Islamic weekend is Thursday and Friday. This would be a test of whether the weekend effect observed in many of the Western World's stock markets is truly due to the extra holding period offered to the investors with the 2 day break from the market, or

is rather a “follow the leader” phenomenon whereby the world stock markets follow the major exchanges such as the New York Stock Exchange. If the weekend effect is to hold, the empirical tests should show a negative return on Saturdays, the day after the weekend. An even more interesting analysis will be to observe the market returns during holiday closures. Holiday closures fall into two categories, official national holidays, and Islamic holidays. Most of the western world shares many of the same holidays e.g. Christmas, Easter; but the situation in the Islamic world is completely different, since the Islamic calendar is a lunar one, and the religious holidays come at different times of the year each year.

The choice of topics was driven by the fact that the Amman Financial Market is a relatively new exchange that has the potential to grow and become one of the most liquid and “investor-friendly” exchanges in the Middle East and the Arab World as a whole. Few, if any, in-depth analysis of the internal operations of the market have been published in the scientific circles. The purpose of the study is not so much as to perform in-depth empirical tests on the AFM, but rather to give the interested reader a case study of the market, how it works, how it is different from what we are used to seeing in the developed world in terms of market mechanisms and trading operations and the implications of these differences for foreign investors. The paper will also address several efficiency issues using well-established empirical tests, and lay the foundations for further work that can be performed in this area.

Seasonal anomalies in the return patterns of various financial assets have been well documented for Western Markets. The existing empirical research provides strong evidence of various predictable patterns in returns. Specifically, predictable return patterns have been identified in long horizon returns. The January effect was identified as a monthly seasonal in which smaller firms are traditionally found to perform exceptionally well relative to large firms. The day-of-the-week effect was extensively documented as well; stock returns tend to be negative on Monday and relatively high on the last trading day of the week.

Although there has been extensive work on Efficient Market's Hypothesis, very little work of any sort has been conducted with regards to the emerging markets of the Middle East. Jordan's relatively advanced exchange and database of prices, offers ample opportunity for researchers to study a market and chart its progress. Jordan's historic signing of the peace treaty with Israel indicated its intentions and ambition to advance beyond the level of an emerging market. Its continuous attempts at democracy and peace in a region that historically has witnessed several conquering and dictatorial civilizations, is an indication of how much Jordan wishes to be viewed as a peaceful country in a region full of turmoil.

The paper is organized as follows. Section II presents a brief background on the country of Jordan. Section III provides detailed information on the Amman Financial Market. Section IV presents a review of the literature concerned with market efficiency and market anomalies. Section V discusses the tests that will be conducted and the expected results. Section VI will present the results and conclusions. Section VII will discuss further research possibilities.

Section II – Background on the Hashemite Kingdom of Jordan

The Hashemite Kingdom of Jordan, at the heart of the Arab world, linking Europe, North Africa and the Arab gulf, is poised to regain its historic position as the regional center for international trade and investment. Politically, as well as geographically, Jordan is ideally positioned to benefit both from the peace treaty with Israel and - to even greater short-term effect - the lifting of sanctions against Iraq. Before the 1990 Gulf crisis, Iraq was Jordan's main trading partner. The bulk of Iraq's world trade flowed through the port of Aqaba and accounted for over 20% of Jordan's exports. *Appendix 1* is the Central Intelligence Agency's 1999 World Fact-book entry for Jordan which includes information on the current government, economic and social statistics as well as geographic and general information.

The overall area expects increased investment, freer markets and a substantial rise in trade. However, international companies seeking to establish regional bases are likely to seize the advantages offered by Jordan's well-developed infrastructure and a highly educated workforce. The figure below displays literacy rates for selected countries in the regions:

Figure 1 – Literacy Rates in selected countries in the Region²

	Jordan	Egypt	Iraq	Israel	Lebanon	Syria	Saudi Arabia
Total Population	86.6%	51.4%	58%	95%	86.4%	70.8%	62.8%
Male	93.4%	63.6%	70.7%	97%	90.8%	85.7%	71.5%
Female	79.4%	38.8%	45%	93%	82.2%	55.8%	50.2%

Definition of Literacy Rate: Age 15 and over that can read and write.

² Source: CIA World Factbook – 1999

The Jordanian government is actively seeking to realize Jordan's potential as the regional center for foreign investment. Financial incentives currently offered are intended to create a liberal and attractive business environment for both local and foreign investors and Investment Promotion Law No. (16) that came into effect in 1995 is intended to strengthen private investment. *Appendix III* is the full text of Law Number (16) of 1995 The Investment Promotion Law.

Jordan is safe, secure and stable, especially when compared to other countries in the region. Jordan has enjoyed political stability over the years that is unparalleled in the Arab World. Its leadership is consistent and its sense of identity is clear. Jordan reflects a consistent and moderate policy at home and abroad. The democratization process has enhanced stability at home. A perfect example is the recent transition of the monarchy from the Late King Hussein to his son, King Abdullah II. The transition came about at the time of King Hussein's death. He had ruled the country for over 45 years. His son took immediate charge of the country, after being sworn in to parliament, and has so far been successful in steering the country in the direction of economic recovery and investment promotion (Jordan joined the World Trade Organization in early 2000). Political parties function without government interference, and take part in free elections every four years representing all political trends. Jordan has one of the most highly skilled populations in the region. The kingdom has worked hard over the years to guarantee all of its citizens their right to a decent standard of living, and this has had dividends in terms of human resources and in terms of stability. In terms of peace and security, Jordan has signed a peace agreement with Israel and is cooperating to bring about a new era of peace in the Middle East. It is working towards comprehensive security and cooperation in the Middle East, and a Human Resource Development Plan at a regional level are all specified in the Jordanian-Israeli Treaty of Peace.

Jordan's democratic elections are only surpassed by neighboring Israel and Lebanon. Few other countries run a truly democratic elections in the region. All of the Gulf States run on the basis of Sheikdoms, with each sheik inheriting the mantel and all government

matters from his predecessor. Saudi Arabia has a pure monarch, Iraq, Syria and Lebanon are all republics. Except for the recent elections in Iran, elections in such countries as Syria and Iraq are only meant to act as a show of democracy to the outside world, but in effect the results of the elections are usually known before they even begin. .

Section III – The Amman Financial Market (AFM)³

Introduction

The AFM was created in 1976 through Law No. 31 and opened for business on January 1 1978. Although technically a government agency under the ministry of Finance, Law 31 gives the AFM legal, financial, and administrative independence.

Before establishment of the Amman Financial Market, securities trading was done on a hit and miss basis through real estate offices, banks, and unlicensed brokers scattered throughout Jordan. Except for a few stocks, liquidity was nonexistent, spreads between bid and asking prices were enormous, and many transaction prices were not disclosed. The AFM centralized these activities with the creation of a regulated auction market with full disclosure of bid and asking prices, instant reporting of all transactions, standardized listing requirements including periodic audited company reports, and the licensing of brokers.

Objectives set forth in Law 31 have essentially been met, including the following:

1. Mobilization of savings by encouraging investments in securities.
2. Regulation and control of issuance of and dealing in securities, to assure soundness, ease, and speed of transactions, in accordance with the financial interests of the country and the protection and interests of small investors (for example the use of the 5% trading limit rule to protect the small investor from big price fluctuations).
3. The gathering and publishing of “necessary data” to achieve these objectives (currently the AFM security prices are monitored through international and local price dissemination services such as Reuters, Access and Bloomberg. The AFM also

³ This section describes the current operations of the AFM. Although the AFM developed and matured over its 25 year life span, with many laws and regulation changes implemented or changed during this time period, this section covers only the current operations and characteristics of the market, with references

requires that public shareholding companies publish their financial data annually in two newspapers. This provides the foreign investor with two things: Price dissemination, and disclosure.

4. Participation in the development of a Capital Market in Jordan through:

- Encouraging the establishment of Brokerage Firms that provide more activity and trading presence in the market.
- Development of a variety of capital raising options for corporations supplementary to issuance of stocks and securities.
- Performing statistical research on publicly traded companies to provide transparency to market investors.
- Providing input to the best methods of achieving a stable and consistent investor laws and policies for the country.

An AFM committee, appointed by the Minister of Finance, provides overall direction of the market, with day-to-day activities supervised by a general manager. In addition to the general manager, the committee includes representatives of banks and specialized credit institutions, listed companies, Jordan's Central Bank, the Amman Chamber of Industry, the Federation of Chambers of Commerce, the AFM Brokers Association, the Controller of Companies, and the Ministry of Finance.

The AFM not only provides the laws and regulations for securities trading in the country, it also acts as a body similar to the Securities Exchange Commission of the United States, ensuring that traded companies provide accurate and up-to-date financial information through both the listing period and the market trading periods. The AFM also monitors trading hall activities, to ensure that all trading laws and regulations are met, and to follow up on any form of insider trading that may occur.

made to any changes that have occurred during the time period for which the market efficiency tests will be conducted in sections V and VI.

The AFM combines features normally found in both a stock exchange and a government securities and exchange commission. It is a government mandated vehicle for both the regulation and institutionalization of the securities market in Jordan. The AFM has been given appropriate mandate to promote the development of the securities market, to regulate the activities of member firms dealing in securities (such as underwriters), brokers, and investment advisors) and to regulate the trading market as such. To this extent, the AFM functions not only as a typical stock exchange, but also as an organizing and controlling body.

The AFM recognized that the combination of monitoring and operating the stock exchange does not provide the ideal environment for a stock exchange to grow and to provide the required security and vigilance that two separate bodies can provide. Therefore in 1999, the AFM was split into three different arms. The Amman Stock Exchange, The Securities Depository Center, and the Jordan Securities Commission. The following explains the responsibilities of each of these organizations⁴:

Jordan Securities Commission(JSC)

The commission aims at supervising the issuance of and dealing in securities, regulating and monitoring the activities and operations of those entities falling under its supervision. It also aims at regulating and supervising the disclosure of information related to securities, issuers, insider trading and major shareholders.

JSC has financial and administrative autonomy, and is directly attached to the Prime Minister, which would enhance its future role, and would enable it to effectively assume its supervisory role over the capital market. It has a Board of Commissioners, composed of five full-time members, which is entrusted with the following functions:

- Drawing up draft laws and regulations on securities;
- Approving the by-laws and regulations of the SDC and ASE;
- Granting brokerage licenses issued under the Law;

- Setting limits for commissions of financial services companies and members of the SDC and;
- Adopting accounting and auditing standards for the entities falling under its supervision as well as standards for their qualified auditors.

Amman Stock Exchange (ASE)

ASE started its operations on March 11, 1999 as a non profit institution, with financial and administrative autonomy, and as the only party authorized to act as an organized market for trading in securities in the Hashemite Kingdom of Jordan, by virtue of the Securities Law No. 23 of the year 1997.

It falls under the surveillance and supervision of JSC, and its membership is made up of certified financial brokers. It is managed by a Board of Directors and a Chief Executive Officer. The Board of Directors is made of seven members; namely, three representatives of financial services companies licensed to act as financial brokers, two representatives of banks licensed to perform activities of financial services companies as financial brokers, and financial brokerage companies which are owned by or affiliates of banks, while the other two members are appointed by the Board of Commissioners of JSC from among experts in legal, financial and economic fields from the private sector.

In the coming future, ASE will enhance safe trading in and registering of securities, and it will bolster trust in the securities market in order to attract local and foreign savings and prompt investment. It has issued those financial and administrative regulations needed for its management as well as those regulations and directives stipulated for in the Securities Law, which are the following:

1. *Code of Ethics of ASE, which apply to ASE members, members of its Board of Directors, its CEO and employees. (See Appendix V).*
2. *Directives on Disclosure related to ASE, which determine confidential data, records and information; the persons authorized to have access thereto by virtue of their job; data, records and information which ASE must disclose; as well as data,*

⁴ Source: Amman Stock Exchange Website

records and information to which the public may have access and of which they may make copies. (See Appendix VI).

3. *Regulations for the Fees and Commissions of ASE*, which include fees and commissions by ASE against listing of and trading in securities, commissions collected against off-the-trading-floor transactions, as well as membership and subscription fees paid by brokers. (See Appendix VII).

ASE will also issue directives related to the Brokers' Guarantee Fund, and directives on dispute settlement among brokers, and between brokers and their clients.

The Securities Depository Center (SDC)

Settlement procedures require the handing over of specific lists of transfer contracts by brokers to the SDC on the day following buying and selling trade-floor transactions (T+1) at the most. The SDC in turn, checks the lists, updates its own records accordingly, and calculates commissions thereon. Once that is completed, contracts are handed over to the concerned companies within two days of SDC's receipt thereof. Consequently, settlement procedures are done within three days of drafting trade-floor contracts (T+3). In turn, listed companies must transfer ownership of shares within three days of receipt of transfer contracts. Thus, all procedures of transfer of ownership of shares and their registration in the company's shareholder books are completed within six days of drafting trade-floor contracts (T+6).

For the purpose of this study, since the time period for the market anomalies test is prior to the establishment of the three separate bodies, the term Amman Financial Market will be used and all the information that is described relates to that time period.

In principle, the securities traded in the AFM are divided into two groups: equities and debt instruments. Orders are handled through brokers and are executed on a continuous auction basis during trading hours. Shares are traded on the floor in units (a unit is 50 shares), and prices are quoted in Jordanian Dinars with ticks in Jordanian piasters (one

hundred piasters = 1 Dinar)⁵. Daily price limits of 5% above or below the opening price are imposed to prevent large price fluctuations in addition to eliminating unnecessary speculation and protecting the interests of the small investor. The AFM keeps a keen eye on any type of market manipulation, and the use of a trading limit allows it to halt trading to investigate any conspicuous trading activities before they affect the small investor. This trading limit should also promote foreign investor interest in the market, as it can allow those foreign investors who are not on the trading floor during trading hours, to take note of the halting of trading, assess the situation and act accordingly. Settlement among brokers and their clients are applied on a spot basis and in accordance with the laws and regulations of the AFM.

The AFM keeps an up-to-date record of transactions. All traded shares are registered. Registration usually takes place on trade day (T+1) when the broker records the transaction with the AFM. The AFM has two business days after trade day to update its records and deliver all transactions to the issuing companies which update their records accordingly. The usual full settlement time frame for equity is a maximum of three business days which is common among all major Western and Asian markets. (T+3).

Since its inception, the Amman Financial Market has shown resilience if not much else. It has been notably less volatile than most emerging markets, both up and down. The AFM Index (100 at 1/1/80) shows all too clearly Jordan's failure to participate in the great bull markets of the 1980s: It closed 1980 at 111.5, and in 1990 at 118.4, with an intervening yearend high of 203.5 (1982) and low of 100.5 (1986)⁶.

All orders for AFM transactions are handled by broker/dealers and are executed on continuous auction bases during trading hours. The market is open from 10:00 a.m. to 11:30 a.m. Jordan time (GMT+2), Saturday through Wednesday, and - to facilitate

⁵ 1 Jordanian Dinar (JOD) = CDN\$ 2.00

⁶ Source AFM statistical department

trading by foreign investors - from 5:00 p.m. to 6:00 p.m., Mondays through Wednesdays.

Objectives of the Amman Financial Market⁷

The AFM is made up of a broad spectrum of participants, including companies, individual investors, institutional investors, securities firms, and dealers with assigned responsibilities.

Today, there are 28 brokerage firms licensed by the Amman Financial Market. Eight of them are public shareholding companies (equivalent of a public company in Canada) dealing in new shares as well as buying and selling securities for their own account and for their clients against a commission in the secondary market. There are also 17 private shareholding brokerage companies. They too sell and buy securities on behalf of their clients against commission and sometimes for their own account. Their legal setup and nature is in the form of a limited liabilities company. The remaining three are in the form of a partnership functioning only as brokers.

Investors in the securities market in Jordan, especially in the secondary market can be characterized as either individual stockholders, which constitute almost half of the participants in the market, or as institutional investors. Currently, the main institutional investors in Jordan are The Social Security Corporation (which invests on behalf of the Social Security System in Jordan), The Jordan Investment Corporation (the investment arm of the government, responsible for promoting and enhancing investments in Jordan and the Stock Exchange), insurance companies, savings funds, banks, and different employee savings and investment funds.

The Amman Financial Market is open to non-Jordanian investors.⁸ This has not always been the case, as foreign investors were usually limited to a maximum investment in any

⁷ Source : Arab Monetary Fund Special Publication "Arab Financial Markets – Establishment and development" – April 1997

⁸ Please see Appendix IV for Non-Jordanian Investment Restrictions

one particular sector or security. It has recently witnessed an increased attention by international financial institutions to invest in the securities market in Jordan. The current share prices at the AFM, in comparison with other emerging stock market prices, are considered competitive which encourages investment in the listed securities.

Foreign investors are free to invest and trade in Jordanian Securities (equities and bonds). In general, foreign ownership is limited to not more than 49% of any companies paid-in capital. Repatriation of investment and income (in any convertible currency) by Arabs and foreigners are free of restrictions when transferred outside the country.

Historical Information and Comparisons with Other Financial Markets

Jordan has a market capitalization of over US\$ 6 billion (1998). Although still small compared to other emerging markets, this makes it one of the largest Arab markets in the region that is open to foreigners.

The industrial sector leads the market with 46% of the total market capitalization. The banking and financial sector is a close second at 44% of total market capitalization. The AFM's solid market-participant profit record has attracted a large number of foreign investors. With Reuters Newswire services providing market information, and the International Monetary Fund tracking the market index, international investors are becoming increasingly aware of the market's presence and movements.

The following table presents summary statistics for Amman Financial Market and Jordan's Economy for the years 1989 – 1998.⁹ *Appendix II* presents more information and comparison with other stock markets.

⁹ Source: International Finance Corporation 1999 Factbook

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of Listed Companies	106	105	101	103	101	95	97	98	139	150
Market Capitalization										
In Dinars	1,378	1,283	1,691	2,269	3,360	3,234	3,311	3,230	3,863	4,157
In US Dollars	2,162	2,001	2,512	3,365	4,891	4,594	4,670	4,551	5,446	5,838
Trading Value in										
Dinars	365	266	292	879	933	430	362	211	355	464
US Dollars	652	407	432	1,317	1,377	626	517	297	501	653
Turnover Ratio (%)	29.9	20.0	19.6	44.4	33.1	13.0	11.1	6.5	10.0	11.6
Local Index										
AFM General	93.3	80.4	100.0	129.9	158.4	143.6	159.2	153.5	169.2	170.1
Change in index (%)	10.4	-13.8	24.4	29.9	22.0	-9.4	10.8	-3.6	10.3	0.5
Economic Data										
GDP (US\$)	4,128	4,020	4,193	5,138	5,487	6,037	6,591	6,703	7,015	-
Change in CPI (US\$)	25.7	16.2	8.2	4.0	3.3	3.5	2.4	6.5	3.0	-
Exchange rate (average)	0.559	0.654	0.667	0.667	0.677	0.699	0.701	0.709	0.709	0.711
	9	4	1	1	6	0	0	4	4	2

Market Types¹⁰

Primary Market

The Primary Market deals with new issues. New issues consist of "share issues" and "bond issues." Share issues include both issues by newly established companies, as well as the established ones through capital increases or by public and private offering. Currently, prices for new share offerings are determined by an Issuing Committee at the Ministry of Industry and Trade in cooperation with the AFM. This procedure, however, will soon change with the introduction of private sector underwriters to the market. The introduction of these underwriters will mean that the true value of the new issues will be determined by the investor demand for the shares, and not as is currently the practice, by the government and its methodology for valuing the share offerings. Higher share prices

and the growing demand for securities creates an excellent climate for the introduction of new securities. There is also a high volume of issues by companies already listed.

Since the AFM's establishment, the number of primary issues in the market has increased around 1000%. 1993 has seen the largest issuance of primary stock to date, JD 227.6 million. The overall value in the primary market for 1993 was JD 238.2 million.

The Amman Financial Market plays a central role in facilitating business expansion in Jordan and efficiently channeling resources to serve the interest of the overall economy. Over 15 years of the AFM, businesses and the general public have become increasingly aware of the benefits such a market offers. Businesses have turned to the stock market as a means of financing expansion and raising funds. Capital formation in Jordan has increased from around JD 229 million in 1978 to over one billion Dinars in 1993. At the same time, new issues have increased over ten fold during this period. The ratio of total value of new shares to gross fixed capital formation has increased from around 9.6 in 1978, to over 22.0 in 1993. This increase reflects not only the market's maturity, but also the public confidence in this institution.

Secondary Market

The Secondary Market is divided into four markets: The Parallel Market, the Regular Market, the Bond Market, and Legal Transfers (transactions off the trading floor). Since its establishment, the number of listed companies have more than doubled. In 1978, only 66 companies were listed in the AFM. In 1998, 150 companies are listed and 17 more companies are waiting to be listed.

Companies waiting to be listed are prospective entrants to the Parallel Market, and are not traded on the trading floor. These companies are traded through the Legal Department of the AFM. This group includes those companies that are newly established as well as those companies whose listing requirements have not yet been met. In addition, listed

¹⁰ Source: Amman Financial Market Official Web Site

companies which have violated certain listing requirements and have been degraded by the AFM. The Parallel Market in turn, includes those companies waiting to be listed in the Regular Market. Before becoming eligible for listing in the mainstream transactions of the Regular Market, the company must have been in operation and must have published two annual financial reports. The company's stocks are traded in the Parallel market for at least one year and have at least ten percent of its shares traded before the AFM Managing Committee considers it for listing on the Regular Market.

Parallel Market

The Parallel Market offers newly emerging companies which need liquidity, an opportunity to have their shares traded in an orderly and fair manner while preparing to meet the more rigid requirements of formal listing in the Regular Market. Since new companies must meet special requirements set by the AFM Managing Committee before being transferred to the Regular Market, the establishment of this market was necessary for trading shares prior to formal listing. To this extent, the Parallel Market is a preparatory market for listing at the Regular Market. The trading rules of the Parallel Market are similar to those of the Regular Market. Listing requirements are less stringent, but offer the same essential protection to the investor.

In addition, the Parallel Market was established due to the tremendous increase in the demand for shares in the early 1980s. This was represented by the accelerated increase in the volume of trading and the number of shares traded in the Regular Market causing an imbalance between the demand and supply of shares which prevailed at the time.

The Parallel Market was established in 1982 and began its first day of trading on February 20th of that year. By the end of 1982, the Parallel Market registered a total of JD 16 million in volume traded. In its past twelve years of existence, the Parallel Market has developed into a fully-fledged market, meeting the demands of companies and investors alike. In 1993, the market registered a record high of JD 35.2 million. The increased variety of securities now available provides a far wider choice to investors.

The Regular Market

Most companies listed at the AFM are traded in the Regular Market. In 1998, there were 150 companies listed in this market, compared to 66 in 1978. The majority of transactions in equity dealings at the AFM take place at the Regular Market. In 1978, the total number of shares traded was 2.4 million of which, almost half took place in the banking sector. In 1992, the number of shares traded in the Regular Market was approximately 344.9 million. The industrial sector generally is the most active, followed by the banking and financial sector.

It is important to note that this increase in the total shares traded has been accompanied by increases in value and market capitalization. The volume of trade in the Regular Market has increased dramatically in the past 15 years of operation. In 1978, the total volume of trade in the Regular Market was only around JD 5.6 million. In 1993, this figure reached around JD 1 billion. This notable increase has received major attention from financial analysts in Jordan and abroad, and has renewed interest in the AFM.

Market capitalization at the AFM has enjoyed steady, but rapid growth since its establishment. In 1978, the market registered a capitalization of JD 286.1 million. Sixteen years later, this value increased to over JD 3.3 billion, an increase of over 1,000%. As a percentage of GDP, market capitalization increased from around 38.3%, in 1978, to around 93.5% in 1993. Appendix II provides data on Market Capitalization for other stock exchanges in the region.

Bond Market

Bonds traded at the AFM include corporate bonds, development bonds, treasury bonds, and treasury bills. Maturity of these debt instruments range between 3 months to 10 years. Trading in bonds and bills at the AFM has been generally slow. Over the past fifteen years, the volume of bonds traded has fluctuated between JD 6 million to JD 37 million. *Appendix VIII* provides historical data on bonds trading on the market, as well as other historical data.

Transactions off the Trading Floor

The Secondary Market also serves the purpose of legal transfers. The Legal Department at the AFM provides a setting for special transactions such as sales of unlisted companies, transactions from abroad or involving transfers within families and related to inheritance. In 1989, transactions off the trading floor recorded its highest volume ever, incorporating almost 29.7% of the overall volume of the AFM in the secondary market.

Trading Mechanism

The buying and selling of securities is performed by brokers on the trading floor. The steps that lead to a trade are as follows:

1. Client authorizes broker to buy or sell securities on his behalf by filling out the required order form.
2. The broker records sell and buy orders on the whiteboard, indicating the broker code, number of shares which are on offer or requested, and the price. (See below for diagram of a board).
3. Counter brokers cross off an order from the board if they wish to meet it, and thus a trade or contract is executed.
4. The transactions is detailed in the appropriate forms, indicating the company traded, number of shares traded, the price, and the brokers on each side of the transaction. The form is signed by representative brokers and the time and date of the trade is stamped on the forms by the market.
5. Each form contains three copies. One copy is given to AFM representatives, and a copy is retained by each of the transacting brokers.

The following diagram presents the layout of the board on which the trading occurs in the market floor. Each company is allocated one board and traders move physically between the boards, executing transactions.

Company Name		Closing Price	Date		
Allied Insurance		3.65	1/10/2000		

<u>Broker Name</u>	<u>Bid Quantity</u>	<u>Price</u>	<u>Broker Name</u>	<u>Offer Quantity</u>	<u>Price</u>
National	200	3.67	Global	300	3.69
			United	100	3.70

Price Indices

Indices are used to portray the pattern of stock price movement, and to measure the performance of the market in terms of return. Back in 1980, the Amman Financial Market constructed an Unweighted Price Index supplemented by sub-indices for the four sectors: Banking and Finance Companies, Insurance, Services and Industrial. At that time 38 stocks were covered and a base value of 100 was stipulated on the opening session of January 1st 1980 for the Unweighted Price Index.

As a result of a long statistical study, the AFM began in 1992 to calculate a Market Capitalization Weighted Price Index covering 50 stocks increased to 60 stocks in 1994. A base value of 100 points on December 31st, 1991 was stipulated for the Weighted Price Index.

Indices are calculated using the latest closing prices and published on a daily basis.

Indices are composed of 60 companies listed at the Regular Market, the selection of these companies is based on the following five criteria which represent the companies' size and liquidity :

- Market capitalization
- Number of days traded
- Turnover ratio
- Value traded
- Number of shares traded

The sector representation is considered when selecting these companies.

The indices are adjusted to maintain their continuity and to safeguard them from exceptional events. These adjustments allow the indices to perfectly mirror the market trend.

The constituents of the indices are reviewed and adjusted every year. Non-periodic adjustments can be made for stocks whose trading will be halted for a long time or permanently.

Un-weighted Price Index

In the Un-weighted Index, all stocks carry equal weight. There is no consideration of the market capitalization, and the price level does not have an impact because the index formula deals with percentage changes only. Such an index can be used by an investor who invests equal amounts of money in each stock in his/her portfolio. This index has been introduced in 1980 with the opening session of January 1st 1980 set at 100 points. In 1992, the AFM introduced some modifications to the index, of which was the changing of the base period to December 31st 1991. The un-weighted index is supplemented by sub-indices for the four sectors: Banking and Finance Companies, Insurance, Services and Industrial.

Methodology¹¹:

The general and sectoral indices are calculated using the following method:

$$\text{Index (t)} = \text{Exp (Ln(10)*S)*100}$$

Where,

$$S = (\sum \text{Log (Pt}_i / \text{Po}_i)) / n$$

i=1

n : sample size

t : time period

Exp : Exponential function to the base e

Ln : Natural Logarithm to the base e

Log : Logarithm to the base 10

Index (t) : Index value at time t

Pt_i : Closing price of the ith stock at time t

Po_i : Closing price of the ith stock at the base period

The un-weighted index uses the logarithmic function to smooth the extreme prices fluctuations. The above formula is similar to using the geometric average of the percent changes of the stock prices of the index constituents.

Adjustments are made to the prices when stock splits or stock dividends occur. Additions or deletions of stocks can be adjusted by computing an adjustment factor C which is equal to the value of the index after the addition or deletion takes place divided by value of the index before. After that, the index will be multiplied by the factor C, i.e.

$$C = (\text{Index after the addition or deletion}) / (\text{Index before the addition or deletion})$$

$$\text{Index (t)} = C * \text{Exp (Ln(10)*S)*100}$$

¹¹ Source: Amman Stock Exchange

Note that the factor C will be used on the day of the adjustment and thereafter. The adjustment factor C is calculated in such a way that, at constant stock prices, the value of the index before and after the addition or deletion remains exactly the same.

Weighted Price Index

The Market Capitalization Weighted Index is presently made up of the most liquid 60 companies from the Regular Market. The company's weight in the index is determined by its relative percentage of the aggregate market capitalization of the 60 companies. A base value of 100 points on December 31st, 1991 was stipulated for the weighted index. The stocks included in the index represent around 90% of the aggregate market capitalization of the listed companies at the regular market. The weighted price index is supplemented by sub-indices for the four sectors: Banking and Finance Companies, Insurance, Services and Industrial sector.

The weighted index provides a comprehensive measure of the market trend to investors or institutions who may be interested in general market price movement.

Methodology¹²:

The index is calculated using the Paasche method.

The general formula for the index (t) is:

At $t=1$,

Index = 100

$B_1 = M_1$, or market capitalization = base value of the index

At $t>1$,

$$\text{Index (t)} = (M_t/B_1) \times 100$$

¹² Source: Amman Stock Exchange

$$B_t = B_{t-1} * (M_t / M_{ad})$$

$$M_{ad} = M_t - I_t - N_t + Q_{t-1}$$

Where,

t : time period

index (t) : index at time t

B_t : base value of index

M_t : market capitalization of constituents at time t (the sum of the market capitalization of all stocks included in the index)

M_{ad} : adjusted market capitalization at time t. The adjustments are done for new issues of shares, and the addition or deletion of constituents

I_t : market capitalization of new shares issued by a company included in the index and listed at time t

N_t : market capitalization of the company added to the index at time t

Q_{t-1} : market capitalization of the company at time (t-1) which was deleted of the index at time t

The base value B_t is an adjusted base (market capitalization) which is not the real market capitalization at the base period. No adjustment is made, however, in case of a stock split, bonus shares (stock dividend) and a decrease in paid-in capital, since such corporate actions do not affect the current market capitalization. Thus, adjustments are done for any changes in index sample or any corporate action affecting the market capitalization on index stocks. This can be achieved by using the adjustment factor M_{ad}.

Without any adjustments, such changes would cause sudden and sharp movements of the index value which would not reflect the market's actual behavior.

Trading Times¹³

Sunday to Thursday

Parallel Market

9:00 am to 9:30 am

Bonds Market

9:45 am to 10:00 am

Regular Market

10:00 am to 12:00 noon

Official holiday: Friday and Saturday (previously Thursday and Friday)

Display of Information

Live from the trading floor

Prices of shares of the Jordanian listed shareholding companies traded on the Regular and Parallel Markets are quoted and transmitted live from the trading floor through several data vendors. These include:

- Reuters Monitor Network worldwide. (Began transmitting from the first day the market started trading).
- Access (Since 1992, although Access has historical data since 1987).
- Bloomberg

Investors living abroad can have live market information or delayed quotes through services provided by the above mentioned Data Vendors. The information is available to subscribers to the data vendors, and provides the following up-to-date information:

¹³ Operating days changed with all government and financial institutions in 1999 from being Saturday through Wednesday to Sunday through Thursday. However, market timings did not change for the with respect to the data used in this study.

- | | | |
|--|---|---|
| ▪ Security Name | ▪ Market Security is traded in | ▪ Current Market Price |
| ▪ 52-week High | ▪ 52-week Low | ▪ P/E Ratio |
| ▪ Dividend per Share | ▪ Number of Contracts traded during the session | ▪ Number of Shares Traded during the session |
| ▪ Trade Volume in JDs | ▪ Opening Price | ▪ Highest Executed Price during the Session |
| ▪ Lowest Executed Price during the session | ▪ Closing Price | ▪ Price Change from previous executed transaction (or from Opening Price if the market is closed) |

Daily and Weekly Quotation

Prices of traded shares are quoted daily and weekly through the Jordanian local Arabic and English newspapers. In addition, daily quotes are broadcast through Jordanian Television in both languages.

Monthly Statistical Bulletin

A monthly bulletin is published by the AFM displaying valuable data and financial ratios of the listed companies. The bulletin divides the market by sector as well as lists overall performance.

Annual Report

The AFM publishes an annual report about the Market's activities that year. It also includes the auditor's report and other financial matters of the AFM.

Companies' Guide

The AFM publishes a Jordanian shareholding companies guide every year. The guide includes valuable data and financial ratios of listed companies. It also includes

information about the number of shareholders, ownership ratios, and the number of employees in each company.

A series of informative pamphlets concerning functions of the AFM as well as information concerning investment in Jordanian securities are provided by the AFM to the public.

Listing Requirements¹⁴

There are stipulated regulations for listing, suspension, and delisting of shares of the Jordanian public shareholding companies. These regulations were established to guarantee proper disclosure practices and transparency as well as to ensure a high quality of management for the listed companies.

Below are the listing requirements for stocks and bonds on the different markets within the AFM. These listing requirements are currently being examined by the newly formed Amman Stock Exchange to examine if there is a need for updating them. However, the international investor's concern here is to note the differences in listing requirements between the AFM and the major stock markets in the developed world, and understand how trading on the Parallel versus Regular market may affect the liquidity of his investment (i.e. percentage of shares traded over the past year to be at least 10% of subscribed shares, and traded over 30 days in the previous years). The concern to the investor is whether he is willing to accept the differences in risk associated with dealing with an emerging market compared to a well established market in terms of the minimum requirements that a company has to exhibit to be listed on the stock market.

Regular Market

1. The shares have been traded for not less than one year on the parallel market, and number of shareholders is not less than 100.
2. The company has begun normal operations, and realized a profit before taxes from normal operations within the year prior to listing on the Regular Market.

¹⁴ Source : Arab Monetary Fund Special Publication "Arab Financial Markets – Establishment and Development" – April 1997

3. Owner's equity in the company is not less than 100% of the paid up capital in the year prior to listing on the Regular Market.
4. The company must present its balance sheet for the year prior to listing. The balance sheet must include all supporting documentation, and final closing figures of all accounts, along with the Auditor's report. The balance sheet must be published at least once in two daily newspapers, and the company must present all financial account figures from the beginning of the present year until the month prior to the one in which the listing request is made.
5. At least 10% of the subscribed shares were traded over an entire year in the parallel market, and that the number of days in which the company shares were traded is no less than 30 in the year. Increases or decreases in working capital is taken into consideration.
6. None of the rules for shifting a stock from the Regular Market to the parallel market, or delisting of the stock are applicable to the security in question.

Parallel Market

1. The company is a public shareholding company
2. 50% of the authorized capital has been offered to the public, and 45% of the authorized capital must be subscribed.
3. Owner's equity is not less than 40% of paid-up capital (In certain cases, a company can begin trading on the exchange floor before 100% of its authorized capital is subscribed).
4. Completion of at least one year of operations from the date it was authorized to commence operations. The listing committee may exempt public shareholding companies that are spin-offs from limited liability companies, or investment advisory firms.
5. Presentation of its financial statements, including its balance sheet as of the end of the first year of operations (or the year prior to request for listing). The balance sheet must include all supplementary attachments, and final closing figures of all accounts, along with the auditor's report. The balance sheet must be published at least once in

two daily newspapers. The listing committee may exempt public shareholding companies that are spin-offs from limited liability companies, or investment advisory firms if 3 years of financial performance is presented.

6. Presentation of company financial statements covering the period between the beginning of the current fiscal year, and the month prior to the one in which the listing request is made. The company must also present the latest closing financial figures, and its future short-term plan of operations.

Bond Market

Since all bonds issued by government agencies are backed by the government, those of public companies and public shareholding companies are guaranteed by the Jordanian government, banks and financial agencies, there are no rules or regulations for the listing of these bonds.

De-listing of Securities Traded on the Regular and Parallel Markets

Securities traded on the parallel market may be de-listed if the following conditions arise:

- The inability of the company to fulfill its current financial obligations, or debt payments on its medium and long term loans which in turn make it unable to perform its normal operations according to the annual auditor's report or to a special audit performed upon the request of the Amman Financial Market.
- Decrease of owner's equity to below 30% of paid-up capital.
- Liquidation of the company's assets and termination of its charter.

Transferring of Shares from the Regular Market to the Parallel Market

Securities traded on the Regular Market may be transferred to the Parallel Market if the following conditions arise:

- Decrease in owner's equity to below 75% of paid-up capital.
- If the closing balances at the end of the previous fiscal year indicate a loss exceeding 30% of owner's equity as of the beginning of the same fiscal year.

Halting of Trading on the Regular and Parallel Markets

Trading of securities on either the Regular or Parallel Markets may be halted if any of the following conditions occur:

- All cases where a decrease in the company's capital occurs due to incurred losses. The securities are halted from the time that a decision is made by the company's board of directors until such time as an official memorandum is issued that procedures for the decrease in capital are complete.
- All cases where a merger is undertaken. The securities are halted from the time that an announcement is made by the company's board of directors until such time as an official memorandum is issued that the merger is complete.
- If the company's board of directors decides to change the company's charter and objectives of its operations. The securities are halted from the time that a decision is made by the company's board of directors until such time as an official memorandum is issued that the change is complete.
- Upon the request of the company's board of directors accompanied with reasons for the halting of trading. The halting is subject to approval by the Amman Financial Market.
- Non-maintenance of shareholder's records by the company. Trading is halted until such time as these records are updated to the satisfaction of the Amman Financial Market.
- Non-presentation of the company's financial statements including balance sheet and auditor's report within the first 4 months of the new fiscal year. Trading is halted until these reports are presented to the Amman Financial Market.
- Non-presentation of the company's semi-annual balance sheet within 45 days of the end of the first six months of the fiscal year. Trading is halted until the balance sheet is presented.
- If the company's normal operations have stopped for a period of more than 3 months without any indications as to the reasons for this stoppage.

Brokerage Firms

Between 1982 and 1991, the number of brokerage firms licensed by the AFM was held at 27; in 1991, a 28th was added. These brokers have a total combined capital of 100 million JDs. Ten are publicly traded companies, with an average capital of 1-1.5 Million JDs each. Several are investment banks, but commercial banks are not permitted to act as Brokers. Brokers generally also serve as custodians with the Arab Bank acting in that capacity for many foreign investors. Sixteen are limited liability, mostly with capital of JD 500,000 (US\$ 700,000) (four have capital under JD 100,000 – US\$140,000); two are partnerships with small equity. Among those commonly used by foreign investors are Jordan Finance & Investment Bank, Arab Jordan Investment Bank, Jordan Finance House, and the Industrial Development Bank.

In order to promote a healthy and safe trading environment for the investor, the Amman Financial Market has established a list of requirements, rules and regulations that the brokerage companies must abide by. These are:

- All client accounts are to be settled within one week from the date that a buy or sell transaction is executed on the market floor.
- Client accounts should not be allowed to go in debt more than 200% of the partners/shareholders equity.
- Client accounts should not be allowed to go in credit more than 200% of the partners/shareholders equity.
- Withdrawals by partners of the firm's equity should not exceed 20% of the paid up capital.
- All contracts to be immediately settled by the transacting brokers on both ends of the trade.
- Buying brokers are not to accept post-dated checks from his clients. Selling brokers should not issue post-dated check for payment of sold securities.
- Minimum required capital to start-up a new brokerage firm of JD 250,000 for firms who deal in securities on behalf of clients only, and JD 500,000 for those firms who wish to also trade for their own accounts.

Commissions and Fees

Trading Commissions

The rate of commission charge for a trade is floating with a lower and upper limit dictated by the Amman Stock Exchange. The following table provides information on the brokerage commissions:

Institution	Trading Commissions*			
	In the floor		Off the floor	
	<i>Shares & Investment Units</i>	<i>Bonds</i>	<i>Shares</i>	<i>Bonds</i>
JSC	0.0005			
ASE	0.0006	0.0001	0.0001 Lower limit of 0.1 JD	0.0001 Lower limit of 0.1 JD
SDC	0.0003	0.0001	0.001	0.0001
Total	0.0014	0.0002	0.002	0.0002

Lower & upper limits of brokerage firms' commissions are added

	Lower Limit	Upper Limit
Shares	0.004	0.006
Bonds and Investment Units	0.0006	0.0008

*Calculated according to the market value

JSC: Jordan Securities Commission

ASE: Amman Stock Exchange

SDC: Securities Depository Center

Transactions that are excluded from being traded on the trading floor

The AFM charges fees for the following services:

1. 10% of the ordinary commission for the inheritance transfers. This commission is collected from one side only.
2. 20% of the ordinary commission for inter-family transfers. This commission is collected from both sides.

3. 100 % of the ordinary commission for transactions that take place outside the kingdom. This commission collected from both sides.
4. 100% of the ordinary commission for transfer operations conducted between relatives excluding the transfer operations provided for under point 2.
5. 100% of the ordinary commission for transactions that are executed by order of the courts.
6. 100% of the ordinary commission for transactions that are excluded from the trading floor by a decision of the AFM Managing Committee.

Fiscal Charges

There is a fee stipulated in the AFM law collected on behalf of the Ministry of Finance and is usually stamped on the transfer deals. This stamp duty is a percentage of the nominal value of each share transferred and is 0.0015% of this value. It is charged to the buyer only. Bonds are exempted from such a duty.

In accordance with Jordanian income tax law shareholding companies are separate taxable entities from their shareholders. Public shareholding companies are taxed at different rates, depending on the nature of their operations.

- Industrial Companies – 15%
- Banks and Insurance – 25%
- Other – 25%

Companies who invest in other companies through the stock market, are taxed an additional 10% on any profit distributions earned from these investments as an “Expenses for Administration” tax.

In contrast to North America, individual investors (whether Jordanian or non-Jordanian), are exempted from income tax on all types of interest earned. They enjoy tax exemptions for any capital gains derived from trading in securities and profits received from their

shareholding. Interest earned on bonds are also exempted. However a 10% tax on cash dividends is applied. Such tax exemptions contribute significantly in giving the AFM a competitive position on the international level.

Settlement and Transfer of Ownership

Settlements on the Amman Financial Market occur on three levels. Broker/Broker, Client/Broker and Broker/Market. All settlements are on a cash basis, in order to avoid any problems with non payment of obligations. The settlement process is as follows:

1. Brokers provide copies of the floor contracts executed the day after the transaction was executed (T+1).
2. The market audits the floor contracts, updates its records, and assesses the commissions that are due.
3. Floor contracts are passed on to the companies traded within 2 days of their receipt from the brokers in order for these companies to update their records. Thus the settlement process stands at T+3
4. Traded companies must update their investor records within 3 days from the date of receipt of the floor contracts.

Reporting Standards

Reporting standards on the AFM is superior to many other markets in the area. Jordan is the only Middle Eastern Arab country to be represented on the board of the International Accounting Standards Committee. Jordan has an Institute of Accountants which decides the auditing standards to be followed by Jordanian companies. and which is attempting gradually to close the gap between local and international standards. By doing so, internationally accepted reporting standards will apply to local companies, and thus the risk or misrepresentation or ambiguous reporting will be lessened. This in turn will boost foreign investors confidence that information received about local companies is trustworthy and reliable.

Custodial and sub-custodial arrangements are readily available. The Arab Bank and all branches of foreign banks operating in Jordan meet most international standards and

various statutory requirements. Although Margin Trading is not allowed by the investor law of the Amman Financial Market, certain brokerage firms and investment banks provide these services with a minimum 200% margin. These institutions review the history of the investor and may request other forms of collateral along with the securities. This means that margin trading for local and international investors is facilitated through the custody operations, and influx of foreign exchange for custody operations is encouraged.

Capital Gains and Income Taxes

There are no Capital Gains Taxes levied on gains from sale of shares traded on the Amman Financial Market. However, a 10% tax is applicable to all dividends distributed to shareholders.

Foreign Investment Restrictions

The Amman Financial Market treats Jordanian and non-Jordanian Arabs alike, both in subscribing to new issues and in trading. Non-Arab foreigners are also welcome to trade in the Jordanian markets (including development bonds used for local infrastructure projects – similar to Municipal Bonds) and corporate bonds as well as equities, and there are no restrictions on the repatriation of investment funds or income, including capital gains. Prior to the enactment of the new law in January 1996, foreign investors were required to adhere to the following restrictions:

1. Advance approval by Jordan's Prime Minister was required before any security was purchased for the first time. The approval process, which went from the AFM to the Prime Minister's office via the Ministry of Finance, usually took two weeks to complete.
2. A foreign investor may not own more than 49% of the outstanding shares of a company, except those involved in tourism, agriculture, or related services where foreign ownership may, as specified in the Encouragement of Investment Law of 1986, go as high as 99%.

The new investment law provides:

- **Equal treatment of all investors.**
- **No need for Ministerial Cabinet approval for foreign investors.**
- **Clear specification of sectors open to 100% foreign ownership.**
- **Firm guarantees against nationalization and expropriation.**
- **Designates sectors eligible for tax incentives.**
- **Eliminates discretionary judgment.**
- **Opens the stock exchange to all foreign investors.**
- **Provides for third party dispute settlement consistent with international practice.**

The new investment law dispenses with the prior approval requirement, and allows foreign investors (Arab and non-Arab) 100% share holding in the following sectors:

- **Industry**
- **Tourism**
- **Housing**
- **Health**
- **Education**
- **Advanced Technology and Computer**
- **Transport by sea**
- **Railways**
- **Livestock**

Foreign investors are also permitted to invest in the following sectors with a cap of 49%:

- **Retail**
- **Public share holding companies.**
- **Consultancy services.**
- **Land and air transport.**
- **Contracting.**
- **Agriculture.**

The exception to this is if upon the initial capital subscription, the percentage ownership of the firm by foreigners is greater than 50%. The maximum limit which a foreign investor can then purchase shares on the market is equal to the percentage owned by foreigners at time of subscription.

Looking Ahead

The Amman Financial Market is on the verge of becoming a leading market in the Arab financial world. Very little work has been done on the market in comparison to other emerging markets. With the exception of *Errunza & Losq 1985*, who looked at 1980 data in testing the independence hypothesis and characteristics of the market, and *Beckaert & Harvey* who looked at emerging markets volatility; no serious and in-depth studies on market efficiency, and market anomalies has been performed on the Jordanian Market. With the increase in investor interest in the market, a study of the markets behavior will be beneficial to its growth.

Updating the Amman Financial Market Laws, Regulations, and Structure

The Amman Financial Market has been reviewing its existing structure, laws and regulations and is attempting to bring them more in line with major Financial Markets worldwide. To this effect, a new law has been that will create five new entities. These are:

1. *A Securities Exchange Commission:* This independent commission's goals are to ensure that the appropriate investment environment is available to investors to safely deal with securities and financial instruments, and to develop, modernize and monitor the Amman Financial Market, and the Investment Capital Market in Jordan. Entities that are subject to monitoring by the SEC would include:
 - The Stock Exchange
 - Central Depository
 - Financial Services Firms (Brokers)
 - Public Trading Companies
 - Investment Funds

- Employees associated with the Financial Services Industry

2. *A Stock Exchange:* The stock exchange would undertake all operations related to the trading of financial instruments including monitoring. This would follow the traditional concept of a Stock Exchange.
3. *Central Depository:* The center would undertake all operations concerning the transfer of ownership for all publicly traded companies, and follow up on investor relations. The center would eventually lead to a shortening of the period of time it would take to transfer ownership and thus enforcing the safety of dealing with securities, and strengthening investor rights.
4. *Institute of Financial Instruments:* The institute's goals would be to provide up to date scientific and professional information on securities markets around the world. The Institute would be formed with the help of the SEC and Financial Investment Firms.
5. *Investment Professionals Organization:* The aim of the organization would be the upkeep of Investment Professional rights, and facilitation of communication between the different members of the community.

These new entities do not affect the market anomalies tests that will be conducted in this paper, as the time period of the data used does not encompass the establishment of these entities.

Electronic Trading

The Amman Financial Market has undertaken a huge project to modernize all its computer systems and link them together. This includes the implementation of an electronic trading system that will allow brokers to place orders electronically, and track

the market from remote sites. The project was approved under an economic agreement between the Jordanian and French government, whereby the French government subsidized the entire cost of the project. The contract is one of the first of its type in the Middle East, and underlines the continuing efforts of the government and the exchange to continue its efforts to become one of the leading financial institutions in the Arab World.

The contract is a major leap forward for the AFM in its attempt to improve efficiency and pave the way for an increase in international investment. With the computerization of the market and eventual electronic trading, the availability of information to the investor will be significantly improved. The system began trading on March 26, 2000 and plans have been set to link the Amman Financial Market to the Muscat Stock Exchange in the country of Oman sometime in the near future, whereby traders on either floor can purchase shares in either country. This not only provides the needed assurances foreign investors demand for operational and informational efficiency, but will also provide a vast amount of data for researchers and analysts alike to better understand any trends that occur in the market, and any profit making possibilities.

Section IV - Literature Review

Efficient Markets Hypothesis

Jones (1991) describes the Efficient Market Hypothesis (EMH), summarizing the numerous attempts to test it since the *Fama (1970)* article. EMH argues quite simply that securities prices are efficient, that is, that they fully reflect all known information quickly and accurately. To “fully reflect all known information,” a stock price must be determined by the cumulative effect of all investors incorporating all the information into their buy-and-sell decisions. Second, “all known information” is the EMH assumption that investor decisions not only take into account data on past earnings, dividends, and economic trends, but also incorporate all available information on current events and the expectations of future economic events. Third, while the words “quickly” and “accurately” leave room for ambiguity, it is assumed that the moment information is made available to the general investor, prices adjust. This “quick” reaction, however, does not necessarily translate into an immediate reaction. The “accurate” part of this definition suggests that the price adjustment should be unbiased, sometimes too large and at other times too small. The important point is that one step has been taken in the direction of estimating final price equilibrium. Over time the expected value of this adjustment error, according to the EMH, should be zero; only when all information has completely circulated will price equilibrium be reached.

Five key assumptions underlie the EMH¹⁵:

1. A large number of rational, profit-maximizing investors who actively participate in the market by analyzing, valuing, and trading stocks;
2. Price-taking behavior;
3. Information is free and dispersed to market participants at approximately the same time;

¹⁵ Jones 1991, P. 464

4. Information is generated randomly, that is, announcements are basically independent of one another;
5. Investors react quickly and accurately to new information, causing stock prices to adjust accordingly.

A market's efficiency level, (weak efficiency, semi-strong efficiency, and strong efficiency), according to the EMH, is determined by the extensiveness of the information set. *Fama (1970)* suggested three levels of efficiency for stock markets.

The first level, "weak efficiency," results when price movements are totally independent of prior price movements. At this level, studying the market with a close examination of historical price patterns will not be beneficial in yielding any abnormal profit. Past patterns in prices do not provide any useful information regarding the future movements of prices.

With "semi-strong" efficiency, the market is efficient in the sense that prices adjust instantaneously and without bias to newly published information. In other words, the current price fully reflects all public information. At this point it is useless for investors to try to take advantage of published data to earn abnormal profits. There exists no advantage in trying to gain insight into which stocks may be "mis-priced" according to fundamental analysis, for everyone within the market has access to the same available information.

At the final level of "strong efficiency," stock market prices reflect not only public information, but also private information not available to the public. For example, an insider trying to maximize profit by trying to capitalize on his or her awareness of an ensuing event would have no edge over the average investor. This is due to stock prices already incorporating that information which is not yet available to all market participants.

The weak form of the EMH amounts to testing whether past data on stock prices helps in predicting future prices. The semi-strong form is tested by looking at the speed at which new information is incorporated into security prices. Testing of the strong form requires comparing the performance of “insiders,” such as corporate officers or managers of large funds, to the performance of the market. A market which behaves efficiently renders fundamental analysis, such as the capital asset pricing model, and technical analysis, such as examination of price-earnings ratios, essentially useless as stock-picking tools in favor of a buy-and-hold strategy.

Random Walk Hypothesis

In an efficient market, competition among the many intelligent participants leads to a situation where, at any point in time, actual prices of individual securities already reflect the effects of information based both on events that have already occurred and on events which, as of now, the market expects to take place in the future. In other words, in an efficient market at any point in time the actual price of a security will be a good estimate of its intrinsic value.

In an uncertain world the intrinsic value of a security can never be determined exactly. Thus there is always room for disagreement among market participants concerning just what the intrinsic value of an individual security is, and such disagreement will give rise to discrepancies between actual prices and intrinsic values. In an efficient market, however, the actions of the many competing participants should cause the actual price of a security to wander randomly about its intrinsic value. If the discrepancies between actual prices and intrinsic values are systematic rather than random in nature, then knowledge of this should help intelligent market participants to better predict the path by which actual prices will move toward intrinsic values. When the many intelligent traders attempt to take advantage of this knowledge, however, they will tend to neutralize such systematic behavior in price series. Although uncertainty concerning intrinsic values will remain, actual prices of securities will wander randomly about their intrinsic value.

The “instantaneous adjustment” property of an efficient market implies that successive price changes in individual securities will be independent. A market where successive price changes in individual securities are independent is, by definition, a random walk market. Most simply, the theory of random walks implies that a series of stock price changes has no memory i.e. the past history of the series cannot be used to predict the future in any meaningful way. The future path of the price level of a security is no more predictable than the path of a series of cumulated random numbers.

Several studies have reported empirical evidence that stock returns, contrary to the random walk hypothesis, contain relatively large predictable components [e.g. *Fama and French (1988)*, *Poterba and Summers (1988)* and *Lo and Mackinlay (1988 and 1989)*]. The evidence found suggests that nominal and real stock returns up to one year may be positively auto-correlated while real stock returns for longer investment horizons may be negatively correlated. But the results are still controversial. On the one hand, they could be interpreted as a violation of the efficient market hypothesis, though their implications for portfolio choice and option pricing hypothesis are more interesting. On the other hand, the statistical significance of the results has been questioned: *Kim et al. (1991)* argue that the mean-reversion phenomenon is concentrated in the pre-war period and that it is also very sensitive to the choice of market index and the type of return measure. *Richardson and Stock (1989)* show that the results provided by *Fama and French (1988)* are less significant than reported. Unfortunately, most previous research has focused on the U.S. stock market. This is probably due to the fact that the issue of auto-correlated stock returns, especially multi-period returns requires a long time series of high quality data.

Stock Market Anomalies

Research into market anomalies has blossomed in recent years including, for example, the size effect, the P/E effect, the January effect and so on. Seasonal and day-of-the-week patterns have proven to be persistent anomalies in U.S. equity markets. Both of these anomalies have been shown to be robust across a variety of time periods. These

anomalies are of interest because they violate the weak form of the market efficiency hypothesis.

Monthly Return Anomalies

The January effect concerns the abnormal returns that accrue during the month of January and generally surpass those of any other month, particularly for smaller capitalization firms. The monthly return anomaly was first casually observed by *Wachtel (1942)* and more completely studied by *Rozeff and Kinney (1976)* who found seasonal patterns in an equally weighted index of prices on the New York Stock Exchange for 1904-1974. The average monthly return in January was about 3.5 percent while other months averaged only 0.5 percent. *Keim (1983)* finds half of the January returns to be concentrated in the first five trading days.

The January effect has received a tremendous degree of attention for the magnitude (and economic significance) of the returns that small capitalization companies earn over the S&P 500 index. These small firms, over the years 1926 to 1986 have on average outperformed the index by 5.5 percent in the month of January.

The effect has also been observed beyond equity markets. *Smirlock (1985)* finds evidence of a January seasonal in low-grade corporate bonds but not in high grade corporate or U.S. government bonds. Using data from 1953 to 1978, he finds the average January return for low grade corporate bonds of 1.44% to be twice as great as the January return for high grade bonds and to be significantly greater than the average (low-grade bond) monthly return.

The source of the January effect has been linked to tax-loss selling arguments and to the institutional considerations of investment managers. The tax-loss argument, first mentioned in the *Wachtel (1942)* paper, has been followed by *Dyl (1977)* and in a related vein by *Haugen and Wichern (1973)*. The argument is that it pays to recognize security losses early and gains late. Thus December should be a month when securities which

have suffered capital losses during that tax year should be considered for sale so that the capital loss can be recognized and used to shield income from taxation. The hypothesis then follows that the funds generated by these December sales are re-invested into the market at the beginning of the New Year that also represents a new tax year.

A second rationale to explain the January effect is rooted in the incentive contracts of portfolio managers and is discussed by *Haugen and Lakonishok (1987)*. A substantial percentage of the U.S. equity market is under the auspicious of professional investment managers. Many of these managers are compensated according to the performance of the capital they manage. It can be argued that the incentive to “risk” the investment capital of a portfolio increases during the month of January, but then decreases throughout the remainder of the year. Because January in general represents a new evaluation period for investment managers, these managers are anxious to establish superior investment performance that will eventually be linked to their compensation.

Daily Return Anomalies

The day-of-the-week effect has been categorized as one of the more damaging anomalies of the efficient markets hypothesis. The persistence and consistency of this anomaly has provided two possible a priori expectations one would have for the pattern in daily returns. One would be that the returns to each day of the week should be similar creating a level return pattern across the week. A second a priori pattern might be that we expect the rate of return earned by financial assets to be constant across all days with the exception of Monday. The rate of return on Monday could be expected higher than on other days because of the longer holding period (3 days from Friday’s close to Monday’s close). The evidence to date is not supportive of either of these two hypotheses .

The day-of-the-week effect has been documented in a number of papers such as the work of *French (1980)*, *Gibbons and Hess (1981)*, and *Lakonishok and Levi (1982)*. In these studies, Monday returns were found to be consistently, significantly negative while the returns on the last trading day of the week, Friday or Saturday tend to be higher than for a

typical day. The results for Tuesday through Thursday returns tend to vary across authors, but most find Wednesday's return largest of the three days.

Jaffe and Westerfield (1985) examined daily stock market returns for the U.S., U.K., Japan, Canada and Australia. They found that the Monday rates of returns were negative in each country, although, in the Japanese and Australian stock markets, the lowest mean rates of return occur on Tuesdays. They conclude that foreign investors confront a day-of-the-week effect in their respective countries independent of the effect that exists in the U.S.

Following the lead of *Gibbons and Hess (1981)*, *Flannery and Protopapadakis (1988)* document daily seasonal anomalies not only in the equity market, but also in the U.S. government debt market. The authors, after carefully controlling for institutional clearing mechanisms, record negative Wednesday returns, contrary to that of the equity returns, although the return is not statistically significant.

A possible explanation of the day-of-the-week effect is that negative information is held for release until after the security markets have closed on Fridays. *Penman (1987)* explores these issues and finds that the release of corporate earnings reports may be advanced or delayed by firms depending on the nature of the release. He confirms results from prior studies that firms with unexpected good news tend to deliver the news on or before the date expected. Penman finds that firms tend to release good information early in the month of reporting period, and also finds that firms also have a propensity to release bad news after the markets close on Fridays. To the extent that the market does not properly incorporate the timing for the turn of the month effect and the day of the week effect.

Miller (1987), in analyzing the daily effect, presents the hypothesis that net buying and selling of shares may not be evenly distributed across the days of the week. This imbalance is caused by the presence of the weekend which, he suggests, permits

individual investors the additional opportunity to analyze portfolio re-balancing decisions. Because brokers often do not initiate sell decisions, Miller suggests individuals must initiate this activity on their own time and that they have more time to come to that decision over the weekend. Institutional investors analyze information, in general, during business hours. Therefore, their transactions should be evenly balanced across the weekend and should not concentrate on one day. Miller suggests that individual buy transactions are to a large extent initiated by brokers and tend to be evenly distributed over the week. The result is that on Monday, because of individual investors, there is an excess of sell orders creating downward price pressure for the day.

Another possible explanation of the day-of-the-week effect revolves around the settlement procedures and was proposed by *Lakonishok and Levi (1982)*. They note that stocks purchased on business days other than Friday give the buyer eight calendar days before disbursing funds in exchange for the securities. However, payment for stocks purchased on Friday will, in general, occur on the second Monday following the trade, or ten calendar days later. Therefore, buyers are willing to pay more on Fridays than on other days by the amount of two days interest, thus forcing up prices. When Monday's trading opens, a price reversal will occur due to the absence of the two extra settlement days. This argument does fit the pattern of the observed data, however even after adjusting the data for interest rates there is still a day-of-the-week effect.

Holiday Effect

Kim & Park (1994) provide evidence of the holiday effect in stock market returns and insight into the effect. The paper reports abnormally high returns on the trading day before holidays in all three major stock markets in the U.S.: NYSE, AMEX. and NASDAQ. The holiday effect is also present in the U.K. and Japanese stock markets, even though each country has different holidays and institutional arrangements. The study finds that the holiday effects in the U.K. and Japanese stock markets are independent of the holiday effect in the U.S. stock market.

Pettengill (1989) documents unusual return patterns for securities around holiday closings. Returns for trading days immediately before holiday closings (pre-holiday trading days) were unusually high regardless of weekday, year, or holiday closing. Returns for trading days following holiday closings (post-holiday trading days) are high only if they occur at the end of the week. Tests indicate that pre-holiday returns do not respond to a closing effect, and that the post-holiday returns do not result from a time-diffusion process.

Section V - Methodology

Efficient Markets Hypothesis

Testing the Efficient Markets Hypothesis involves testing the three levels of market efficiency as outlined in *Fama, 1970*. *Weak form* tests concern the information obtained by examining past prices. This can be achieved by studying the Random Walk Hypothesis or testing for anomalies. Tests of the *semi-strong form* are concerned with the speed by which prices adjust to publicly available information (e.g. earnings reports, announcements of mergers/stock splits). Tests of the *Strong form* are concerned with whether any investor or group of investors have “monopolistic access” *Fama, 1970*, to information that is not available to other investors.

This paper will only test the *weak-form* efficiency of the markets for several reasons: The first and most important is the trading hours of the exchange. The AFM is open for trading for only ten and a half hours each week. Testing the reaction of stock prices, for example to announcements, would be difficult, since it is usually not possible to trace the time of the day the announcement was made, and whether the movement in the market when it reopens could have been caused by the announcement itself, or by investor’s reevaluation of their portfolio positions. In the developed markets, tick-by-tick information is readily available to researchers, and this information can be used to conduct regular event studies that can look at announcement time and date. Unfortunately, with the manual trading system that generated the data to be used for this paper, such information is not available, and trying to conduct event studies on daily prices alone could be misleading and inaccurate as price changes might not be due entirely to the event being studied, but rather to other factors that came to play on that day.

Second, unlike Wall Street, and other major exchanges in the world, the AFM is relatively new. Reporting and disclosure procedures, which make insider trading information available to the public, have not been integrated into the system. Thus, it

would be difficult to test the *strong form* efficiency of the market at this time. Hopefully, with time and the new computerization of the market, disclosure procedures will become part of the exchange's policy, at which time, data collection can commence to test this form of the Efficient Markets Hypothesis. The trading of shares is mostly done by individuals through brokers, and even if these individuals own large blocks of shares, the information they hold is not different than the information that all investors in the market hold, and they cannot be termed as institutional investors.

Month of the Year effect

To test the null hypothesis of equal expected abnormal returns for each month of the year; the following regression equation will be used:

$$R_t = a_1 + a_2 DFEB_t + a_3 DMAR_t + \dots + a_{12} DDEC_t + e_t$$

In the regression, R_t is the return on the index, and the dummy variables (DFEB,..., DDEC) indicate the month of the year on which the return is observed. If returns across months of the year are equal, then the coefficients $a_2 \dots a_{12}$ should be close to zero and the F-statistic should be insignificant. The return for January is measured by a_1 , while a_2 through a_{12} represent differences between return on January returns and returns for the other 11 months of the year.

Data:

The data used will be the daily returns computed from the daily closing prices of the Amman Financial Market weighted index for the years 1987 through 1994.

Day-of-the-week effect

To test the day-of-the-week effect, the null hypothesis of equal expected abnormal returns for each day of the week. The regression equation is:

$$R_t = a_1 + a_2 DSUN_t + a_3 DMON_t + a_4 DTUE_t + a_5 WED + e_t$$

In the regression, R_t is the return on the index, and the dummy variables (DTUE,..., DFRID) indicate the day of the week on which the return is observed. The return for Saturday is measured by a_1 , while a_2 through a_5 should be close to zero and the F-statistic should be insignificant.

Data:

Again, the data used will be the daily returns computed from the daily closing prices of the Amman Financial Market weighted index for the years 1987 through 1994.

Holiday Effect

To test the Holiday Effect null hypothesis of equal expected abnormal returns for days preceding Official and Islamic holidays, a regression with returns on the left and a series of dummy variables defined as follows will be run:

$D1 = 1$ if day is a Wednesday (day before the weekend), 0 else

$D2 = 1$ if day is a Saturday (day after weekend), 0 else

$D3 = 1$ if holiday (non Islamic)

$D4 = 1$ if Islamic holiday

The regression would then be:

$$R_t = a + a_1 * D1_t + a_2 * D2_t + a_3 * D3_t + a_4 * D4_t + e_t$$

the coefficient on a_3 will give the effect of a holiday after controlling for weekend effects and a_4 would give the impact of Islamic holidays after controlling for weekends. a_1 and a_2 would give the weekend effects. The constant a would give an estimate of the mean daily return. (note that if a national holiday falls during an Islamic holiday, it would mean that on that day, $D3$ and $D4$ were both equal to 1).

Data:

The data used will be the daily returns computed from the daily closing prices of the Amman Financial Market weighted index for the years 1987 through 1994.

Section VI – Results and Conclusion

Results

The data consisted of daily closing prices of the Weighted Amman Financial Market

Index from January 1987 to December 1995. The regressions were run on the return of the daily return of the Amman Financial Market Index.

Day of the Week Effect

The following are descriptive statistics for the Day of the Week Regression:

Descriptive Statistics

	Mean	Std. Deviation	N
RETURN	3.923E-04	8.095E-03	2210
SUNDAY	.2018	.4014	2210
MONDAY	.1986	.3991	2210
TUESDAY	.1991	.3994	2210
Wednesday	.2000	.4001	2210

The following are the results of the Day of the Week Regression:

	Coefficient	t-statistic	p-value	R-Squared	F Stat	Durbin Watson
<i>Saturday</i>	0.00047	1.224	0.221	0.000	0.176	2.022
<i>ΔSunday</i>	-0.00023	-0.426	0.670			
<i>ΔMonday</i>	-0.00041	-0.258	0.796			
<i>ΔTuesday</i>	-0.00019	-0.342	0.732			
<i>ΔWednesday</i>	0.00016	0.303	0.762			

From these results, and using a 95% Confidence Interval, we fail to reject the hypothesis of equal expected abnormal returns for each day of the week on the Amman Financial Market.

Month of the Year Effect

The following are descriptive statistics for the Month of the Year Regression:

Descriptive Statistics

	Mean	Std. Deviation	N
RETURN	3.923E-04	8.095E-03	2210
JANUARY	8.914E-02	.2850	2210
FEBRUARY	8.009E-02	.2715	2210
MARCH	8.462E-02	.2784	2210
APRIL	8.326E-02	.2763	2210
MAY	7.557E-02	.2644	2210
JUNE	7.919E-02	.2701	2210
JULY	8.326E-02	.2763	2210
AUGUST	8.462E-02	.2784	2210
September	8.507E-02	.2790	2210
OCTOBER	8.959E-02	.2857	2210
NOVEMBER	7.873E-02	.2694	2210

Results of the regression are :

	Coefficient	t-statistic	p-value	R-Squared	F Stat	Durbin Watson
<i>January</i>	-0.00027	-0.336	0.737	.003	1.696	2.032
<i>ΔFebruary</i>	-0.00134	-1.587	0.113			
<i>ΔMarch</i>	0.00012	0.150	0.881			
<i>ΔApril</i>	-0.00164	-1.965	0.050			
<i>ΔMay</i>	-0.00043	-0.508	0.612			
<i>ΔJune</i>	-0.00076	-0.895	0.371			
<i>ΔJuly</i>	-0.00195	-2.336	0.020			
<i>ΔAugust</i>	-0.00229	-2.756	0.006			
<i>ΔSeptember</i>	-0.00043	-0.523	0.601			
<i>ΔOctober</i>	-0.00074	-0.905	0.366			
<i>ΔNovember</i>	-0.00112	-1.322	0.186			
<i>ΔDecember</i>	0.00129	2.211	0.027			

Using a 95% Confidence Interval, The results suggest the abnormal returns are found in the months of April, July, August and December. These may be explained as follows:

- The negative April return can be explained by the fact that traded companies are required to submit and disclose their annual reports detailing the previous years activities within 3 months of the end of the year. This means that companies annual reports are released at the end of March/ beginning of April. At this point in time, investors are able to gauge the company's activities during the previous year and re-evaluate their portfolios by selling those that did not perform as expected.
- The months of July and August witness a huge influx of Arabs to Jordan fleeing from the extreme heat found in the Gulf Region (Kuwait, Saudi Arabia, Bahrain, Qatar, Oman and United Arab Emirates). These Arabs are either wealthy Gulf Nationals who own homes in Jordan, or Jordanians working abroad back for the summer holidays. On average, the income and wealth of these people is higher than that of an average person working in Jordan. These Arabs may be investors in the stock market, and their return to Jordan could provide them with an opportunity to meet with their brokers, catch up on the market news, and perhaps reevaluate their holdings. This could lead to a selling attitude and realization of profits.

- Negative July returns can again be attributed to the fact that companies must release their semi-annual reports by end of June. The same scenario may be occurring as that found in the negative April returns.
- The weather in Amman, although milder and cooler in the Summer than that found in the Gulf States, is still relatively hot (temperatures reaching the low +40s Celsius). Trading times on the Main Market are between the hours of 10:00 AM and 12:00 Noon. Midday in the bustle and traffic of Jordan on a hot July or August day may be a strong deterrent to the active trader from making the trip to the Stock Exchange and trading. The manual trading system biggest downfall is the unavailability of up to the minute information to those investors who are not on the trading floor, and an investor who is used to be present on the trading floor on a daily basis, could feel that he missed out on some news or a general market trend, and sell his holdings if he feels that he is unable to continue tracking its movement. In order to investigate this theory further, research could be done on the turnover ratio of shares during the months of July and August, and compare to the rest of the year.
- The positive December effect can be attributed to the fact that the end of the fiscal year is December. The end of the year requires brokers to provide their investors with annual performance reports of their portfolios. In order to show a positive return on these portfolios, the brokers use the month of December to raise the market prices by buying securities, either for client portfolios or their own. The rise in prices ultimately leads to positive returns.

Holiday Effect

The following are descriptive statistics for the Holiday Regression:

Descriptive Statistics

	Mean	Std. Deviation	N
RETURN	3.923E-04	8.095E-03	2210
D1: Dummy for Wednesday	.2000	.4001	2210
D2: Dummy for Saturday	.1986	.3991	2210
D3: Dummy for National	2.489E-02	.1558	2210
D4: Dummy for Islamic	1.674E-02	.1283	2210

The following is the regression results:

	Coefficient	t-statistic	p-value	R- Squared	F Stat	Durbin Watson
Constant	0.00022	0.983	1.790	0.003	1.442	2.025
Dummy for Wed.	0.00037	0.833	0.326			
Dummy for Sat.	0.00012	0.276	0.405			
Dummy for National Holiday	0.00134	1.205	0.783			
Dummy for Islamic Holiday	0.00241	1.790	0.228			

Using a 95% confidence interval, we fail to reject the hypothesis of equal expected abnormal returns for days preceding Official and Islamic holidays.

Opportunities for Future Research

The Amman Financial Market presents many opportunities for researchers to continue from the work set out in this paper. These include:

- Research on the effects of the Gulf War on the market. Jordan's economy has always been heavily dependent on Iraq, it's biggest trading partner. With the Gulf War, and the ensuing embargo against Iraq, the economy struggled to maintain its production and exports. This may have directly affected stock prices, and the sentiment of the investor for future prospects. A study of key dates in the Gulf War and their effects on the Amman Financial Market may reveal some interesting phenomenon.
- The Amman Financial Market went live on an electronic trading in March 2000. The opportunity exists to study the effects of implementing such a system on a mature stock exchange, and effects on stock prices of transitioning from a manual trading system to an electronic. The data would be available on a tick-by-tick basis through the electronic trading mechanism.
- Since the Middle East Peace Process started, Jordan has witnessed several attempts at achieving a full and comprehensive peace between Israel, Palestine, Syria and Lebanon. A study can be conducted to view the effect of each failed and successful negotiation on the stock prices.

- A study can be conducted to view the effects on stock price of moving a security from the Parallel Market to the Main Market. The study could examine the effects of the longer trading hours, more stringent reporting standards, and tougher competition for funds presented by the Main Market on the returns for these securities.

- The Amman Financial Market presents a unique scenario that is not found in the Western World, but only found on other Arab Stock Exchanges – the possibility of trading a security when its capital is not fully paid up. These companies are traded on the parallel market. An interesting study could examine the effects on share prices when an installment of capital is requested from Shareholder, or if the companies authorized capital is raised or lowered.

- A vast array of research already conducted on Western Stock Exchanges can now be repeated on the Amman Financial Market. With the implementation of the electronic trading system, and the availability of tick-by-tick price information, a wider range of topics will be available to researchers interested in looking at emerging markets, and in particular those operating in Islamic Countries.

Conclusion

This paper has attempted to provide the reader with a brief outlook on the Amman Financial Market and its operations. The market is currently under major restructuring, with the splitting of the Trading and Monitoring functions into two separate and distinct companies. (The Amman Stock Exchange (ASE), and the Jordan Securities Commission (JSC). The addition of the Securities Depository Center (SDC) represents a huge step for the exchange in providing the investor with the security and assurance that his investment and funds are stable and secure.

The inclusion of Jordan in the World Trade Organization earlier this year and the radical changes to investor and tax laws that the new Monarch is promoting is part of the bigger plan to attract foreign investors to a country that over the past several years suffered from the embargo placed on Iraq, its main trading partner. These investment incentives and the reorganization of the Amman Financial Market is the first step of many that can lead Jordan to again become a major influencing power in the region, and push the region to accept the peace that it has already honored with Israel, and return the Middle East to its pre-World War II position of being an essential link between the countries of the East and West.

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Appendix 1 – The Central Intelligence Agency's 1999 World Factbook Entry on Jordan

Location: Middle East, northwest of Saudi Arabia

Geographic coordinates: 31 00 N, 36 00 E

Map references: Middle East

Area:

total: 89,213 sq km

land: 88,884 sq km

water: 329 sq km

Area—comparative: slightly smaller than Indiana

Land boundaries:

total: 1,619 km

border countries: Iraq 181 km, Israel 238 km, Saudi Arabia 728 km, Syria 375 km, West Bank 97 km

Coastline: 26 km

Maritime claims:

territorial sea: 3 nm

Climate: mostly arid desert; rainy season in west (November to April)

Terrain: mostly desert plateau in east, highland area in west; Great Rift Valley separates East and West Banks of the Jordan River

Elevation extremes:

lowest point: Dead Sea -408 m

highest point: Jabal Ram 1,754 m

Natural resources: phosphates, potash, shale oil

Land use:

arable land: 4%

permanent crops: 1%

permanent pastures: 9%

forests and woodland: 1%

other: 85% (1993 est.)

Irrigated land: 630 sq km (1993 est.)

Natural hazards: NA

Environment—current issues: limited natural fresh water resources; deforestation; overgrazing; soil erosion; desertification

Environment—international agreements:

party to: Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Nuclear Test Ban, Ozone Layer Protection, Wetlands signed, but not ratified: none of the selected agreements

People

Population: 4,561,147 (July 1999 est.)

Age structure:

0-14 years: 43% (male 1,005,211; female 954,968)

15-64 years: 54% (male 1,265,116; female 1,200,372)

65 years and over: 3% (male 67,852; female 67,628) (1999 est.)

Population growth rate: 3.05% (1999 est.)

Birth rate: 34.31 births/1,000 population (1999 est.)

Death rate: 3.85 deaths/1,000 population (1999 est.)

Net migration rate: 0 migrant(s)/1,000 population (1999 est.)

Sex ratio:

at birth: 1.06 male(s)/female

under 15 years: 1.05 male(s)/female

15-64 years: 1.05 male(s)/female

65 years and over: 1 male(s)/female

total population: 1.05 male(s)/female (1999 est.)

Infant mortality rate: 32.7 deaths/1,000 live births (1999 est.)

Life expectancy at birth:

total population: 73.06 years

male: 71.15 years

female: 75.08 years (1999 est.)

Total fertility rate: 4.64 children born/woman (1999 est.)

Nationality:

noun: Jordanian(s)

adjective: Jordanian

Ethnic groups: Arab 98%, Circassian 1%, Armenian 1%

Religions: Sunni Muslim 96%, Christian 4% (1997 est.)

Languages: Arabic (official), English widely understood among upper and middle classes

Literacy:

definition: age 15 and over can read and write

total population: 86.6%

male: 93.4%

female: 79.4% (1995 est.)

Government

Country name:

conventional long form: Hashemite Kingdom of Jordan

conventional short form: Jordan

local long form: Al Mamlakah al Urduniyah al Hashimiyah

local short form: Al Urdun

former: Transjordan

Data code: JO

Government type: constitutional monarchy

Capital: Amman

Administrative divisions: 12 governorates (muhafazat, singular—muhafazah); Ajlun, Al 'Aqabah, Al Balqa', Al Karak, Al Mafraq, 'Amman, At Tafilah, Az Zarqa', Irbid, Jarash, Ma'an, Madaba

Independence: 25 May 1946 (from League of Nations mandate under British administration)

National holiday: Independence Day, 25 May (1946)

Constitution: 8 January 1952

Legal system: based on Islamic law and French codes; judicial review of legislative acts in a specially provided High Tribunal; has not accepted compulsory ICJ jurisdiction

Suffrage: 20 years of age; universal

Executive branch:

chief of state: King ABDULLAH II (since 7 February 1999)

head of government: Prime Minister Abdul Raoof Al Rawabdeh

cabinet: Cabinet appointed by the prime minister in consultation with the monarch

elections: none; the monarch is hereditary; prime minister appointed by the monarch

Legislative branch: bicameral National Assembly or Majlis al-'Umma consists of the Senate (a 40-member body appointed by the monarch from designated categories of public figures; members serve four-year terms) and the House of Representatives (80 seats; members elected by popular vote on the basis of proportional representation to serve four-year terms)

elections: House of Representatives—last held 4 November 1997 (next to be held NA November 2001)

election results: House of Representatives—percent of vote by party—NA; seats by party—National Constitutional Party 2, Arab Land Party 1, independents 75, other 2

note: the House of Representatives has been convened and dissolved by the monarch several times since 1974; in November 1989 the first parliamentary elections in 22 years were held

Judicial branch: Court of Cassation

Political parties and leaders: Al-Ahrar (Freedom) Party [Dr. Ahmad ZO'BI, secretary general]; Arab Ba'th Progressive Party [Mahmoud al-MA'AYTAH, secretary general]; Arab Islamic Democratic Party (Doa'a) [Yousif ABU BAKR, secretary general]; Arab Jordanian Ansar Party [Muhammad MAJALI, secretary general]; Arab Land Party [Dr. Muhammad al-'ORAN, secretary general]; Democratic Party of the Left [Musa MA'AITAH, secretary general]; Islamic Action Front [Dr. Ishaq al-FARHAN, secretary general]; Jordanian Arab Constitutional Front Party [Milhem TELL, secretary general]; Jordanian Ba'th Arab Socialist Party [Tayseer al-HOMSI, secretary general]; Jordanian Communist Party [Ya'acoub ZAYADIN, secretary general]; Jordanian Democratic Popular Unity Party [Sa'eed MUSTAPHA, secretary general]; Jordanian Labor Party [Muhammad KHATAYIBAH, secretary general]; Jordanian Peace Party [Dr. Shaher KHREIS, secretary general]; Jordanian People's Democratic Party or HASHD [Salem

NAHHAS, secretary general]; Al-Mustaqbal (Future) Party [Suleiman 'ARAR, secretary general]; National Action Party or Haqq [Muhammad ZO'BI, secretary general]; National Constitutional Party [Abdul Hadi MAJALI, secretary general]; National Democratic Public Movement Party [Muhammad al-'AMER, secretary general]; Progressive Party [Na'el BARAKAT, secretary general]; Al-Umma (Nation) Party [Ahmad HNEIDI, secretary general]

International organization participation: ABEDA, ACC, AFESD, AL, AMF, CAEU, CCC, ESCWA, FAO, G-77, IAEA, IBRD, ICAO, ICC, ICFTU, ICRM, IDA, IDB, IFAD, IFC, IFRCs, ILO, IMF, IMO, Intelsat, Interpol, IOC, IOM (observer), ISO (correspondent), ITU, MONUA, NAM, OIC, OPCW, PCA, UN, UNCTAD, UNESCO, UNIDO, UNMIBH, UNMOP, UNMOT, UNOMIG, UNPREDEP, UNRWA, UPU, WFTU, WHO, WIPO, WMO, WToO, WTrO (applicant)

Diplomatic representation in the US:

chief of mission: Ambassador Marwan Jamil MUASHIR
chancery: 3504 International Drive NW, Washington, DC 20008
telephone: [1] (202) 966-2664
FAX: [1] (202) 966-3110

Diplomatic representation from the US:

chief of mission: Ambassador William BURNS
embassy: Jabel Amman, Amman
mailing address: P. O. Box 354, Amman 11118 Jordan; APO AE 09892-0200
telephone: [962] (6) 5920101
FAX: [962] (6) 5927712

Flag description: three equal horizontal bands of black (top), white, and green with a red isosceles triangle based on the hoist side bearing a small white seven-pointed star; the seven points on the star represent the seven fundamental laws of the Koran

Economy

Economy—overview: Jordan is a small Arab country with inadequate supplies of water and other natural resources such as oil and coal. Jordan benefited from increased Arab aid during the oil boom of the late 1970s and early 1980s, when its annual real GNP growth averaged more than 10%. In the remainder of the 1980s, however, reductions in both Arab aid and worker remittances slowed real economic growth to an average of roughly 2% per year. Imports—mainly oil, capital goods, consumer durables, and food—outstripped exports, with the difference covered by aid, remittances, and borrowing. In mid-1989, the Jordanian Government began debt-rescheduling negotiations and agreed to implement an IMF-supported program designed to gradually reduce the budget deficit and implement badly needed structural reforms. The Persian Gulf crisis that began in August 1990, however,

aggravated Jordan's already serious economic problems, forcing the government to shelve the IMF program, stop most debt payments, and suspend rescheduling negotiations. Aid from Gulf Arab states, worker remittances, and trade contracted; and refugees flooded the country, producing serious balance-of-payments problems, stunting GDP growth, and straining government resources. The economy rebounded in 1992, largely due to the influx of capital repatriated by workers returning from the Gulf, but recovery was uneven. A preliminary agreement with the IMF in early 1999 will provide new loans over the next three years. Sluggish growth, along with debt, poverty, and unemployment are fundamental ongoing economic problems.

GDP: purchasing power parity—\$15.5 billion (1998 est.)

GDP—real growth rate: 2.2% (1998 est.)

GDP—per capita: purchasing power parity—\$3,500 (1998 est.)

GDP—composition by sector:

agriculture: 6%

industry: 30%

services: 64% (1995 est.)

Population below poverty line: 30% (1998 est.)

Household income or consumption by percentage share:

lowest 10%: 2.4%

highest 10%: 34.7% (1991)

Inflation rate (consumer prices): 4% (1998 est.)

Labor force: 1.15 million

note: in addition, there are 300,000 foreign workers (1997 est.)

Labor force—by occupation: industry 11.4%, commerce, restaurants, and hotels 10.5%, construction 10%, transport and communications 8.7%, agriculture 7.4%, other services 52% (1992)

Unemployment rate: 15% official rate; note—actual rate is 25%-30% (1998 est.)

Budget:

revenues: \$2.8 billion

expenditures: \$3 billion, including capital expenditures of \$672 million (1999 est.)

Industries: phosphate mining, petroleum refining, cement, potash, light manufacturing

Industrial production growth rate: -3.4% (1996)

Electricity—production: 5.52 billion kWh (1996)

Electricity—production by source:

fossil fuel: 99.64%

hydro: 0.36%

nuclear: 0%

other: 0% (1996)

Electricity—consumption: 5.52 billion kWh (1996)

Electricity—exports: 0 kWh (1996)

Electricity—imports: 0 kWh (1996)

Agriculture—products: wheat, barley, citrus, tomatoes, melons, olives; sheep, goats, poultry

Exports: \$1.5 billion (f.o.b., 1997 est.)

Exports—commodities: phosphates, fertilizers, potash, agricultural products, manufactures

Exports—partners: Iraq, India, Saudi Arabia, EU, Indonesia, UAE, Syria, Ethiopia

Imports: \$3.9 billion (c.i.f., 1997 est.)

Imports—commodities: crude oil, machinery, transport equipment, food, live animals, manufactured goods

Imports—partners: EU, Iraq, US, Japan, Turkey, Malaysia, Syria, China

Debt—external: \$7.5 billion (1998 est.)

Economic aid—recipient: \$1.097 billion (1995); note—received \$320 million from ODA in 1998 (est.)

Currency: 1 Jordanian dinar (JD) = 1,000 fils

Exchange rates: Jordanian dinars (JD) per US\$1—0.7090 (January 1999-1996), 0.7005 (1995), 0.6987 (1994), 0.6928 (1993)

note: since May 1989, the dinar has been pegged to a basket of currencies

Fiscal year: calendar year

Communications

Telephones: 425,000 (1998)

Telephone system:

domestic: microwave radio relay, coaxial and fiber-optic cable, and cellular; Jordan has two cellular telephone providers (with approximately 50,000 subscribers in 1998), ten data service providers, and four Internet service providers (with approximately 8,000 subscribers in 1998)

international: satellite earth stations—3 Intelsat, 1 Arabsat, and 29 land and maritime Inmarsat terminals (1996); coaxial cable, fiber-optic cable, and microwave radio relay to Iraq, Saudi Arabia, Syria, and Israel; building a Red Sea Fiber-Optic Link Around the Globe (FLAG) fiber-optic submarine cable link and planning to update links with Saudi Arabia and Israel to fiber-optic cable; 4,000 international circuits (1998 est.); participant in Medarabtel

Radio broadcast stations: AM 6, FM 7, shortwave 1 (1998 est.)

Radios: 1.1 million (1992 est.)

Television broadcast stations: 8 (in addition, there are approximately 42 repeaters and 1 TV receive-only satellite link) (1997)

Televisions: 350,000 (1992 est.)

Transportation

Railways:

total: 677 km

narrow gauge: 677 km 1.050-m gauge; note—an additional 110 km stretch of the old Hejaz railroad is out of use (1998 est.)

Highways:

total: 8,000 km

paved: 8,000 km

unpaved: 0 km (1998 est.)

Pipelines: crude oil 209 km

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Appendix II – Amman Financial Market Summary Statistics¹⁶

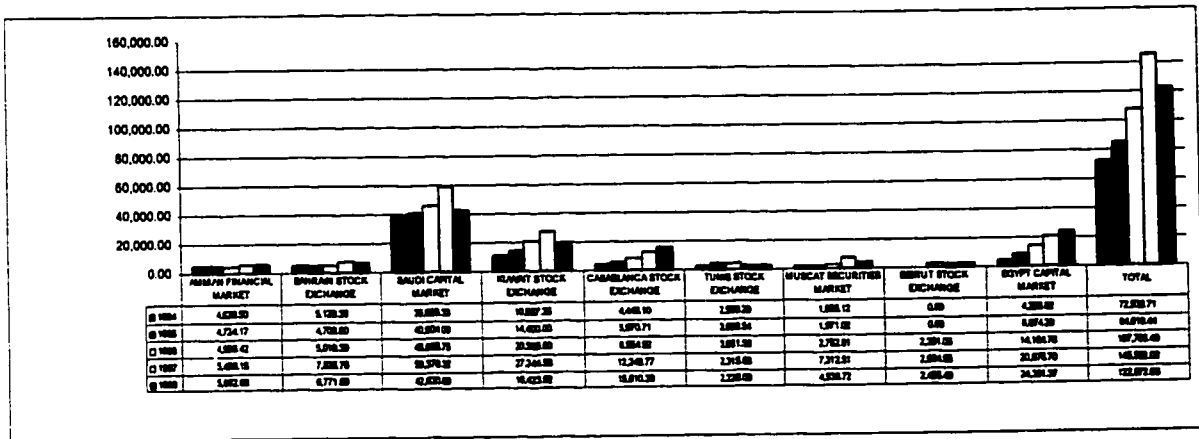
The following tables and diagrams provide insight on the Amman Financial Market in comparison with other Arab, Regional, and World Stock Exchanges.

Market Capitalization (Million \$)

	1994	1995	1996	1997	1998
AMMAN FINANCIAL MARKET	4,626.50	4,724.17	4,556.42	5,456.15	5,862.66
BAHRAIN STOCK EXCHANGE	5,129.30	4,706.80	5,019.39	7,825.78	6,771.80
SAUDI CAPITAL MARKET	38,693.33	40,904.00	45,855.75	59,378.32	42,630.63
KUWAIT STOCK EXCHANGE	10,967.25	14,400.00	20,599.80	27,244.56	18,423.92
CASABLANCA STOCK EXCHANGE	4,446.10	5,970.71	8,554.92	12,248.77	15,610.38
TUNIS STOCK EXCHANGE	2,559.29	3,868.54	3,851.56	2,315.68	2,229.09
MUSCAT SECURITIES MARKET	1,856.12	1,971.02	2,752.81	7,312.51	4,536.72
BEIRUT STOCK EXCHANGE	-	-	2,391.08	2,904.55	2,425.49
EGYPT CAPITAL MARKET	4,258.82	8,074.20	14,184.76	20,875.70	24,525.21
TOTAL	72,536.71	84,619.44	107,766.49	145,562.02	123,015.90

¹⁶ Source: Arab Monetary Fund

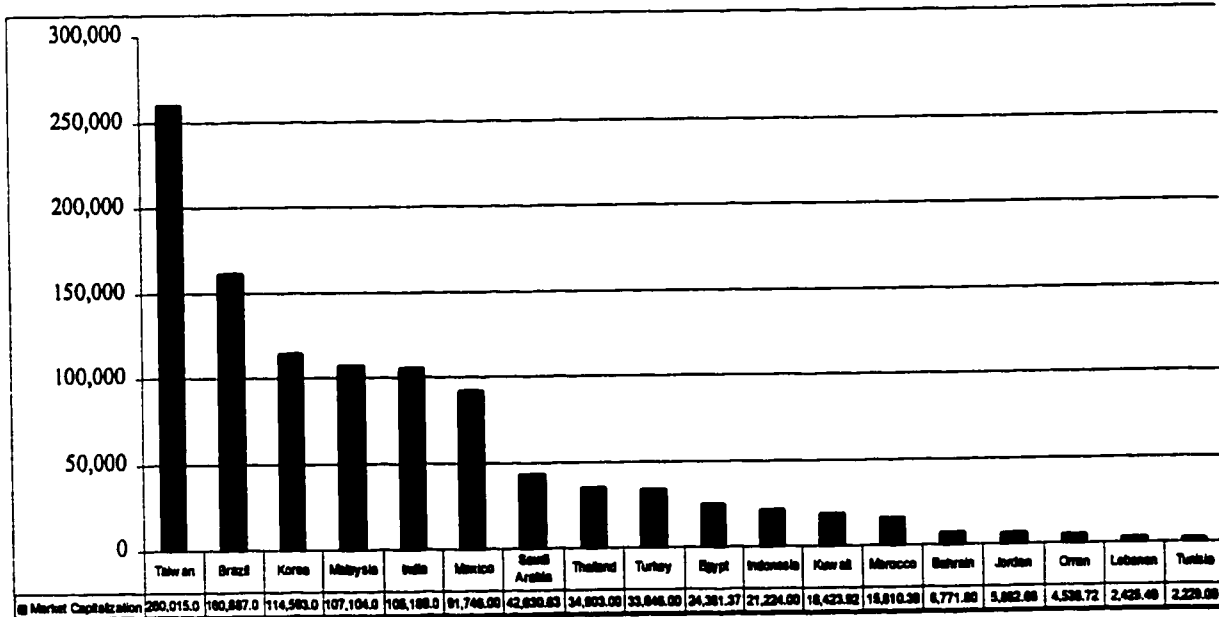
Market Capitalization of Arab Countries



1994 – 1998

\$ Billions

Market Capitalization of Arab Countries and some Emerging Markets 1998



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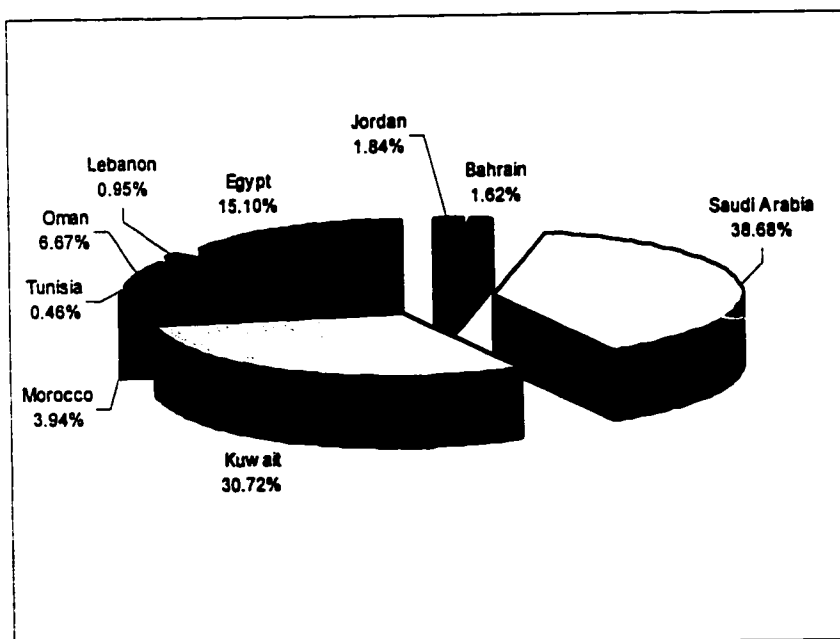
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**VALUE TRADED
1994-1998**

(Million \$)

	1994	1995	1996	1997	1998
AMMAN FINANCIAL MARKET	615.81	516.73	351.10	501.83	654.62
BAHRAIN STOCK EXCHANGE	160.25	106.07	176.56	471.67	576.64
SAUDI CAPITAL MARKET	6,632.27	6,193.87	6,766.76	16,547.22	13,744.93
KUWAIT STOCK EXCHANGE	1,959.42	6,393.60	19,223.80	34,579.30	10,918.24
CASABLANCA STOCK EXCHANGE	214.14	290.71	545.27	1,067.11	1,401.74
TUNIS STOCK EXCHANGE	334.48	604.09	240.93	225.10	164.51
MUSCAT SECURITIES MARKET	240.93	211.06	579.57	3,875.05	2,371.30
BEIRUT STOCK EXCHANGE	-	-	66.63	609.56	336.84
EGYPT CAPITAL MARKET	355.87	672.11	2,579.00	6,017.91	5,367.55
TOTAL	10,513.17	14,988.24	30,529.62	63,894.75	35,536.37

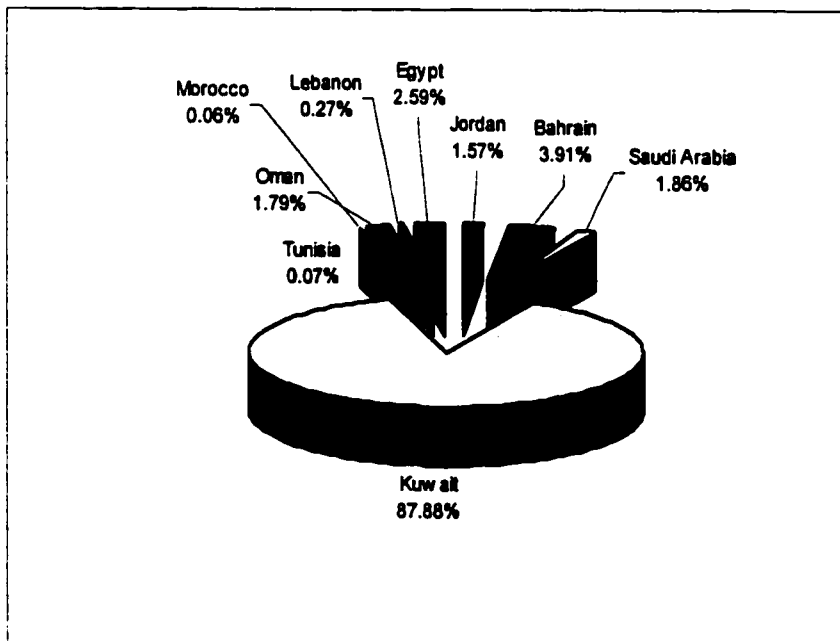


Value Traded of Arab Capital Markets

Share of Respective Value Traded - 1998
VOLUME TRADED
1994-1998

*(Million
Share)*

	1994	1995	1996	1997	1998
AMMAN FINANCIAL MARKET	133.82	125.07	162.40	191.10	248.56
BAHRAIN STOCK EXCHANGE	257.10	183.70	298.74	630.09	619.84
SAUDI CAPITAL MARKET	152.10	116.60	137.67	313.98	294.97
KUWAIT STOCK EXCHANGE	2,519.16	9,056.40	25,720.18	33,988.07	13,917.09
CASABLANCA STOCK EXCHANGE	2.97	3.48	6.82	9.77	9.40
TUNIS STOCK EXCHANGE	15.53	17.65	10.85	10.96	11.06
MUSCAT SECURITIES MARKET	42.10	41.15	113.55	374.08	283.50
BEIRUT STOCK EXCHANGE	-	-	0.84	63.22	42.15
EGYPT CAPITAL MARKET	27.27	46.25	170.40	274.76	410.69
TOTAL	3,150.05	9,590.30	26,621.45	35,856.03	15,837.26



**Volume Traded of Arab Capital Markets
Share of Respective Volume Traded
1998**

**ARAB MONETARY FUND PRICE INDICES
1994-1998**

	1994	1995	1996	1997	1998
AMMAN FINANCIAL MARKET	100.00	111.52	109.28	116.73	119.50
BAHRAIN STOCK EXCHANGE	100.00	90.80	95.90	137.02	123.02
SAUDI CAPITAL MARKET	-	100.00	112.77	136.37	90.70
KUWAIT STOCK EXCHANGE	100.00	117.51	146.97	156.83	96.61
CASABLANCA STOCK EXCHANGE	100.00	109.39	143.62	181.69	225.62
TUNIS STOCK EXCHANGE	100.00	107.37	90.90	42.84	36.93
MUSCAT SECURITIES MARKET	100.00	103.54	127.22	264.71	115.26
BEIRUT STOCK EXCHANGE	-	100.00	80.90	97.86	78.41
EGYPT CAPITAL MARKET	-	100.00	115.92	125.59	93.27
COMPOSITE	100.00	108.30	119.93	138.45	104.12

TURNOVER RATIO
1994-1998

(Percentage)

	1994	1995	1996	1997	1998
AMMAN FINANCIAL MARKET	13.31	10.94	7.71	9.20	11.17
BAHRAIN STOCK EXCHANGE	3.12	2.25	3.52	6.03	8.52
SAUDI CAPITAL MARKET	17.14	15.14	14.76	27.87	32.24
KUWAIT STOCK EXCHANGE	17.87	44.40	93.32	126.92	59.26
CASABLANCA STOCK EXCHANGE	4.82	4.87	6.37	8.71	8.98
TUNIS STOCK EXCHANGE	13.07	15.62	6.26	9.72	7.38
MUSCAT SECURITIES MARKET	12.98	10.71	21.05	52.99	52.27
BEIRUT STOCK EXCHANGE	-	-	2.79	20.99	13.89
EGYPT CAPITAL MARKET	8.36	8.32	18.18	28.83	22.01
TOTAL	14.49	17.71	28.33	43.90	28.92

Appendix III - Law Number (16) of 1995 – The Investment Promotion Law¹⁷

- Article (1):** This law shall be named “The Investment Promotion Law of 1995”, and shall come into effect as of its publication in the official Gazette.¹⁸
- Article (2):** Whenever used in this Law, and unless the context otherwise provides, the following terms and expressions shall have the meaning ascribed thereto hereunder:
- **The Council:** The Higher Council for the Investment Promotion formed pursuant to this law
 - **The Corporation:** The Investment Promotion Corporation established pursuant to this Law.
 - **The Board:** The Board of Directors of the Corporation.
 - **The Minister:** The Minister of Industry and Trade.
 - **The Committee:** The Investment Promotion Committee formed pursuant to this Law.
 - **The Director General:** The Director General of the Corporation.
 - **The Project:** Any economic activity to which the provisions of this Law and Regulations and Instructions issued hereunder shall apply.
 - **Fixed Assets:** The necessary machinery, apparatus (es), equipment, supplies and tools to be exclusively used in the Project, and the furniture and supplies for hotels and hospitals.
 - **Fees:** Import Fees, Custom Duties and other fees imposed on Fixed Assets items in accordance with the applicable laws, with the exception of Municipal Fees.
 - **Taxes:** Taxes imposed on Fixed Assets items pursuant to the applicable laws, with the exception of Municipal Taxes.
 - **The Investor:** The natural or legal person investing in the Kingdom in accordance with the provision of this Law.
 - **Production Capacity:** The designed or occupancy capacity of the Project.
- Article (3):** Any project falling within the following Sectors and sub sectors shall enjoy the exemptions and facilities provided by this Law:
- a. Industry.
 - b. The Agriculture Sector (without prejudice to other privileges provided in other Laws).

¹⁷ Source: The Investment Promotion Corporation

¹⁸ This law was published in the Official Gazette issue No. (4075) dated 16/10/1995.

- c. Hotels
- d. Hospitals
- e. Maritime Transport and Railways
- f. Any other Sector or Sub sectors the Council of Ministers approve of upon the Councils recommendation.¹⁹

- Article (4):**
- a. For the purposes of this Law, the (Geographical) areas which enjoy Tax exemptions are classified into three development areas (A,B,C); Subject to the degree of economic development of such areas in each of the sectors as in Article (3) of this law, pursuant to a regulation to be issued for this purpose.
 - b. The Subsectors and the investment activities listed in paragraph (a) of this Article, along with the eligibility conditions for the enjoyment of the privileges provided by this Law in each of the development areas designated hereunder shall be specified in a regulation to be issued for this purpose.

- Article (5):** For the purposes of this Law, the term “Invested Foreign Capital” shall refer to money invested in the Kingdom by a non-Jordanian in cash or in kind, or any rights having originated outside the Kingdom, including the following:

- a. Cash transferred to the Kingdom via licensed banks and financial Companies which is invested for the purposes of this Law.
- b. The imported assets in kind whose cost has been paid from outside the Kingdom.
- c. Profits, returns and reserves resulting from investing Foreign Capital in the Project, provided that such profits, returns or reserves are used to increase the capital of the Project or are invested in another Project covered by the provisions of this Law.
- d. Intangible rights such as licenses, patents, trademarks and trade names registered in the Kingdom.

- Article (6):**
- a. The Fixed Assets of the Project shall be exempted from Fees and Taxes provided that they are imported into the Kingdom within a period of three years from the date of the Committee’s decision approving the lists of fixed Assets of the Project. The Committee may extend this period if it deems that the nature of the project and the size of work require that.
 - b. Imported spare parts for the Project shall be exempted from Fees and

¹⁹ The following two sub sectors have been added by virtue of the Council of Ministers’ resolution dated 28/10/1977:

- Leisure and Recreational Compounds
- Conventions and Exhibition Centers.

Taxes provided that the value of such spares does not exceed 15% of the value of the Fixed Assets for which they are required, and provided that they are required, and provided that they are imported into the Kingdom or used in the Project within a period of ten years from the date of commencement of production or work, in accordance with a decision taken by the Committee approving the lists of spare parts and their quantities.

- c. The Committee shall exempt from Fees and Taxes Fixed Assets that are required for the expansion, development or modernization of the Project if such expansion, development or modernization shall result in an increase in the Production Capacity of the Project by not less than 25%.
- d. The Committee shall exempt from Fees and Taxes any increase in value of the Fixed Assets which are imported for the Project is such increase is a result of a rise in the prices of such assets in the country of origin, of a rise in the freight charges applicable thereto or of changes in the exchange rate.

- Article (7):**
- a. By a decision of the Committee, the Project that falls within one of the sectors or sub sectors listed in Article (3) of this law shall be exempted from income and social services taxes, by the following percentages in accordance with the development area applicable thereto:
 - 25% if the Project is in a class A development area
 - 50% if the Project is in a class B development area
 - 75% if the Project is in a class C development areaThe Exemption period upon the committee's decision shall be ten years starting from the date of commencement of work for services projects, or from the date of commencement of production for manufacturing projects.
 - b. The Committee shall grant an additional exemption if the Project has been expanded, developed or modernized with the result of increasing its Production Capacity, of one year per each increase in production not less than 25% for a maximum period of four years.

Article (8): Hotels and hospital Projects shall be granted additional exemptions from Fees and Taxes once every seven years for purchases of furniture and supplies required for modernization and renewal. Provided that such items are imported into the Kingdom or used in the Project within four years from the date of the Committee's decision approving the list of purchases and their quantities.

Article (9): If the project is transferred from one development area to another during the granted exemption period, then for the purposes of the exemptions, and provided that the Corporation has been (duly) notified (of the

transfer), the Project shall be afforded, for the remaining period of the exemption, the same treatment as Project located in the (new development) area to which the Project has been transferred.

Article (10): Excluding the exemptions provided in Article (7) of this Law, any existing Project, whether approved as an “Economical Project” or as an “Approved Economical Project” pursuant to the provisions of the Encouragement of Investment Law No. (11) of 1987 and its amendments or the proceeding laws, and any other project that did not benefit from the provisions of these laws, shall enjoy the exemptions and privileges provided by this Law if it meets the requirements of a regulation that will be issued for this purpose, and adjusts its status according to the provisions thereof.

- Article (11):**
- a. A council entitled “The Higher Council for Investment Promotion”, shall be established and chaired by the Prime Minister and the membership of:
- | | |
|---|-------------------|
| - Minister or Industry & Trade | Deputy Chairman |
| - Minister of Finance | Member |
| - Minister of Planning | Member |
| - Minister of Tourism | Member |
| - Minister of Transport | Member |
| - Governor of the Central Bank | Member |
| - Director General | Member Rapporteur |
| - Chairman of the Union of Jordanian Chambers of Commerce | Member |
| - Chairman of Amman Chamber of Industry | Member |
| - Three competent and experienced Persons from the private sector Appointed by the Chairman upon A recommendation of the Minister For two renewable years | Member |
- b. The council shall hold its meetings whenever the need arises, pursuant to an invitation from its Chairman, or Deputy-Chairman in case of the Chairman’s absence. The Council’s meeting shall be considered legal if attended by two thirds of the Council’s members, provided that the Chairman, or the Deputy-Chairman in case of the former’s absence. Is present Resolutions shall be reached unanimously or by a majority of votes of members attending the meeting. In case of equal votes, the side supported by the Chairman of the meeting shall prevail.

Article (12): The Council shall create a suitable environment for investment in order to achieve the comprehensive development goals, and for that the Council shall assume the following responsibilities:

- a. Approving the National Strategy for Investment including the development of production sectors, developing and following-up its implementations.
- b. Approving the investment policies.
- c. Approving the Investment Promotion Policy, and following up its implementation.
- d. Reviewing the investment regulations.

- Article (13):**
- a. According to the provisions of this Law a corporation named "The Investment Promotion Corporation" shall be established which enjoys legal personality with financial and administrative independence. Thus, the Corporation may carry out all legal acts, concluding contracts, acquiring movable and immovable property, borrowing, selling, mortgaging and accepting donations and grants. The Corporation shall be represented in legal matters and judicial proceedings pertaining to or arising from its activities by the General Civil Lawyer or by any registered lawyer appointed by the Corporation.
 - b. The Corporation shall have a Director General appointed by decision of the Council of Ministers upon a recommendation by the Minister; provided that the decision is endorsed by a Royal Decree.
 - c. The headquarters of the Corporation shall be in the city of Amman. The Corporation may establish branches in any place within or outside the Kingdom.

- Article (14):**
- The Corporation shall aim at promoting investment in the Kingdom, by carrying out the following:
- a. Enhancing confidence in the investment environment, identifying investment opportunities, promoting these opportunities and motivating investment therein.
 - b. Simplifying the registration and licensing procedures of investment projects, following up existing Projects, and giving them priority in finalization of applications at official authorities.
 - c. Establishing an investment window at the Corporation which shall undertake licensing investment projects and obtaining approvals on such projects from authorities pursuant to the legislation in force. The Minister has the right to issue a decision to license a certain Project if the relevant ministries or public authorities fail to issue a reasoned decision regarding the licensing (of that Project) within a period of thirty days from the date on which the investor submitted a request for licensing.
 - d. Giving advice, providing available information and data for investors and issuing related guides.
 - e. Setting and implementing investment promotion programs to attract investors to the Kingdom

- Article (15):** The Corporation shall have an annual independent budget and its funds shall be constituted of the following sources:
- a. Funds allocated by the Gouvernement
 - b. Returns of services rendered by the Corporation and other revenue received thereby.
 - c. Local or foreign loans; provided the Council of Ministers approves the foreign loans.
 - d. Profits on the Corporation funds.
 - e. Grants, aids, gifts, and wills or other funds offered to the Corporation and approved by the Council.
- Article (16):**
- a. The financial year of the Corporation starts on the first of January of each year and shall end on December 31 of the same year.
 - b. Within the four months following the end of the financial year, the Corporation shall provide a comprehensive report on its actions accompanied by its final accounts certified by the auditors, and shall submit such report to the Board for approval.
 - c. In organizing its accounts and records, the Corporation pursues the principles of commercial accounting.
- Article (17):**
- a. The Corporation shall be managed by a Board of Directors chaired by the Minister. The Board shall be formed pursuant to a decision of the Council with a number from the Council's members not exceeding (7) seven, provided that the Director General shall be among them. The Board shall select one of its members to be a Deputy Chairman.
 - b. Whenever the need may arise the Board shall convene pursuant to an invitation from the Chairman. The Board meeting shall be considered legal if it is attended by the majority of members, provided that the Chairman, or Deputy Chairman, in the case of the Chairman's absence, is present. The Board shall reach its decisions unanimously or by a majority vote. In the event of equal votes the side supported by the Chairman of the meeting shall prevail.
 - c. The Chairman of the Board may invite any expert and specialized person to attend the Board meetings to offer consultations on the subject presented thereto without such person entitled to vote.
 - d. The remuneration of the members of the Board shall be determined by the Council's decision and shall be paid according to the number of meeting attended by the relevant member.
 - e. The Chairman of the Board shall appoint one of the corporation staff as secretary to the Board in accordance with the Director General's recommendation. The secretary shall be responsible for organizing the administrative work of the Board, recording its resolutions and obtaining the signature of the Chairman of the meeting and the other members on such resolutions.

- Article (18):** The Board shall carry out the duties and assume the authorities provided for in this Law including the following:
- a. Supervising and follow up the administrative affairs of the Corporation.
 - b. Suggesting the investment policies of the Kingdom, determining its priorities, setting programs and plans, determining and submitting them to the Council for approval.
 - c. Approving the Corporation's budget, the auditor's report and the final financial statements.
 - d. Approving the financial and administrative instructions of the Corporation.
 - e. Appointing licensed auditors for the Corporation and determining their fees.
 - f. Establishing branches of the Corporation anywhere within or outside the Kingdom.

Article (19): The Chairman of the Board shall represent the Corporation in all its relations with others and may delegate this representation to the Director General.

- Article (20):** The Director General shall carry out and assume the following duties and authorities:
- a. Applying the general policy of the Corporation, implementing decisions issued in accordance with the provisions of this law, and following up their implementation.
 - b. Administering the activities of the Corporation, supervising its staff and its technical, administrative and financial affairs.
 - c. Laying down programs that achieve the goals and tasks of the Corporation, submitting the related recommendations to the Board, and working towards their development.
 - d. Any other duties determined by the Board, or assigned to him pursuant to the regulations issued under this law.

- Article (21):** A committee name "The Investment Promotion Committee" shall be chaired by the Director General and with the membership of:
1. The Director General of the Income Tax Department.
 2. The Director General of the Customs Department.
 3. A Representative of the Ministry of Industry and Trade appointed by the Minister.
 4. A Representative of the private sector appointed by the Chairman of the Council.

- a. In the absence of the Committee's Chairman, the Director General of the Customs Department shall assume the chairmanship of the Committee.
- b. The Committee shall convene pursuant to an invitation from its Chairman. The meeting shall be considered legal if four of its members are present including the Chairman. The committee shall reach its decisions by a majority vote of three of its members.
- c. The Director General may invite one or more persons from any entity from the relevant sector to attend the Committee's meetings in order to provide advice on the matter presented thereto, without such person being entitled to vote.
- d. The Director General shall appoint one of the Corporation staff to carry out the duties as Secretary to the Committee and record and follow up the Committee's decisions.

Article (22): The Committee shall carry out the duties and assume the authorities stated in this Law including the following:

- a. Reviewing applications submitted by the Investors and reaching decisions thereon within a period of thirty days from the date of submittal of the application, and in case of disapproval reasons shall be mentioned.
- b. Approving additional exemptions pursuant to this Law.
- c. Reviewing objections on the Committee's decisions that are raised by investors. The decision of the Committee to dismiss an objection shall be subject to appeal to the Board within a period of thirty days from the date of notification of the decision.

Article(23): In the event that all or part of the exempted Fixed Assets have been sold in a manner contrary to the provisions herein, or have not been used in the Project, or have been used for purposes other than authorized, the due taxes, fees and fines shall be imposed on the Project in accordance with the provisions of the laws and regulations in force.

Article (24): Subject to the provisions of other Laws:

- a. The Non-Jordanian Investor may invest in the Kingdom through ownership or partnership or shareholding, in accordance with the provisions of a regulation to be issued for this purpose. Said regulation shall clarify the project sectors or sub sectors thereof in which the foreign Investor may invest and the maximum percentage of ownership and the minimum Foreign Capital allowed therein.
- b. Subject to the provisions of paragraph (a) above, the Non-Jordanian Investor investing in any project governed by this Law shall be afforded the same treatment as the Jordanian Investor.
- c. The Investor has the right to manage the Project in the manner deemed

appropriate and through the person(s) chosen by the Investor for its management. The competent authorities shall provide the required facilities.

Article (25): It shall not be permissible to expropriate any Project or to subject it to any measures that may lead to expropriation, unless such expropriation shall be by way of compulsory purchase for the purposes of public interest, and in return for just compensation to be paid to the Investor. The compensation paid to a Non-Jordanian Investor in such case shall be in a convertible currency.

Article (26): The Investor must carry out the following:

- a. Notify the corporation in writing, upon completing the installation of the Fixed assets and preparation for the Project, of the date of commencement of work or actual production.
- b. Maintain regular books and records and have them audited by licensed auditors in the Kingdom.
- c. Maintain a record of the Fixed Assets that are admitted to the Project where all details of such assets shall be entered.
- d. Furnish any information, data or documents required by the Corporation which are pertinent to the Fixed Assets of the Project. Any authorized employee of the Corporation shall be allowed to have an access to the Project to check the accuracy of such data and information.

Article (27): If the ownership of the project is transferred during the granted exemption period, the Project shall continue to enjoy the granted exemptions, facilities and guarantees till the end of such period; provided that the new investor continues work in the Project and replaces the previous investor in the rights and obligations provided under the provisions of this Law.

Article (28):

- a. Upon obtaining the approval of the Committee, the Investor may sell the exempted Fixed Assets or relinquish them to another Investor benefiting from the provisions of this Law, provided that these assets are used in the Project of such Investor. Upon notifying the Committee, the Investor may also sell the exempted Fixed Assets to any person or to another project not covered by the provisions of the Law, after paying the fees and taxes due on such Fixed Assets.
- b. Upon obtaining the approval of the Committee, the Investor may re-export the exempted Fixed Assets.

Article (29): If two or more companies or corporations merge, the new company or corporation resulting from the merger shall for the remaining period of the exemption, be obliged to maintain separate accounts for each project that

had enjoyed the exemption and benefits provided for in this Law before the merger.

- Article (30):** The Non-Jordanian Investor shall be entitled to remit abroad without delay and in a convertible currency the Foreign Capital transferred to the Kingdom for investment pursuant to the provisions of this Law or any previous legislation, together with any returns and profits accrued thereof, and also, the proceeds of sale of all part or share of this project.
- Article (31):** Non-Jordanian technicians and administrators working in any Project may transfer their salaries and remuneration abroad in accordance with the legislation in force.
- Article (32):**
- a. The provisions of "The Investment Agreement of Arab Capital and their transfer between Arab States" and the provisions of treaties concluded in Arab States and their amendments shall be taken into consideration with respect to Arab Capital invested in accordance with the provisions of this Law.
 - b. Any Investor, whose investment is guaranteed by his country or by an official agency, may assign to that country or agency any returns on his investment or other compensation to which he is entitled.
- Article (33):** Investment disputes between Investors of Foreign Capital and Jordanian governmental agencies shall be settled amicably. If no amicable settlement can be reached within a period not exceeding six months, either party may resort to litigation or may refer the dispute to "The International Center for the Settlement of Investment Disputes"(ICSID) for settlement by conciliation or arbitration in accordance with the provisions of the Agreement on the Settlement of Investment Disputes between States and Nationals of other States which has been signed by the Kingdom.
- Article (34):** It shall be permissible to register mortgages on equipment and machinery that are part of Fixed Assets of any Project; as security for extended credit facilities. For the purposes of implementing the provisions of this Article, the Corporation shall, pursuant to instructions issued for this purpose by the Board and published in the Official Gazette, maintain an industrial register listing the equipment and machinery of every Project.
- Article (35):** Any project, which was approved pursuant to the provisions of the Encouragement of Investment Law No. (11). Of 1987 and its amendments shall continue to enjoy the exemptions granted thereto in accordance with that Law until the end of the exemptions period and subject to its conditions.
- Article (36):** The Corporation shall enjoy the same exemptions and benefits applicable

to ministries and governmental departments.

Article (37): The Council of Ministers may issue the necessary regulations for implementing the provisions of this Law, including those pertinent to financial, procurement, and employment affairs of the Corporation.

Article (38): The following are cancelled:

- a. The Encouragement of Investment Law no. (11) of 1987, its amendments, and the regulations issued thereunder.
- b. The Law Regulating Arab and Foreign Investments No. (27) of 1992 and the regulations issued accordingly.

Article (39): The Prime Minister and the Ministers are entrusted to implement the provisions of this Law.

Appendix IV – Regulation No. (39) of 1997 Non-Jordanian Investment Regulation Issued Pursuant to Article (24) Of the Investment Promotion Law Number (16) of 1995²⁰

- Article (1):** This regulation shall be named “The Non-Jordanian Investment Promotion Regulation of 1997” and shall come into effect as of the date of its publication in the Official Gazette.²¹
- Article (2):** The words and terms mentioned in this Regulation shall have the meaning assigned thereto in the Investment Promotion Law No. (16) of 1995.
- Article (3):** The Non-Jordanian Investor may own any project in full or in part or any economic activity in the Kingdom except the following projects and activities in which his ownership or participation therein may not exceed fifty percent (50%).
- a. Construction Contracting Sector.
 - b. Commercial and Commercial Services Sector.
 - c. Mining Sector.
- Article (4):** Except for the participation in the public shareholding companies with due observance to the provision of Article (3) of this regulation, the investment of the Non-Jordanian may not be less than (50,000) Fifty Thousand Jordanian Dinars.
- Article (5):** The Minister may issue the necessary instructions for implementing the provisions of this Regulation in a manner not contradicting with its provisions thereof.
- Article (6):** The “Non-Jordanian Investments promotion Regulation” No. 1 of 1996 and its amendment shall be abolished.

²⁰ Source: Investment Promotion Corporation

²¹ The Regulation was published in the Official Gazette issue No. (4226) dated 1/9/1997.

Appendix V - Code of Ethics of Amman Stock Exchange Issued by virtue of the provisions of Article 26 (e) of Securities Law No. 23 of 1997²²

Article (1): These Directives shall be called the "Directives for the Code of Ethics of Amman Stock Exchange for the year 1999". They shall enter into effect as of October 15, 1999.

Article (2): The following words and expressions shall have the meaning assigned to them hereunder, unless otherwise indicated by context:

- **The Stock :** Amman Stock Exchange / Securities Exchange Market.
- **The Board:** The Board of Directors of the Stock Exchange.
- **The Member :** A financial services company licensed by the Securities Commission to conduct financial brokerage activities.
- **The Persons :** The members of the Board of Directors the Chief Executive Officer and the staff of the Stock Exchange.

Article (3): The member shall respect the Securities Law and the regulations and directives issued by virtue thereof, including those regulations and directives in force at the Stock Exchange; and it shall execute Stock Exchange transactions, in line with sound trading. In particular, the member shall pledge to refrain from doing the following:

1. Wash, sham and unreal transactions which cover , in reality, trading meant to mislead the dealers into believing that there is an active securities market.
2. Any direct or indirect behavior intended to influence the prices of securities by way of triggering off a chain of operations on a given security, and which provokes an apparent demand on or offer of, or increases or decreases the prices of. securities with the aim of encouraging others to sell or buy such securities, as the case may be.
3. Any behavior or action intended to provide misleading and incorrect data, declarations or information, or to spread rumors in relation to a rise or a fall in the prices of securities.

²² Source: Amman Stock Exchange Website

4. Defaming or degrading any other member.
5. Receiving commissions that are beyond the minimum or maximum ceilings set by the Securities Law.
6. Using securities deposited with it as safe-custody, or securities held in the name of clients, to achieve a private interest.
7. Moving clients' portfolios just to obtain commissions.
8. Divulging confidential information about clients.
9. Conducting any transactions that run counter to the correct practices of the Stock Exchange, or which are incompatible with the principles of a fair and transparent market.

Article (4): It shall be prohibited for any member to enter into any operation for its own account, if any of the members of the Board of Directors, or any of its staff, is aware of any circumstances which might render such a transaction a breach of the provisions of Article 68 of the Securities Law, Likewise, it shall be prohibited for the member to enter into any transaction for the account of any of its clients, if the said transaction is in breach of the said Article.

Article (5): The member shall abide by the sound settlement of transactions executed by it in accordance with the operative regulations and directives.

- Article (6):**
- a. Each member shall organize its work in a responsible manner, and shall provide sufficient human, technical and financial resources to conduct its business, in accordance with the operative regulations and directives, including these Directives. In particular, the member shall consider the following:
 - 1) Setting up suitable bases, lists regulations and procedures for the execution and settlement of transactions, as well as for keeping records and reports.
 - 2) Laying out suitable administrative and internal audit procedures.
 - b. Each member shall keep its financial records and papers in accordance with the accepted accounting standards.
- Article (7):** The member shall include in the agreements it makes with its clients any information or conditions required by the operative regulations and directives, the following being the minimum:
- a. The names and addresses of the member and the client.

- b. A statement of the services to be rendered by the member.
- c. A statement of the commissions to be received by the member in return for its services, or a reference to a separate document which indicates such information, on the condition that said commissions are within the authorized parameters.

Article (8): Under no agreement shall the member restrict, nor he released of, the responsibilities imposed on it by virtue of the laws, regulations and directives.

Article (9): When executing a sale or a buy for the account of a client, the member shall, immediately or as mutually agreed upon, inform the client of the details thereof.

Article (10): In the event the member has an interest in the transaction to be conducted for the account of the client, or if it has any relation to the transaction which might lead to a conflict of interests, it shall be prohibited for the member to execute said transaction, unless it brings said interest to the attention of the client, takes the appropriate action to safeguard the client's interest and affords him / her a fair treatment.

Article (11): The management of the member shall be fully responsible for the breaches of the regulations and directives committed by its staff.

Article (12):

- a. The persons shall keep the information and activities related to the Stock Exchange confidential; it shall be prohibited for them to divulge said information or activities in any manner or form, irrelevant of their importance, or to use said information and activities for their own or for any third party's benefit.
- b. It shall be prohibited for the persons to transmit any confidential information to any person, or to transmit such information from the member's representative at the Board of Directors to his / her company.
- c. The persons shall keep the confidential documents in a safe place when not used, so as to ensure that no one has access to them.

Article (13): The persons shall take the necessary procedures and precautions to ensure the safety of the electronic systems of the Stock Exchange, and to protect them from destruction, alterations or use by unauthorized persons. In particular, the persons shall be obliged to do the following:

- a. To protect their data which enables them to enter into the systems.
- b. Not to allow unauthorized persons to use the systems.

- c. Not to use any Stock Exchange software or hardware before the specialist ensures their safety.
- d. As soon as it comes to their knowledge, to inform the concerned employee in the Information Technology Department of an violation of software or related material copyrights in the Stock Exchange, as well as of any misuse of the Stock Exchange's systems or of any possibility of having a software that might affect the data stored on the hardware.

- Article (14):**
- a. It shall be prohibited for the persons to send confidential information via the Stock Exchanges electronic mail, unless they are authorized to do so.
 - b. Print-outs of important letters sent or received via the Stock Exchanges electronic mail shall be kept.
 - c. It shall be prohibited for the persons to have access to the Stock Exchange's sent or received electronic mail, without authorization to do so.

- Article (15):** It shall be prohibited for the members and the persons to behave in any manner which might harm the reputation of the Stock Exchange or its members.

- Article (16):** It shall be prohibited for the members and the persons to receive or to offer any gifts or donations, if such gifts or donations might influence the giver's or receivers obligations.

- Article (17):** Subject to professional and disciplinary liability, the members and persons shall abide by these Directives.

Appendix VI - Directives on Disclosure Related to Amman Stock Exchange Issued by virtue of the provisions of Article 26 (c &d) of the Securities Law No. 23 of 1997 ²³

Article (1): These Directives shall be called the "Directives on Disclosure Related to Amman Stock Exchange for the year 1999". They shall enter into effect as of October 15, 1999.

Article (2): The following words and expressions shall have the meanings assigned to them hereunder, unless otherwise indicated by context:

- **The Commission** : The Securities Commission.
- **The Stock Exchange** : Amman Stock Exchange / Securities Market.
- **The Board of Directors** : The Board of Directors of the Stock Exchange.
- **Chief Executive Officer** : The Chief Executive Officer of the Stock Exchange.
- **The members of the financial services Stock Exchange** : companies licensed by the Securities Commission to conduct financial brokerage activities.

- Article (3):**
- a. The Stock Exchange must disclose the following information:
 - 1. Names of issuers of securities listed on the Stock Exchange.
 - 2. Names of issuers of securities suspended from trading.
 - 3. Names and addresses of the Stock Exchange members.
 - 4. Names of the Stock Exchange members barred from practicing.
 - 5. Names of the certified financial professionals licensed to trade on the Stock Exchange.
 - 6. Daily, weekly, monthly and annual data, which cover each company's trading, as well as the sector movements, in terms of number of traded shares, volume of trading, number of contracts, prices, indices and key financial indicators.
 - 7. Information and data coming to the Stock Exchange, which have an influence on the prices of securities, and the trading flow.
 - b. The public may have access to and may make copies of, against consideration, the information and data mentioned in sub-paragraph A of this Article.
 - c. Disclosure shall be through Stock Exchange bulletins, and information

²³ Source: Amman Stock Exchange Website

shall be circulated to the Stock Exchange members and shall be announced via those methods deemed appropriate by the Stock Exchange.

- Article (4):**
- a. The following information, data and records shall be confidential, and no one save the Chief Executive Officer and the specialized Stock Exchange employees shall have access thereto:
 - 1. Data and information to which the Stock Exchange staff have access by entering in the trading system.
 - 2. Information on the names of dealers in securities, the size of their dealings and any information related to their dealings.
 - 3. Information on the names of owners of securities, the volume of their ownership, subject to the provisions of the applicable Disclosure Directives, which are issued by the Commission.
 - 4. Information on the financial status of the members of the Stock Exchange.
 - 5. Information acquired by the Stock Exchange through investigations or dispute settlements.
 - 6. Information and data contained in the transfers' records, which are excluded from trading.
 - 7. Information submitted by governmental organs, the Commission and the Securities Depository Center which are considered confidential by its nature.
 - 8. The deliberations of the Board of Directors.
 - b. The Board of Directors may have access to the information needed to perform its duty, and cited in 1 to 7 of sub-paragraph A of this Article.
 - c. In cases it deems special, the Board of Directors may lift the confidentiality off any information, data or records mentioned in sub-paragraph a of this Article.

- Article (5):**
- a. Subject to legal liability, in accordance with the applicable laws and regulations, it shall be prohibited for the members of the Board of Directors, the Chief Executive Officer, the Stock Exchange staff, the external legal consultant of the Stock Exchange. and the auditor of the Stock Exchange to divulge any information or data, deemed confidential by virtue of these Directives.
 - b. It shall be prohibited for a member of the Board of Directors to transmit information, deemed confidential by virtue of these Directives, to the company he / she represents.

- Article (6):** The Stock Exchange may enter into agreements with bodies specialized in disseminating information, against considerations determined by virtue of said agreements.

Article (7): The Stock Exchange may give other stock exchanges and related institutions in the securities market information and data requested by them; it may also cooperate with them to disseminate said information and data.

Appendix VII - Regulations for the Fees and Commissions of the Amman Stock Exchange Issued by virtue of the provisions of Articles 9 (J), 26 and 27 of the Securities Law No. 23 of 1997 ²⁴

Article (1): These Regulations shall be called the “Regulations for the Fees and Commissions of the Amman Stock Exchange for the year 1999”. They shall enter into effect as of the date fixed by the Board of Commissioners of Jordan Securities Commission.

Article (2): a. Whenever they appear in these Regulations, the following words and expressions shall have the meanings assigned to them hereunder, unless otherwise indicated by context:

- **The Law:** The Securities Law.
- **The Board of Directors :** The Board of Directors of the Amman Stock Exchange.
- **The Stock Exchange :** Amman Stock Exchange / Securities Market.
- **The member** The Stock Exchange member.

b. Those words and expressions which are not defined in these Regulations shall have the meanings assigned to them in the Law, unless otherwise indicated by context.

Article (3) a. Subject to sub-paragraphs B & C of this Article, the Stock Exchange shall collect an annual commission, in return for listing securities issued within the Kingdom in the Stock Exchange, at a rate of 0,0004 (four per ten thousand) of the nominal value of said securities, provided that the maximum amount collected does not exceed 3000 (three thousand) Jordan Dinars.

b. The Stock Exchange shall collect an annual commission in return for listing bonds issued by Jordanian public shareholding companies, at a rate of 0,0002 (two per ten thousand) of the nominal value of said bonds, provided that the maximum amount collected does not exceed 2000 (two thousand) Jordan Dinars.

c. The Stock Exchange shall collect a lump annual commission of 250 (two hundred and fifty) Jordan Dinars per issue, in return for listing bonds issued by The Government, public institutions or municipalities.

a. Subject to sub-paragraph B of this Article, the Stock Exchange shall

²⁴ Source: Amman Stock Exchange Website

- Article (4)** collect, in return for trading in securities, a commission of 0,0006 (six per ten thousand) of the market value of traded securities from each contracting party.
- b. In return for trading in bonds, the Stock Exchange shall collect a commission of 0,000 1 (one per ten thousand) of the market value of traded bonds from each contracting party.
- Article (5)** Subject to sub-paragraph B of this Article, the Stock Exchange shall collect, in return for contracts of transfer of ownership, a commission of 0,001 (one permit) of the market value of the contract from one party.

Appendix VIII – Key Statistics of the Amman Financial Market (Amman Stock Exchange)

Key Statistics of the ASE						
1994-1999						
	1994	1995	1996	1997	1998	1999
1 Value Traded (JD million)	495.1	419.0	248.6	355.2	464.4	389.4
2 ASE General Weighted Price Index (point)	143.6	159.2	153.5	169.2	170.1	167.4
3 Non-Jordanian Buying (JD million)	---	---	9.9	55.5	151.1	62.3
4 Non-Jordanian Selling (JD million)	---	---	16.5	45.0	53.9	32.0
5 Net Investment of Non-Jordanian (JD million)	---	---	8.5	56.8	124.3	15.5
6 Non-Jordanian Ownership of Market Cap. (%)	31.1	31.0	32.8	39.1	43.9	43.1
7 P/E Ratio (times)	18.10	17.43	13.54	14.68	16.29	14.30
8 P/BV (times)	2.05	1.95	1.73	1.63	1.56	1.44
9 Dividend Yield Ratio (%)	2.30	2.32	2.54	2.31	2.37	2.88
10 Turnover Ratio – Regular Market(%)	26.1	20.9	15.4	14.5	15.9	17.9
11 Number of Listed Companies	116	126	132	139	150	152
12 Traded Development Bonds (JD million)	3.5	11.9	4.5	1.9	2.3	0.8
13 Traded Corporate Bonds (JD million)	0.9	0.3	0.6	0.1	1.8	3.3
14 Market Capitalization (JD million)	3409.3	3465.4	3461.2	3862.0	4156.6	4137.7
15 Market Capitalization as a Percentage of the GDP (%)	80.8	75.7	72.7	77.3	79.4	79.0

Trading Volume of the Amman Stock Exchange				
Year	Stocks	Bonds	Off-Trading Floor Transactions (JD)	Total
1978	5,615,891	---	4,056,000	9,671,891
1979	15,843,159	776,289	3,848,649	20,468,097
1980	41,431,076	1,661,015	6,748,813	49,840,904
1981	75,417,027	2,324,445	6,569,746	84,311,218
1982	128,288,963	1,942,272	9,565,110	139,796,345
1983	141,427,111	607,686	13,481,071	155,515,868
1984	59,318,623	1,676,497	8,302,526	69,297,646
1985	66,730,872	3,607,914	14,425,344	84,764,130
1986	69,522,993	2,530,574	26,080,676	98,134,243
1987	148,178,293	1,047,321	17,982,136	167,207,750
1988	132,625,222	16,656,964	22,194,279	171,476,465
1989	367,589,840	22,175,343	164,865,777	554,630,960
1990	268,885,973	3,121,014	17,808,353	289,815,340
1991	302,836,729	1,448,874	16,001,995	320,287,598
1992	886,950,983	4,316,726	15,254,051	906,521,760
1993	968,613,802	4,650,449	37,372,182	1,010,636,433
1994	495,076,052	4,375,151	46,812,893	546,264,096
1995	418,958,544	12,238,519	82,926,204	514,123,267
1996	248,583,344	5,141,100	28,919,143	282,643,588
1997	355,244,623	2,008,224	67,663,188	424,916,035
1998	464,374,268	4,041,085	69,750,893	538,166,246
1999	389,476,334	4,097,316	109,287,384	502,861,034

Trading Value at the Regular and Parallel Market						
Year	Traded Shares #	(%) Change	Value Traded (JD)	(%) Change	No. of Transactions #	(%) Change
1978	2,429,151	-	5,615,891	-	8,397	-
1979	6,534,880	169.0	15,843,159	182.1	16,603	97.7
1980	17,397,885	166.2	41,431,076	161.5	29,857	79.8
1981	29,231,086	68.0	75,417,027	82.0	53,013	77.6
1982	45,839,068	56.8	128,288,963	70.1	95,565	80.3
1983	61,139,326	33.4	141,427,111	10.2	113,266	18.5
1984	40,819,292	(33.2)	59,318,623	(58.1)	68,201	(39.8)
1985	37,297,990	(8.6)	66,730,872	12.5	54,225	(20.5)
1986	48,898,265	31.1	69,522,993	4.2	68,361	26.1
1987	99,129,842	102.7	148,178,293	113.1	120,073	75.6
1988	113,792,702	14.8	132,625,222	(10.5)	120,568	0.4
1989	195,620,241	71.9	367,589,840	177.2	210,484	74.6
1990	136,054,317	(30.4)	268,885,973	(26.9)	157,129	(25.3)
1991	161,777,149	18.9	302,836,729	12.6	183,426	16.7
1992	350,650,042	116.7	886,950,983	192.9	339,755	85.2
1993	270,439,340	(22.9)	968,613,802	9.2	335,553	(1.2)
1994	175,475,801	(35.1)	495,076,052	(48.9)	253,654	(24.4)
1995	175,204,564	(0.2)	418,958,544	(15.4)	210,879	(16.9)
1996	162,489,105	(7.3)	248,583,344	(40.7)	163,310	(22.6)
1997	191,064,386	17.6	355,244,623	42.9	137,957	(15.5)
1998	247,856,716	29.7	464,374,268	30.7	137,714	(0.2)
1999	271,109,284	9.4	389,476,334	(16.1)	154,603	12.3

Trading Value at the Regular and Parallel Market by Sector					
Year	Banking	Insurance	Services	Industry	Total
1978	1,909,388	211,581	605,792	2,889,130	5,615,891
1979	6,837,164	932,825	1,315,201	6,757,969	15,843,159
1980	17,339,167	931,044	5,944,764	17,216,101	41,431,076
1981	28,903,515	6,619,151	7,828,845	32,065,516	75,417,027
1982	54,198,621	13,553,451	18,552,277	41,984,614	128,288,963
1983	95,726,894	6,534,397	16,634,169	22,531,651	141,427,111
1984	34,387,848	2,642,570	6,243,573	16,044,632	59,318,623
1985	47,429,847	2,574,124	3,766,969	12,959,932	66,730,872
1986	39,719,883	4,212,281	4,610,438	20,980,391	69,522,993
1987	40,735,013	7,404,634	6,297,346	93,741,300	148,178,293
1988	42,273,622	3,098,922	9,459,852	77,792,826	132,625,222
1989	86,698,562	7,841,808	32,713,056	240,336,414	367,589,840
1990	71,177,094	6,422,945	30,840,497	160,445,437	268,885,973
1991	75,523,292	4,794,580	35,435,609	187,083,248	302,836,729
1992	202,807,731	25,309,246	128,018,415	530,815,591	886,950,983
1993	282,551,879	32,946,207	127,939,623	525,176,093	968,613,802
1994	186,791,403	7,845,031	91,257,939	209,181,679	495,076,052
1995	149,619,498	7,364,131	110,160,986	151,813,929	418,958,544
1996	83,095,667	3,105,991	51,029,859	111,351,827	248,583,344
1997	165,445,904	4,528,160	55,220,936	130,049,623	355,244,623
1998	192,664,521	5,931,034	46,979,741	218,798,972	464,374,268

1999	128,121,996	7,618,634	50,800,991	202,934,713	389,476,334
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Yearly Trading Movement of Bonds Market

Year	Traded Bonds #	(%) Change	Traded Bonds (JD)	(%) Change
1978	-	-	-	-
1979	117,124	-	776,289	-
1980	98,440	(16.0)	1,661,015	114.0
1981	217,484	120.9	2,324,445	39.9
1982	184,331	(15.2)	1,942,272	(16.4)
1983	42,813	(76.8)	607,686	(68.7)
1984	127,673	198.2	1,676,497	175.9
1985	337,274	164.2	3,607,914	115.2
1986	121,440	(64.0)	2,530,574	(29.9)
1987	97,074	(20.1)	1,047,321	(58.6)
1988	532,987	449.1	16,656,964	1,490.4
1989	658,652	23.6	22,175,343	33.1
1990	198,926	(69.8)	3,121,014	(85.9)
1991	119,924	(39.7)	1,448,874	(53.6)
1992	406,614	239.1	4,316,726	197.9
1993	437,965	7.7	4,650,449	7.7
1994	437,523	(0.1)	4,375,151	(5.9)
1995	1,223,199	179.6	12,238,519	179.7
1996	514,025	(58.0)	5,141,100	(58.0)
1997	200,760	(60.9)	2,008,224	(60.9)
1998	241,863	20.5	4,041,085	101.2
1999	85,432	(64.7)	4,041,086	0.0

Value of Bonds Market

Year	Stocks	Corporate Bonds	Development Bonds	Total
1978	11,901,117	-	10,000,000	21,901,117
1979	16,887,705	5,000,000	11,000,000	32,887,705
1980	47,764,260	5,000,000	10,000,000	62,764,260
1981	74,547,574	5,000,000	9,000,000	88,547,574
1982	91,308,682	25,000,000	12,000,000	128,308,682
1983	62,010,000	22,000,000	12,000,000	96,010,000
1984	6,283,630	19,500,000	13,000,000	38,783,630
1985	10,675,000	8,500,000	20,000,000	39,175,000
1986	11,420,000	19,000,000	15,500,000	45,920,000
1987	28,159,538	5,000,000	26,000,000	59,159,538
1988	7,000,000	9,660,000	17,000,000	33,660,000
1989	21,845,074	5,000,000	18,000,000	44,845,074
1990	10,478,065	6,000,000	28,000,000	44,478,065
1991	20,722,028	-	38,000,000	58,722,028
1992	54,608,973	-	6,000,000	60,608,973
1993	228,394,905	3,000,000	8,000,000	239,394,905
1994	460,920,711	8,000,000	15,500,000	484,420,711
1995	322,932,733	-	26,000,000	348,932,733
1996	154,882,113	-	19,000,000	173,882,113
1997	327,356,278	-	-	327,356,278
1998	47,522,780	53,500,000	8,000,000	109,022,780
1999	53,294,587	31,800,000	-	85,094,587

Major Financial Indicators for the Regular and Parallel Markets

Year	Market Capitalization (JD)	Book Value (JD)	Net Income After Taxes (JD)	Dividends (JD)	Subscribed Shares #
1978	286,118,483	242,071,913	26,463,124	10,664,676	83,547,097
1979	452,291,527	316,475,848	36,519,766	14,743,936	118,396,143
1980	495,526,486	372,974,033	44,494,224	18,375,207	124,410,130
1981	834,614,580	451,465,244	52,826,784	22,616,688	146,266,895
1982	1,034,818,001	612,928,253	60,769,009	29,246,934	272,395,651
1983	1,053,358,110	677,637,786	50,399,684	27,335,230	422,391,621
1984	911,686,265	696,115,983	35,716,379	33,308,870	393,601,409
1985	926,905,946	532,786,460	49,594,938	31,483,884	365,610,036
1986	891,808,105	719,672,030	61,105,003	27,467,415	362,456,892
1987	929,380,379	745,269,893	61,211,229	32,197,900	372,709,974
1988	1,104,677,475	844,963,354	92,388,631	36,006,686	394,646,695
1989	1,400,406,829	946,358,579	194,981,838	43,539,346	394,818,855
1990	1,293,210,890	1,080,114,083	178,036,313	57,621,931	406,810,631
1991	1,707,095,165	1,198,004,898	153,825,516	65,049,557	428,519,267
1992	2,295,649,288	1,395,845,716	155,503,414	72,472,769	406,628,078
1993	3,463,930,183	1,581,703,715	143,477,685	77,798,480	529,017,345
1994	3,409,293,505	1,837,851,535	175,099,128	74,335,644	677,674,424
1995	3,495,438,521	2,076,930,987	198,251,044	78,609,637	835,076,414
1996	3,461,156,739	2,364,236,961	228,537,095	82,904,520	917,000,695
1997	3,861,951,390	2,756,796,070	217,682,866	88,941,501	1,073,189,277
1998	4,156,558,122	2,936,877,274	244,355,682	102,716,299	1,334,399,885
1999	4,137,711,690	2,975,776,877	243,211,433	106,500,052	1,416,929,800

Percentage of the Total Shareholding of the Bank in the Shareholding Companies by Sector

PERIOD	BANKS	INSURANCE	SERVICES	INDUSTRY	GENERAL
1994	46.680	15.999	2.876	23.566	31.148
1995	46.348	15.666	3.277	19.888	31.048
1996	47.722	16.478	7.286	21.750	32.795
1997	53.796	15.969	9.299	26.001	39.059
1998	56.385	15.123	11.592	28.073	43.931
1999					
JAN	49.727	15.246	7.649	24.390	35.804
FEB	57.121	15.116	11.427	29.990	44.260
MAR	57.259	15.580	11.957	30.264	44.224
APR	57.338	15.421	11.739	30.198	44.279
MAY	56.968	15.706	10.942	30.364	43.913
JUN	56.761	15.386	11.537	29.525	43.292
JUL	56.954	15.457	10.604	30.116	43.736
AUG	57.249	15.345	10.691	30.063	44.139
SEP	57.249	15.150	10.969	30.288	44.003
OCT	57.261	15.235	11.110	30.377	43.967
NOV	57.254	15.440	11.232	30.355	43.970
DEC	56.647	15.620	13.977	30.483	43.099

* As a percentage of market cap.

Major Indicators for the Regular and Parallel Market

Year	P/E Ratio (times)	P/BV (times)	Dividend Yield Ratio (%)	EPS (JD)	Turnover Ratio (%)
1978	10.812	1.182	3.727	0.317	2.908
1979	12.385	1.429	3.260	0.308	5.520
1980	11.137	1.329	3.708	0.358	13.984
1981	15.799	1.849	2.710	0.361	19.985
1982	17.029	1.688	2.826	0.223	16.828
1983	20.900	1.554	2.595	0.119	14.475
1984	25.526	1.310	3.654	0.091	10.371
1985	18.690	1.740	3.397	0.136	10.202
1986	14.595	1.239	3.080	0.169	13.491
1987	15.183	1.247	3.464	0.164	26.597
1988	11.957	1.307	3.259	0.234	28.834
1989	7.182	1.480	3.109	0.494	49.547
1990	7.264	1.197	4.456	0.438	33.444
1991	11.098	1.425	3.811	0.359	37.753
1992	14.763	1.645	3.157	0.382	86.234
1993	24.143	2.190	2.246	0.271	51.121
1994	19.471	1.855	2.180	0.258	25.894
1995	17.631	1.683	2.249	0.237	20.981
1996	17.458	1.666	2.271	0.216	17.720
1997	14.300	1.630	2.310	0.203	17.800
1998	16.290	1.560	2.370	0.183	18.574
1999	14.300	1.440	2.880	0.172	19.134

Trading and Net Investments of Non-Jordanian

Period	Total Buying	Total Selling
1996	26,445,212	17,923,594
1997	100,499,724	43,735,612
1998	204,989,118	82,382,672
1999		
JAN	19,235,542	9,918,020
FEB	13,978,051	13,411,199
MAR	7,194,188	4,246,805
APR	9,250,339	9,161,975
MAY	5,820,917	6,334,034
JUNE	6,632,772	13,703,655
JULY	3,096,259	3,953,397
AUG	9,019,334	3,498,200
SEP	2,309,388	3,692,928
OCT	4,285,656	3,503,210
NOV	8,461,837	3,916,860
DEC	4,993,494	3,466,246

Trading of Non - Jordanians

Period	Buy						Sell					
	Individuals			Companies			Total			Individuals		
	Non Arab	Arab	- Arab	Non - Arab	Arab	Arab	Non - Arab	Arab	Arab	Non - Arab	Arab	Arab
1996	260,803	9,702,701	9,659,452	6,822,256	26,445,212	361,713	10,009,572	4,716,222	2,836,087	17,923,594		
1997	813,212	17,720,866	54,668,875	27,296,771	100,499,724	240,331	14,392,731	15,248,366	13,854,184	43,735,612		
1998	425,754	16,839,131	150,633,050	37,091,183	204,989,118	457,246	10,823,666	46,002,404	25,099,356	82,382,672		
1999												
JAN	2,160	609,299	15,987,239	2,636,844	19,235,542	11,805	1,232,247	7,338,904	1,335,064	9,918,020		
FEB	100,000	450,703	12,970,064	457,284	13,978,051	85,934	1,610,216	3,245,477	8,469,572	13,411,199		
MAR	93,150	1,210,789	5,152,212	738,037	7,194,188	47,020	607,418	3,129,828	462,539	4,246,805		
APR	7,691	920,301	7,539,202	783,145	9,250,339	107,340	397,363	2,658,380	5,998,892	9,161,975		
MAY	13,972	469,221	2,540,905	2,796,819	5,820,917	17,620	1,470,610	4,195,704	650,100	6,334,034		
JUNE	65,920	671,513	1,107,032	4,788,307	6,632,772	6,485	2,498,163	10,638,556	560,451	13,703,655		
JULY	29,435	1,593,211	1,357,188	1,164,25	3,096,259	119,500	1,802,818	1,499,302	531,777	3,953,397		
AUG	9,595	1,313,593	6,110,859	1,585,287	9,019,334	215,705	653,011	2,506,205	123,279	3,498,200		
SEP	977	456,027	749,906	1,102,478	2,309,388	7,730	2,615,903	839,652	229,643	3,692,928		
OCT	15,067	1,455,019	663,396	2,152,174	4,285,656	41,212	814,732	2,303,482	343,784	3,503,210		
NOV	365,778	203,563	6,362,548	1,529,948	8,461,837	70,715	2,387,414	1,167,842	290,889	3,916,860		
DEC	0	1,380,418	1,035,091	2,577,985	4,993,494	27,425	1,105,788	781,071	1,551,962	3,466,246		

Trading and Net Investments of Non-Jordanians by Sector

Buy	29.90	0.20	6.20	8.70	45.00	20.40	0.00	3.10	32.00	55.50	50.30	0.20	9.30	40.70	100.
Sell	22.80	0.17	2.50	2.80	28.27	3.80	0.66	0.99	10.00	15.45	26.60	0.83	3.49	12.80	43.7
Net Investment	7.10	0.03	3.70	5.90	16.73	16.60	-0.66	2.11	22.00	40.05	23.70	-0.63	5.81	27.90	56.7
Buy	35.82	0.35	1.09	16.67	53.93	60.46	0.32	1.57	88.71	151.06	96.28	0.67	2.66	105.38	204.
Sell	29.50	0.74	0.47	5.21	35.92	21.83	0.27	1.11	23.25	46.46	51.33	1.01	1.58	28.46	82.3
Net Investment	6.32	-0.39	0.62	11.46	18.01	38.63	0.05	0.46	65.46	104.60	44.95	-0.34	1.08	76.92	122.
Buy	15.53	0.39	4.99	11.08	31.99	24.36	1.07	3.78	33.07	62.28	39.89	1.46	8.77	44.15	94.2
Sell	13.62	0.18	2.81	21.13	37.74	18.28	0.00	0.94	21.84	41.06	31.90	0.18	3.75	42.97	78.8
Net Investment	1.91	0.21	2.18	-10.05	-5.75	6.08	1.07	2.84	11.23	21.22	7.99	1.28	5.02	1.18	15.4