Consequences of Fair Value Accounting for Financial Instruments in the Developing Countries: The Case of the Banking Sector in Jordan

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ABSTRACT

The introduction of International Financial Reporting Standards (IFRS), mandatory for many listed companies in the developing countries, has proven to be a challenge for accountants, given the standards' emphasis on fair value as a means to improve the true and fair presentation of the financial statements. This study aims to provide evidence on the effect of implementing fair value measurements of financial instruments on the financial performance of a firm and its Earning Per Share (EPS). The study sample comprises Jordanian commercial and investment banks, and covers the period of 2002-2006. The researchers make a comparison between accounting results reported under valuing financial instruments at fair values and those under cost for the same set of years, and they document how fair value accounting changes key financial measures and the value relevance of financial statement information.

This study finds that financial performance of a bank is generally very significantly affected by valuing financial instruments at fair values. It also finds that there is a positive and extremely high value of Earnings Per Share (EPS) when implementing the fair values in evaluating the financial instruments, compared to when income is calculated without adding holding gains and losses. In case of some of the developing countries such as Jordan, where the financial markets are inefficient and go through bubble years, using fair value accounting to value financial instruments may distort the income and mislead the users of financial statements. The study concludes with questioning the suitability of the worldwide application of IFRS for fair value accounting measurement

Keywords: Fair value accounting, Financial instruments, Banks, IAS 39, EPS.

INTRODUCTION

Accounting standards setters in many countries around the world have issued standards requiring recognition of some balance sheet amounts at fair value, and recognition of changes in their fair values in income or only in stockholders' equity. In addition, many other balance sheet amounts have been made subject to partial application of fair value rules that depend on various ad-hoc circumstances, including impairment and use of a derivative against fair value. The Financial Accounting Standards Board and the International Accounting Standards Board (henceforth FASB and IASB) are also working jointly on projects examining expanding the use of fair values in accounting.

In Jordan it is compulsory to adopt the International Financial Reporting Standards (henceforth IFRS). Currently under IFRS, fair value recognition, measurement and disclosure of transactions and events is required under several accounting standards including: International Accounting Standard (henceforth IAS for singular and plural) 39 on financial instruments, IAS 40 on investment property (where entities can choose between the cost model or the fair value model), IAS 38 on intangible assets and IFRS 3 on goodwill (where entities measure the fair value of intangible assets and goodwill acquired in a business combination), and IAS 16 on property, plant and equipment (where entities can choose between the cost model and fair value model).

Although fair value accounting has been defended on

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the grounds of being more relevant for investment decisions, a cost to investors potentially arising from its use is that many recognized assets might not be measured with sufficient precision to help them assess adequately the firm's financial position and earnings potential. This reliability cost is compounded by the problem that in the absence of active markets for particular assets such as financial instruments, management must estimate fair value, an issue that can be subject to discretion or manipulation.

Before applying fair value measurement, accounting for financial instruments was concentrated on retaining the original cost value of these instruments on the balance sheet. It would require disclosure, as supplementary information (footnotes for example), about the current market prices of the instruments that the companies owned. By doing that, companies avoid reporting holding gains or losses from changes in the market price of financial instruments unless, and until, they were actually sold. But a few academics and analysts complained that this approach permitted companies to *cherry-pick* gains and losses. By selling stock with a built in profit, the company would report an increase in income and earnings per share (EPS). If there had been some windfall and the company wanted to offset the gain, they could always sell securities that traded below the actual cost. Therefore, fair value measurement asks now that those changes in market value must be reported directly (King, 2009).

Consequently, fair value measurement is supported on the ground that it provides information which is more relevant to users. However, the other objectives of financial statements, namely understandability, reliability and comparability, are achievable only if the meaning of fair value is both clear and unambiguous. In the absence of an active market, fair value must be estimated and this can lead to less reliable information since managers may use their discretion to manipulate accounting information (Hodder et al., 2006b). Ronen (2008) indicates that fair value inputs are potentially subjective, subject to random error which may lead to significant distortions in the balance sheet and income statement. Also, using fair value measurements has the potential to create volatility in the balance sheet and income statement, which in turn may impact on financial performance of a company and its EPS. Distortion of earnings through fair value measurement and fair value hedging issues are factors believed to restrict the validity and applicability of fair value accounting for financial instruments (Hitz, 2007).

This paper discusses and tests economic consequences of the application of fair value accounting (in particular International Accounting Standard - IAS 39) in the context of a developing country, Jordan. The main application of IAS 39 in Jordan is for investment of security portfolios, especially by banks, which have been required by Jordanian laws to use IFRS in external financial reporting since 1998.

Given the magnitude of the complications of applying fair value accounting in the more-developed countries, this study seeks to contribute to our knowledge on this issue by studying it in a developing country, with a much smaller economy and a much less efficient financial market, where the consequences of such an application could be possibly relatively higher. This paper, therefore; discusses and tests the effect of implementing fair value measurement for financial instruments on the Jordanian banks' income and Earning Per Share (EPS). The Jordanian banking sector is one of the most important sectors in Jordan, so the major question addressed in this paper is: how appropriate the application of fair value measurement of financial instruments, as adopted by the IASB, might be in different contexts? This will be answered by studying the effect of implementing fair value measurement for financial instruments on the Jordanian banks' income and EPS. To do that, two different variables are used. The first one is the net income, calculated as earnings including unrealized holding gains and losses from financial instruments based on fair values, while the second is net income after excluding such gains and losses.

The next section outlines the theoretical background. Section 3 covers some empirical evidences on the application of fair value accounting. Section 4 discusses

the Jordanian context. Section 5 discusses the research approach. Section 6 provides the results of the empirical analysis, while section 7 concludes the study.

THEORETICAL BACKGROUND

Replacing traditional historical cost accounting measures with measures based on fair values has been considered a controversial issue, or even a paradigm shift (Barlev and Haddad, 2003). Several arguments have been put forward in support or against the application of fair value accounting in practice.

This section begins by discussing the definition of fair value as used in accounting. It then discusses arguments for and against the application of fair value accounting, and the role of international adoption or convergence with IFRS in the international spread of issues related to fair value accounting, especially those issues related to IAS 39.

Definition of Fair Value as Applied in Accounting

According to IAS 39 (paragraph 9) fair value is defined as:

'the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction'

In the USA, the most recent SFAS 157 (paragraph 5) defined fair value as:

'the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date'

We can see that both the IASB and the FASB definitions are basically equivalent, despite different wording (Hitz, 2007; Turel, 2007). It is also clear that both definitions emphasize exit prices as the chosen measure for fair value (Penman, 2007).

However, these definitions require a closer look when trying to apply them in practice. For example, Barth and Landsman (1995) argue that the definitions can be applied in a setting of perfect and complete markets, while in fact there are several different alternative fair value constructs. Accounting theorists have argued in favor of several different measures of fair value, including current cost accounting based on entry prices or exit prices, and current purchasing power accounting using price indices (Deegan and Unerman, 2006).

The application of fair value accounting follows a three-tier hierarchy, where first market prices are applied as a best estimate of fair value. If market prices are not available or do not exhibit sufficient quality, quoted market prices of comparable items are considered. If this also does not work, fair value is applied by internal estimation (Hitz, 2007). IAS 39 describes this in more details (see Alfredson et al., 2007).

Arguments for the Application of Fair Value Accounting

Accounting theory literature is full of arguments by accounting scholars claiming that historical cost accounting is obsolete and irrelevant to financial decision-making, and therefore needs to be replaced by some form or another of fair value accounting. According to its opponents, main deficiencies associated with historical cost accounting include its irrelevance during inflation periods (Deegan and Unerman, 2006), its failure to recognize unrealized increases in values of assets, and its lack of comparability (Riahi-Belkaoui, 2004).

Given that, the use of fair values was proposed as an alternative to historical cost measures. In the particular case of financial instruments, fair value has generally been considered as more relevant than historical cost, and in many cases not much less reliable, especially if current market prices are readily available. Fair value measures of financial instruments have been seen as reflecting the market's assessment of the effects of current economic conditions on the financial instrument, not being affected by the past history of the financial instrument or the specific enterprise that holds it (Carroll et al., 2003), and allowing adequate financial statement reflection of asset liability management activities (if fair value accounting is applied to all financial instruments) (Gebhardt et al., 2004). Therefore, fair values can arguably be seen as reflecting value (rather than cost) and true economic substance (Penman, 2007). It was also argued that fair value accounting measures, as

compared to historical cost accounting, provides better international accounting harmonization (Barlev and Haddad, 2007).

Barth (2006) concludes that the perceived usefulness of fair value accounting by standard-setters has shifted the argument from whether they should be used in financial statements to how they should be used in financial statements. However, the application of fair value accounting has not been without criticism, notably from the banking industry. The following subsection illustrates this issue.

Arguments against the Application of Fair Value Accounting

Although the concept of fair value measurement in accounting has been seen as relevant for investment decisions, it has been criticized on several grounds. These include the arguments that fair value measurements may lead to distortion of net income through recognition of unrealized holding gains and losses, and that fair value measurements are not exact, costly to generate, subject to manipulation, and lead to breaking the historical cost model which is seen as well working and well understood (Evans, 2003). Benston (2005) argues that although the concept of using market values of assets and liabilities is theoretically sound, its implementation has been seriously flawed, such as in the case of excluding held-to-maturity securities from revaluation, or in the case of treating derivatives by fair values that may in many cases be calculated with substantial leeway by managers. Benston (2005) also argues that extending the use of fair value accounting to the level of revaluation for all assets would allow managers to record income in advance of reliable evidence that it has been earned. This carries the risk of being misleading due to being based on expectations that may turn out to be false (Rayman, 2007).

The emphasis of both the IASB and the FASB on exit prices for measuring fair value has been criticized on several grounds. Penman (2007) argues that when a firm holds net assets whose values come from executing a business plan rather than fluctuations in market prices, a direct relationship between exit prices and fair value to shareholders does not exist. Benston (2008) also criticizes the use of exit values as fair value measurements for assets like work-in-process inventories and special purpose machines, where exit values may equal zero or even be negative, since exit prices offer little or even no value to investors in ongoing firms. Finally, Ronen (2008) argues that fair value accounting measures are not relevant, since they do not reflect the use value of the asset, and thus are not useful in predicting future cash flows generated for the firm from these assets. He also argues that fair value accounting measures are not reliable, given the high level of subjectivity involved in their estimation, and the possibility of moral hazard by managers misusing them (Ronen, 2008).

A major vocal opponent of fair value accounting for financial instruments has been the banking industry, which sought to provide several arguments against fair value accounting, and even lobby against its full application (Zeff, 2008). For example, the banking industry in the USA asserted that:

'(1) Earnings numbers based on fair values for investment securities are likely to be more volatile, or variable, than those based on historical cost. Because this increased volatility is not reflective of the underlying economic volatility of banks' operations, inefficient capital allocation decisions will result, thus raising banks' cost of capital. (2) Using fair value accounting for investment securities is likely to cause banks to violate regulatory capital requirements more often than is economically appropriate, resulting in excess regulatory intervention or leading to costly actions by bank managers to reduce the risk of regulatory intervention. …….. (3) Because contractual cash flows are fixed for investments in debt securities held to maturity, changes in fair values of these securities are irrelevant to valuing bank equity. Thus, such changes should not be a component of reported earnings.' (Barth et al., 1995, p. 579).

Anagnostopoulos and Buckland (2005) argue that banks aim at developing a portfolio of banking

transactions that would aim in the long term to maintain income and enlarge the customer base. This means that a bank generally cannot directly enjoy benefits from differences between carrying and fair values of its portfolio, given that fair values do not rigidly bear a relation to contractual cash flows.

In addition, confusion may result when some types of financial instruments (such as some swaps) have zero historical cost, yet their current values may be very high and highly sensitive to interest rates or exchange rates (Whittington, 2005).

A further problem was faced with the issue of international harmonization of accounting and promoting international accounting standards worldwide. The introduction of IFRS into Europe (particularly IAS 39) caused strong objection from the banking industry (Larson and Street, 2004; Zeff, 2008). This caused the European Union to adopt IAS 39 after excluding certain sections from it, thus causing a major obstacle in its convergence with IFRS and a problem for auditors in terms of what particular financial reporting standards to refer to in the auditor's report (Pacter, 2005).

Consequently, over the years, IAS 39 has been subject to a fair amount of criticism. IAS 39 requires that most of the financial assets and liabilities should be recognized on the balance sheet at a fair value. This implies that gains and/or losses from financial instruments will be recorded even if they are not realized. These fair value movements are taken either to the income statement or directly to equity. The proponents of fair value measurement, implicitly, do assume that financial markets are efficient. Technically this means that all the relevant information is incorporated into the quoted prices. But this does not imply that some financial markets do provide an approximation of the fundamental value of an asset, computed from its expected returns, given a long-term interest rate. Such a discrepancy does not derive from minor market imperfections or a typical information asymmetry, since it is the direct consequence of the fact that such financial markets are different from the more-developed markets.

The financial markets in many of the developing counties, and Jordan is no exception, are inherently volatile because they are driven by expectations about the future. These are markets for *credence* goods, dependent on psychological factors, as opposed to search goods or experience goods (Hodder et al., 2006b). In these contexts, financial markets deal with expected valuation by diverse actors facing radical uncertainty and in some instance strategic behavior for some traders shift market far away from the so-called fundamental value. The competition among traders does not overcome the radical uncertainty that is typical of a market economy. This is a major difference with respect to the functioning of markets for standard goods. Consequently, fair value measurement might widen the difference between share prices and the fundamental value, by comparison with historical cost accounting.

EMPIRICAL EVIDENCE ON THE APPLICATION OF FAIR VALUE ACCOUNTING

Many empirical studies were undertaken on issues related to fair value accounting. These issues include the value-relevance of fair value measures on security prices, the comparison between effects of fair value accounting and historical cost accounting on security prices, earnings' changes and volatility resulting from the recognition of unrealized holding gains and losses under fair value accounting, and the effect of adopting fair value accounting as part of IFRS on capital markets, particularly outside North America. A discussion of some of these studies and their results is presented below.

Studies covering the value-relevance of fair value accounting, measured by its incremental effect over historical cost accounting on stock prices, have generally found that fair value estimates for investment securities are value-relevant and have significant explanatory power beyond that of historical cost measures (see for example Barth, 1994; Bernard et al., 1995; Barth et al., 1996; Barth and Clinch, 1998).

As for earnings computed under fair value accounting, many studies have generally found that fair

value earnings, resulting from recognizing unrealized holding gains and losses, are more volatile than those computed under historical cost accounting (Barth et al., 1995; Bernard et al., 1995). Hodder et al. (2006a) argue that incremental earning volatility under fair value accounting income is related to elements of risk not captured by historical cost accounting net income or comprehensive income, and that these risks relate more closely to capital market pricing.

Such value-relevance of fair value accounting measures has even been found under less efficient circumstances. Carroll et al. (2003) argue that incremental value-relevance of fair value accounting information is not eliminated when an estimation of fair value for thin markets' securities is needed. They found this result for both fair values of securities and fair-value-based gains and losses covered in their study of close-end mutual funds.

In his survey of many extant fair value accounting studies from the USA, UK and Australia, Landsman (2007) concluded that "disclosed and recognised fair values are informative to investors, but that the level of informativeness is affected by the amount of measurement error and source of the estimates-management or external appraisals" (Landsman, 2007, p. 19). However, this view has been countered by some results of studies where relatively different findings were reported. Eccher et al. (1996) found that in some cases historical cost measures had incremental value-relevance higher than those of fair value measures. Barth et al. (1995) found that although fair value earnings are more volatile than historical cost earnings, incremental volatility is not reflected in stock prices. In addition, Owusu-Ansah and Yeoh (2006) reported no significant difference between recognition of unrealized gains from revaluation of investment property in income and recognition of these gains in revaluation surplus. Nelson (1996) reported that fair values of investment securities have more incremental power relative to book values, but that this result holds only for investment securities, and not for loans, deposits, or long-term debt.

A relatively similar result was reported by Khurana and Kim (2003), who found that fair values of available-for-sale securities are more informative than those of their book values. However, they found that for small bank holding companies and those with no analyst following, fair value accounting measures for loans and deposits are less informative than those of their historical cost accounting measures. They argue that this is possibly because loans and deposits are not actively traded and may in many cases include more subjectivity in estimating fair values. Khurana and Kim (2003) concluded that fair value measures are more value-relevant when there exists available objective market-determined fair values. Apart from that, they argued that simply requiring the use of fair value accounting is not appropriate for all cases.

Some studies analyzed the value-relevance of fair value measurements on the financial performance of some companies. Penman (2007) concludes that book values change considerably when investments are accounted for at fair value, and that the magnitude of this change varies between companies and types of assets. However, only in few cases the difference in valuation leads to a relevant difference in companies' efficiency scores. That is, within the sample the overall rank order of the companies with regard to efficiency and profitability remains largely the same under both valuation bases. These findings seem to indicate that a change from historical cost to fair value accounting for investments would alter analyst perceptions of a limited number of companies but would not have any effect for the majority of them.

Consequently, the value-relevance of fair value measures and their effect on stock prices has not always been reported to be a positive issue. Indeed, several studies have found that fair value measures have caused negative stock price reactions. This is generally in the case of banks, given their relatively large proportion of investment securities to total assets, compared to other types of businesses. Cornett et al. (1996) argue that new costs on banks resulting from fair value accounting announcements exceed benefits from reducing alleged

gains-trading practices. Beatty et al. (1996) reported negative effects of stock price movements for banks as a result of fair value accounting. This was found to in most of the cases of banks more frequently trading their investments, having longer maturity investments, and being more fully hedged against interest rate changes (Beatty et al., 1996).

Indeed, the adoption of IFRS in the European Union, which included adoption of fair value accounting through IAS 32 and IAS 39, had its effect on European capital markets. Armstrong et al. (2006) reported that European capital markets show positive reaction to events increasing the likelihood of adopting IFRS, and negative reaction to events decreasing that likelihood. They argue that investors prefer accounting harmonization and perceive that adoption of IFRS has benefits that outweigh its costs. Armstrong et al. (2006) also found that this result holds for banks, despite widespread arguments that European Union banks oppose IAS 39.

Lopes and Rodrigues (2007) found that, regarding the disclosure level under IAS 32 and IAS 39, disclosure by Portuguese listed companies is related to size, auditor type, listing status, and economic sector.

Nevertheless, surveys by Larson and Street (2004) and Jermakowicz and Gornik-Tomaszewski (2006) showed that in Europe, IAS 32 and IAS 39 were seen as too complicated and complex in actual implementation, and that this is a significant barrier to IFRS convergence. Callao et al. (2007), in a study on Spain, found that the main difference between IFRS and Spanish accounting standards is the application of fair value accounting for financial instruments, and that this leads to short-term worsened comparability and no improved relevance of financial reporting to the local stock market. As for property, plant and equipment revaluation, they found no significant effect for that, given that it is an optional practice that many companies rejected. However, Callao et al. (2007) argue that improved relevance as a result of fair value accounting may occur in the medium-term or long-term. In addition, Turel (2007) found that Turkish real estate investment trusts do not prefer valuing investment properties at fair value under IAS 40. He argues that this is because of the effects of income volatility.

In a study of French Banks, Ben Hamida (2007) found that the market perceives adoption of IFRS and fair value accounting as harmful to the economic values of banks. She finds that announcements that signal an increased (decreased) probability of IAS 39 adoption lead to negative (positive) abnormal stock price reactions.

However, a number of studies voiced concern about the application of fair value accounting for all financial instruments or other balance sheet items, especially when no readily-determined market values and active markets for trading exist. With the adoption of IFRS in the European Union, studies continued to find many problems in adopting fair value accounting international standards. These standards were accused of being too complex and complicated in actual accounting practice, and banks continued to show concerns regarding fair value accounting application.

THE JORDANIAN CONTEXT

The service sector dominates the Jordanian economy making up approximately 70% of GDP. Financial services, real estate, transport and communications, and government and quasi-government services are the major contributors. Jordan has a well-developed banking and financial services sector. As of 2006, there were 23 banks operating in Jordan. Of these, two claim Islamic banking and eight are foreign banks. These banks conduct business in Jordan through a network of 515 branches and 92 representative offices. Thus, the index of population to total number of operating banks, at the end of 2006, was nearly 10.9 thousand individuals per branch. On the other hand, the number of branches of Jordanian banks operating abroad at the end of 2006, including representative offices, was 130, of which 53 branches and 10 representative offices are in Palestine. The Arab Bank plc, by far the largest Jordanian bank, has the largest number of foreign branches and affiliates, spanning several continents. Despite the classification distinction between commercial banks and investment

banks, at present banks in Jordan generally perform both functions. Jordanian banks are modern institutions, and have contacts with numerous leading foreign banks.

Since 1998, banks in Jordan have been required to use IAS/IFRS in preparing their financial statements, and to have their financial statements audited by an audit firm under the application of International Standards on Auditing. The vast majority of Jordanian banks use the services of Jordanian audit firms associated with international audit firms, especially those associated with Ernst & Young and Deloitte.

All Jordanian banks are listed on Amman Bourse (AB), which is based in Amman, the capital of Jordan, and contains about 200 public listed companies. AB works under control of the Jordan Securities Commission, a governmental body. AB is a member of the Union of Arab Stock Exchanges. Listed firms on AB are officially classified into the following main sectors: Banking, Insurance, Service, and Industrial. For the period 1998-2004, the banking sector accounted for about 54 % of total market capitalization, followed by the industrial sector at 32 %, the services sector at 12 %, and the insurance sector at 2 %.

A notable factor included in the adoption of IAS39 in Jordan is that fair value accounting was required to be used by Jordanian banks and the very common financial assets used regularly by Jordanian banks are those held for trading and those held for sale. The revaluation difference for the financial assets held for trading is to be recognized in the income statement, but for those held for sale is to be recognized in the owners' equity.

The market prices at AB are used to measure the fair value of banks financial assets. Consequently, AB bubbles are expected to affect the financial indicators of the Jordanian banks. The sharpest effects of the fair value accounting practice were shown in the financial statements of 2005, given the large amount of new capital entering the stock market in the previous few years, some of which has been contributed by non-Jordanian investors, and much of which has been contributed by a huge number of small Jordanian investors probably speculating on what looked like a very major boom of increased share prices in the market.

The negative effects of these actions began to show up in the 2006 financial statements, leading to large volatility in net income and share prices for companies involved in fair value accounting practices, mainly including Jordanian banks. Many speculators have since lost large sums of their investments in shares. This caused problems for the Jordanian economy, and led the government to consider proposing some solutions to the problem of treating fair value financial reporting.

Many studies questioned the efficiency of AB and concluded that AB is not an efficient market (Omet, 1999; Omet and Bino, 2000; Alshiab and Alalawneh, 2007). Market efficiency, according to the efficient market hypothesis, occurs when markets adjust rapidly to fully impound released information into share prices. Capital market accounting research assumes a semi-strong form of market efficiency, where all publicly available information, whether from financial reporting or other sources, is rapidly and fully impounded into share prices without bias as it is released (Deegan and Unerman, 2006). Empirical evidence from this research generally supports the idea that investors are not naïve, and therefore alternative accounting policies with no apparent cash flow consequences are generally found not to affect security prices (Wolk et al., 2004).

Therefore, market efficiency assumes that investors would see through alternative accounting choices. However, when markets are not efficient, alternative accounting choices can fool investors (Drever et al., 2007). In particular to Jordan, given that fair value adjustments in investment portfolio valuation can be seen as a type of alternative accounting policy choice with no apparent cash consequences (given that under Jordanian tax laws, income tax is not counted for unrealized holding gains and losses from investments, but rather deferred until actual realization of the gain or loss), it seems that the surge in security price increases from applying IAS 39 can be arguably seen as a sign of poor market efficiency. Drever et al. (2007) even suggest that this irrational behavior may be exacerbated by some

psychological effects on investors' behavior, such as being overconfident, relying on stereotypes, willing to make gambles to avoid losses, and anchoring on initial estimates when making decisions. Such behavior, that is likely to occur in the cases of large numbers of Jordanian investors with limited market investment experience, arguably adds to the poor level of market efficiency.

This study contributes to our knowledge of financial reporting by analyzing the application of fair value accounting in a less-developed economy with low market efficiency, a context where this issue is very under-researched. It aims to assess the effect of such accounting practices and recommend financial reporting practices that might be more suitable for such security markets.

THE RESEARCH DESIGN

Data Sources

The data used in this study comprises Jordanian commercial and investment banks. The study population excludes foreign banks, banks that generally use different types of investment portfolios (such as banks that do not deal with interest-bearing investments), and banks that do not have enough data to cover the study period, which was chosen as the years 2002-2006. This period is chosen because the financial instruments were required to be re-measured at fair value based on IAS39 since January 2001 and later (the effective date of the IAS39). Data sources include the financial statements of the twelve banks that make up all of the study population according to the above criteria.

Methodology

This study discusses the effect of implementing fair value accounting for financial instruments on the Jordanian banks' income and EPS. To do that, two different variables are used. The first one is the net income, calculated as earnings including unrealized holding gains and losses from financial instruments based on fair values (NIW), while the second is net income after excluding such gains and losses (NIWO).

- **(EPS) ratio is calculated as follows:**

EPS = earnings / outstanding common shares……(1)

The earnings figure used in the calculation of EPS is the profit attributable to equity shareholders of the reporting entity, after deducting minority interest, extraordinary items, preferred dividends and other appropriations in respect to preferred shares.

EPS Ratio = EPSW / EPSWO……(2)

Where:

EPSW is the earning per share when earnings include unrealized holding gains and losses under fair value accounting.

EPSWO is the earning per share when earnings do not include such gains and losses

Test model:

EPS Ratio=1 , that means *EPSW= EPSWO* and there **is no effect** of fair value accounting on the earnings

EPS Ratio>1, that means the earnings include **gains** as a result of valuing the financial instruments at fair value.

EPS Ratio<1, that means the earnings include **losses** as a result of valuing the financial instruments at fair value.

Also to test the consequences of applying fair value accounting on the volatility of income and then on the EPS, the following hypothesis will be tested

H1: The volatility of EPSW is significantly greater than the volatility of EPSWO

It is worth mentioning that there is semi-consensus within the research community that fair-value-based earnings are more volatile than those based on historical cost (e.g., Barth et al., 1995 and Yonetani and Katsuo, 1998. For example, Hodder et al. (2006a) found that, for the average sample bank, the volatility of full-fair-value income is more three times than the volatility of comprehensive income and more five times than the volatility of net income.

The importance of investigating the volatility of different income measures may also come from the

findings of Dickinson and Liedtke (2004) who report that with the higher volatility of reported earnings it would be more difficult to provide earnings' forecasts or forward-looking information to the investment community. The Paired t-test will be used to allow the comparison between the means of EPSW and EPSWO as will be shown in the following section.

RESULTS

General Analysis

Using fair value measurement to account for financial instruments may be inappropriate if the financial market is inefficient or if it is dominated by so many speculators. In 2005 and 2006, AB witnessed a dramatic change which affects the financial performance of many Jordanian companies as a result of using fair value measurement. The AB general index reached its highest level in 2005 where the index closed at the end of the year at 8191.5 points. However, the same index closed at 5518.1 points at the end of 2006. Figure 1 shows the movements in AB general index for the period of the study. It is obvious from the figure that the movement in the index values in the years 2005 and 2006 caused a bubble in AB in that period. In the year 2005 the trading value of the exchange was about 17 billion JD. During the last 5 years, trading value increased over 30 times, causing a fast dynamic development. Table 1 shows the value traded at AB according to all sectors and the banks sector in 2004, 2005 and 2006. Figure 2 shows the price to earning ratio (P/E Ratio) in AB. It is obvious that in 2005 the ratio was at the highest level, and in 2006 it was at the lowest level.

Figure (1): AB general index

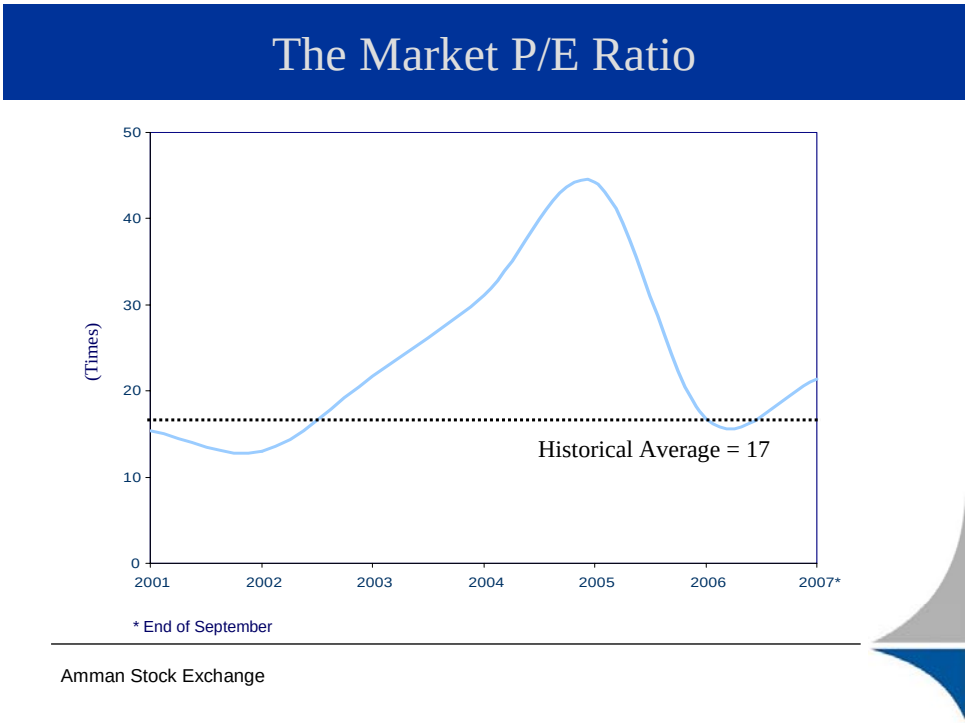

Figure (2): The market P/E ratio

Table (1): Value of AB trading

	2006	**2005**	**2004**
All sectors	14,205,003.7	16,871,051.9	3,793,251.1
Bank sector	2,867,833.7	6,043,405.2	1,692,995.4

As discussed previously, the bubble years coincided with two related factors. The first was the influx of huge amounts of capital from Arab and other non-Jordanian investors, while the second was the entry of a large number of small Jordanian investors into the market, causing a very significantly larger market capitalization. These investors were probably to a large extent naïve investors who wished to speculate on an apparent market boom and gain quick income from the seemingly highly increasing share prices.

Fair Value Accounting Effect on Banks' Reported Income

As shown in Table 2, the use of fair value accounting to measure the financial instruments has a significant effect on the banks' earnings, especially in years 2005 and 2006. Banks' earnings numbers based on fair values for financial instruments are likely to be more volatile than those based on historical costs. This variability in earnings might mislead the users of the financial statements through providing them with some financial indicators which are a result of using some accounting measurement tools more than a result of real economic events.

Table (2): Jordanian bank incomes and the gains or losses of valuing banks financial instruments at fair value during the period of 2002-2006

BANK NAME	YEAR	Gains or losses	NIW	NIWO	EPSW	EPSWO	EPS ratio
Arab Bank	2002	3,303,000	130,200,000	126,897,000	1.48	1.44	1.03
	2003	14,920,000	120,200,000	105,280,000	1.37	1.20	1.14
	2004	19,920,000	148,332,000	128,412,000	0.84	0.73	1.16
	2005	35,882,000	200,092,000	164,210,000	1.14	0.93	1.22
	2006	13,386,000	263,277,000	249,891,000	0.74	0.70	1.05
Housing Bank for Commerce and Trading	2002	3,488,126	22,003,377	18,515,251	0.22	0.19	1.19
	2003	9,364,765	22,153,569	12,788,804	0.22	0.13	1.73
	2004	9,567,322	30,294,449	20,727,127	0.30	0.21	1.46
	2005	26,149,079	74,051,778	47,902,699	0.74	0.48	1.55
	2006	15,559,266	94,705,866	79,146,600	0.38	0.32	1.20
Bank of Jordan	2002	991,289	8,025,649	7,034,360	0.23	0.20	1.14
	2003	53,583	7,552,424	7,498,841	0.21	0.21	1.01
	2004	1,878,905	14,395,002	12,516,097	0.32	0.28	1.15
	2005	7,719,040	23,207,357	15,488,317	0.35	0.23	1.50
	2006	-1,577,764	25,582,705	27,160,469	0.30	0.32	0.94
Arab Banking Corporation	2002	-3,073,506	7,104,581	5,604,013	0.36	0.28	1.27
	2003	2,511,484	5,795,830	3,284,346	0.25	0.14	1.76
	2004	2,671,504	6,627,884	3,956,380	0.24	0.14	1.68
	2005	1,739,706	11,861,343	10,121,637	0.34	0.29	1.17
	2006	1,193,634	10,991,248	9,797,614	0.25	0.22	1.12
Jordan-Kuwait Bank	2002	4,693,318	10,328,416	5,635,098	0.42	0.23	1.83
	2003	3,408,523	13,565,035	10,156,513	0.55	0.41	1.34
	2004	1,986,220	19,233,281	17,247,061	0.62	0.56	1.12
	2005	3,590,161	27,545,183	23,955,022	0.70	0.61	1.15
	2006	159,220	39,623,369	39,464,149	0.54	0.53	1.00
National Bank	2002	-894,453	-3,758,315	-2,863,862	-0.09	-0.07	1.31
	2003	1,965,709	-8,313	-1,974,022	0.00	-0.04	0.00
	2004	2,034,367	6,621,814	4,587,447	0.11	0.08	1.44
	2005	2,528,030	25,429,070	22,901,040	0.31	0.28	1.11
	2006	-272,472	20,229,095	20,501,567	0.18	0.19	0.99
Union Bank	2002	317,982	3,229,917	2,911,935	0.16	0.15	1.11
	2003	-10,213,028	-691,236	9,521,792	-0.03	0.48	-0.07
	2004	5,312,123	10,802,344	5,490,221	0.43	0.22	1.97
	2005	19,506,736	24,652,146	5,145,410	0.62	0.13	4.79
	2006	-928,377	12,422,634	13,351,011	0.23	0.24	0.93
Cairo-Amman Bank	2002	1,100,090	1,442,639	342,549	0.07	0.02	4.21
	2003	4,344,303	4,460,845	116,542	0.22	0.01	38.28

BANK NAME	YEAR	Gains or losses	NIW	NIWO	EPSW	EPSWO	EPS ratio
	2004	3,171,159	12,369,653	9,198,494	0.41	0.31	1.34
	2005	17,246,635	31,474,539	14,227,904	0.70	0.32	2.21
	2006	10,028,921	19,248,635	9,219,714	0.29	0.14	2.09
Commercial Bank	2002	133,930	-14,346,993	-14,480,923	-0.36	-0.36	0.99
	2003	284,867	-1,179,495	-1,464,362	-0.03	-0.04	0.81
	2004	1,782,045	3,679,306	1,897,261	0.09	0.05	1.94
	2005	12,099,974	13,015,074	915,100	0.26	0.02	14.22
	2006	-2,341,592	10,682,700	13,024,292	0.19	0.23	0.82
Arab Jordan Investment Bank	2002	12,246	3,098,519	3,086,273	0.15	0.15	1.00
	2003	867,405	4,348,265	3,480,860	0.22	0.17	1.25
	2004	1,651,689	5,057,195	3,405,506	0.17	0.11	1.49
	2005	7,655,939	8,558,121	902,182	0.29	0.03	9.49
	2006	1,136,014	8,338,171	7,202,157	0.19	0.16	1.16
Jordan Bank for Investment and Finance	2002	924,434	22,727	-901,707	0.00	-0.05	-0.03
	2003	7,003,206	36,571	-6,966,635	0.00	-0.26	-0.01
	2004	5,977,079	4,082,944	-1,894,135	0.14	-0.06	-2.16
	2005	21,039,820	27,551,003	6,511,183	0.83	0.20	4.23
	2006	-762,003	9,771,765	10,533,768	0.22	0.24	0.93
Industrial Development Bank	2002	36,677	4,476,024	4,439,347	0.19	0.18	1.01
	2003	47,411	2,835,894	2,788,483	0.12	0.12	1.02
	2004	-820,147	3,478,812	4,298,959	0.14	0.18	0.81
	2005	614,459	9,312,980	8,698,521	0.39	0.36	1.07
	2006	24,984	7,870,663	7,845,679	0.33	0.33	1.00

Furthermore, Table 2 includes the results of implementing equation (2) (EPS ratio). The dominant value of this ratio exceeded 1 for the vast majority of the banks' observations over all years. This result indicates that most of Jordanian banks' earnings had unrealized gains during the period of the study 2002-2006. The magnitude of differences in income related to the inclusion of fair value accounting in Jordan is many times higher than that found by several relatively similar studies based on data generated from more-developed countries (see for example Barth et al., 1995; Cornett et al., 1996; Eccher et al., 1996, Khurana and Kim, 2003), thus strengthening the argument that due to low market efficiency, a market such as that of Jordan can be much more vulnerable to economic consequences of new accounting regulations than more-developed countries' markets.

Also, as shown in Table 3 which includes 60 observations, 73% of these observations are in the category of ***EPS Ratio*>1** and 22% are in the category of ***EPS Ratio*<1,** with the remaining 5% in the category of ***EPS Ratio*=1.** But when considering the data of 2005 and 2006 analyzed separately, the results show a significant change. In 2005 100% of the observations are in the category of ***EPS Ratio*>1**, but in 2006 just 41% of the observations are in the category of ***EPS Ratio*>1,** while 59% are in the categories of ***EPS Ratio*=1 or less.** These results show that the volatility of banks' earnings in 2005 and 2006 are very notable. Consequently, the changes in banks' reported financial performance are

significantly obvious as a result of adopting fair value accounting and including unrealized holding gains and losses. Including such gains and losses in the reported income significantly affects the income, and this effect is a result of accounting measures more than a result of economic activities, as evidenced by the fact that for 2006 most banks made higher profits excluding fair value measurement than they made in 2005, yet they reported significantly lower profits for 2006 after adding the fair value measurement effect. These results are consistent with those of studies such as Barth et al. (1995) and Bernard et al. (1995).

Table 3: Range of EPS ratio during the period of 2002-2006

For all observations (all banks and all years)

range	***EPS Ratio*<1**	***EPS Ratio*=1**	***EPS Ratio*>1**			**total**
			1.01-1.5	1.51-2.00	more than 2	
number of observations	13	3	29	7	8	60
percentage	22%	5%	48%	12%	13%	100%

For all banks in year 2005

range	***EPS Ratio*<1**	***EPS Ratio*=1**	***EPS Ratio*>1**			**total**
			1.01-1.5	1.51-2.00	more than 2	
number of observations	0	0	6	1	5	12
percentage	0%	0%	50%	8%	42%	100%

For all banks in year 2006

range	***EPS Ratio*<1**	***EPS Ratio*=1**	***EPS Ratio*>1**			**total**
			1.01-1.5	1.51-2.00	more than 2	
number of observations	5	2	4	0	1	12
percentage	42%	17%	33%	0%	8%	100%

Furthermore, as shown in Table 4, the income increased significantly as a result of valuing the financial instruments at fair value. As an example, the income of Cairo-Amman Bank doubled during the period of 2002-2005 as a result of valuing financial instruments at fair value. The income of Jordan Bank for Investment and Finance is quadrupled when unrealized holding gains and losses get included in the income.

Table 4: Jordanian bank incomes with and without the gains or losses of valuing banks financial instruments at fair value for the entire period of 2002-2006

BANK NAME	NIW	NIWO	Increase ratio*
Arab Bank	172,420,200	154,938,000	11.3%
Housing Bank for Commerce and Credit	48,641,808	35,816,096	35.8%
Bank of Jordan	15,752,627	13,939,617	13.0%
Arab Banking Corporation	8,476,177	6,552,798	29.4%
Jordan-Kuwait Bank	22,059,057	19,291,569	14.3%
National Bank	9,702,670	8,630,434	12.4%
Union Bank	10,083,161	7,284,074	38.4%

BANK NAME	NIW	NIWO	Increase ratio*
Cairo-Amman Bank	13,799,262	6,621,041	108.4%
Commercial Bank	2,370,118	-21,726	11008.9%
Arab Jordan Investment Bank	5,880,054	3,615,396	62.6%
Jordan Bank for Investment and Finance	8,293,002	1,456,495	469.4%
Industrial Development Bank	5,594,875	5,614,198	-0.3%

* Increase ratio is calculated as [(NIW – NIWO) / NIW] x 100%

Moreover, and in order to test the hypothesis of the study (The volatility of EPSW is significantly greater than the volatility of EPSWO) which is built on a presumption that fair-value-based earnings are more volatile than those based on historical cost, a Paired t-test is used to allow the comparison between the means of EPSW and EPSWO. The results are shown in Table 5.

Table (5): Statistical tests (parametric and non-parametric) to compare measures of income volatility

Paired-Sample for Means (T Test)		
	EPSW	EPSWO
EPS Means	.3375	.2533
EPS Variance	0.32384	0.295069
NI Means	26922750.98	21978165.82
NI Variance	49296876.99	44759455.61
Observations	60	
Df	59	
t Stat	2.1712	
P(T<=t) two-tail	0.0139* *(P <0.05)*	
Two-Related-Samples Test (Wilcoxon)		
z Stat	2.4565	
P(T<=t) two-tail	0.0045**(P <0.05)*	

*The results are significant (P <0.05)

The mean of EPSWO (.2533) is less than the mean of EPSW (.3375) and the variance for the first measure is less than the second measure. These results indicate that using fair value measurement leads to volatility of earnings and EPS, the mean of net income for all the banks under investigation was (26922750.98JD) wile it was (21978165.82) when fair effect is excluded from the net profit. Such information may impact on investors, potential investors, debt covenants, credit ratings and others. Second, as shown in Table 5 both parametric and nonparametric statistical tests are used to test the volatility of earnings. The calculated t-statistic (t-stat) is 2.17 and the P-value (two-tails test) is 0.0139; which means the P value is less than 0.05 and then our probability of making an inaccurate judgment by rejecting the null hypothesis is less than 5 out of 100. Also when a two related samples test (Wilcoxon) is used z-statistic (z-stat) was 0.0045, which is significantly less that 0.05. Consequently, firm-specific t- and z-statistics (i.e., parametric and nonparametric statistical tests) reject (P-values < 0.05) the null hypothesis of equal means of the measures of volatility with and without fair value. Accordingly, we conclude that there is a difference between the net income volatility when fair

value accounting differences are included and the net income volatility when they are not included.

CONCLUSIONS

The main issues that can be concluded from the previous results and discussion are that changes in banks' reported financial performance are significantly obvious as a result of adopting fair value accounting and including unrealized holding gains and losses in the calculation of reported income. Including such gains and losses in the reported income significantly affects the income, and this effect is a result of accounting measures more than being a result of economic activities. This effect is more apparent in developing countries, such as Jordan, where the financial market is inefficient. As it can be seen, results of the year 2005, which coincided with widespread application of IAS 39 in fair value measurements of investments has led to a very dramatic effect on the market, causing abnormally high earnings for banks caused mainly by fair value accounting measures, rather than better economic performance. The economic consequences of such fair value measurements in a relatively weak efficient market included very sharp changes in share prices and the entry of a large percentage of new speculative investors, many of whom may be classified as naïve, who probably believed that the economic performance of listed companies, especially banks, has dramatically improved. By the release of the 2006 income information, there was a major reverse in the stock prices situation, which would probably have caused significant losses to many of the investors, especially the new ones who entered at the 2005 income release prices.

An arguably ironic conclusion from the findings of this study may be that in a relatively small and inefficient capital market, share prices tend to affect banks' reported profits, rather than the theoretically more-expected opposite direction. That is, given the significant percentage of profit coming to banks from security portfolios, such unrealistic share prices in the market will impact the bank's reported income or loss probably to a larger degree than its own economic performance. It is highly possible in this environment that a good economic performance will be reported in the income statement's bottom-line as a poor one, while a poor economic performance will be reported in the income statement's bottom-line as a good one, based mainly on the results of share price volatility in a market that can be described as generally inefficient and including too many naïve investors. The effects of such profit and share price volatility in less-efficient markets are expected to be significantly higher than those in more efficient markets.

This caused a problem for the Jordanian economy. In fact, and in a relative departure from IFRS, Jordanian public listed companies were required not to use fair value in their income statements for the year 2007. That is, the companies were not allowed to classify any investments in financial instruments as trading investments. In addition, all optional fair valuations of investment property and property, plant and equipment were disallowed. The effect of this regulation, if it were to be generally applied, is yet to be seen after the release of future financial statements. Full information about this situation is not yet available to the researchers.

The situation reported in this study would cause a lot of concern in such a small stock market of a developing country, and would arguably question the logic of using fair value measurements included in IFRS, whether mandatory (as is the case of trading and available-for-sale securities, where in the case of the former the resulting gains or losses are included in reported net income) or optionally (as in the cases of investment properties or fixed asset revaluation). It can be concluded that the application of fair value accounting measurement may be arguably harmful for developing countries' stock markets, and it may be recommended that it should be amended, allowed as an alternative treatment, or even dropped in financial reporting for such stock markets, given that the results and subsequent economic consequences would be arguably much larger in these markets, compared to those of the more-developed countries' markets.

REFERENCES

Alshiab, M. and Alalawneh, A. 2007. Common Shares Performance Evaluation for Companies Listed at Amman Stock Exchange, ***Dirasat: Administrative Sciences***, 34(1): 210-220.

Alfredson, K., Leo, K., Picker, R., Pacter, P., Radford, J. and Wise, V. 2007. ***Applying International Financial Reporting Standards***, John Wiley & Sons Australia, Ltd.

Anagnostopoulos, Y. and Buckland, R. 2005. Historical Cost Versus Fair Value Accounting in Banking: Implications for Supervision, Provisioning, Financial Reporting and Market Discipline, ***Journal of Banking Regulation***, 6 (2): 109-127.

Armstrong, C., Barth, M.E., Jagolinzer, A. and Riedl, E.J. 2006. Market Reaction to Events Surrounding the Adoption of IFRS in Europe, Working paper, Stanford University.

Barlev, B. and Haddad, J.R. 2003. Fair Value Accounting and the Management of the Firm, ***Critical Perspectives on Accounting,*** 14: 383-415.

Barlev, B. and Haddad, J.R. 2007. Harmonization, Comparability, and Fair Value Accounting, ***Journal of Accounting, Auditing and Finance***, 22 (3): 493-509.

Barth, M.E. 1994. Fair Value Accounting: Evidence from Investment Securities and the Market Valuation of Banks, ***The Accounting Review,*** 69 (1): 1-25.

Barth, M.E. 2006. Including Estimates of the Future in Today's Financial Statements, ***Accounting Horizons***, 20 (3): 271-285.

Barth, M.E., Beaver, W.H. and Landsman, W.R. 1996. Value-Relevance of Banks' Fair Value Disclosures under SFAS No. 107, ***The Accounting Review***, 71 (4): 513-537.

Barth, M.E. and Clinch, G. 1998. Revalued Financial, Tangible, and Intangible Assets: Associations with Share Prices and Non-Market-Based Value Estimations, ***Journal of Accounting Research,*** 36 (supplement), 199-233.

Barth, M.E. and Landsman, W.R. 1995. Fundamental Issues Related to Using Fair Value Accounting for Financial Reporting, ***Accounting Horizons***, 9 (4): 97-107.

Barth, M.E., Landsman, W.R. and Wahlen, J.M. 1995. Fair Value Accounting: Effects on Banks' Earnings Volatility, Regulatory Capital, and Value of Contractual Cash Flows, ***Journal of Banking and Finance***, 19: 577-605.

Beatty, A., Chamberlain, S. and Magliolo, J. 1996. An Empirical Analysis of the Economic Implications of Fair Value Accounting for Investment Securities, ***Journal of Accounting and Economics***, 22: 43-77.

Ben Hamida, N. 2007. An Investigation of Capital Market Reactions of Quoted French Banks to Pronouncements on IAS 39, Paper presented at The British Accounting Association Annual Conference, 3-5 April, London.

Benston, G.J. 2005. Accounting doesn't Need Much Fixing (Just Some Reinterpreting), in Chew Jr., D.H. and Gillan, S.L. (editors), ***Corporate Governance at the Crossroads: A Book of Readings***, McGraw-Hill/Irwin, pp. 492-505.

Benston, G.J. 2008. The Shortcomings of Fair-Value Accounting Described in SFAS 157, ***Journal of Accounting and Public Policy***, Vol. 27, pp. 101-114.

Bernard, V.L., Merton, R.C. and Palepu, K.G. 1995. Mark-to-Market Accounting for Banks and Thrifts: Lessons from the Danish Experience, ***Journal of Accounting Research***, 33 (1): 1-32.

Callao, S, Jarne, J.I. and Lainez, L.A. 2007. Adoption of IFRS in Spain: Effect on the Comparability and Relevance of Financial Reporting, ***Journal of International Accounting, Auditing and Taxation,*** 16 (2): 148-178.

Carroll, T.J., Linsmeier, T.J. and Petroni, K.R. 2003. The Reliability of Fair Value versus Historical Cost Information: Evidence from Closed-End Mutual Funds, ***Journal of Accounting, Auditing and Finance***, 18 (4): 1-23.

Cornett, M.M., Rezaee, Z. and Tehranian, H. 1996. An Investigation of Capital Market Reactions to Pronouncements on Fair Value Accounting, ***Journal of Accounting and Economics***, 22: 119-154.

Deegan, C. and Unerman, J. 2006. ***Financial Accounting Theory***, European edition, McGraw-Hill Companies, Inc.

Drever, M., Stanton, P. and McGowan, S. 2007. ***Contemporary Issues in Accounting***, John Wiley & Sons Australia, Ltd.

Dickinson, G. and Liedtke, P. 2004. Impact of a Fair Value Financial Reporting System on Insurance Companies: A Survey, ***Geneva Papers on Risk and Insurance: Issues and Practice,*** Special Issue.

Eccher, E.A., Ramesh, K. and Thiagarajan, S.R. 1996. Fair

Value Disclosures by Bank Holding Companies, ***Journal of Accounting and Economics***, 22: 79-117.

Evans, T.G. 2003. ***Accounting Theory: Contemporary Accounting Issues***, Thomson Learning, South-Western.

Financial Accounting Standards Board (FASB), ***SFAS 157: Fair Value Measurements***.

Gebhardt, G., Reichardt, R. and Wittenbrink, C. 2004. Accounting for Financial Instruments in the Banking Industry: Conclusions from a Simulation Model, ***European Accounting Review,*** 13 (2): 341-371.

Hitz, J.-M. 2007. The Decision Usefulness of Fair Value Accounting – A Theoretical Perspective, ***European Accounting Review***, 16 (2): 323-362.

Hodder, L.D., Hopkins, P.E. and Wahlen, J.M. 2006a. Risk-Relevance of Fair Value Income Measures for Commercial Banks, ***The Accounting Re***view, 81 (2): 337-375.

Hodder, L.D., Mayew, W. J. McAnally, M. L. and Weaver C. D. 2006b. Employee Stock Option Fair-Value Estimates: Do Managerial Discretion and Incentives Explain Accuracy?, ***Contemporary Accounting Research*** 23 (4): 933-975.

International Accounting Standards Board (IASB), ***IAS 39: Financial Instruments: Recognition and Measurement***.

Jermakowicz, E.K. and Gornik-Tomaszewski, S. 2006. Implementing IFRS from the Perspective of EU Publicly Traded Companies, ***Journal of International Accounting, Auditing and Taxation***, 115: 170-196.

Khurana, I.K. and Kim, M. 2003. Relative Value Relevance of Historical Cost vs. Fair Value: Evidence from Bank Holding Companies, ***Journal of Accounting and Public Policy***, 22: 19-42.

King, A. 2009. Determining Fair Value: The very Essence of Valuation is the Professional Judgment of the Appraiser, not Just a Set of Rules, ***Strategic Finance***: 27-32.

Landsman, W.R. 2007. Is Fair Value Accounting Information Relevant and Reliable? Evidence from Capital Market Research, ***Accounting and Business Research***, Special Issue: International Accounting Policy Forum: 19-30.

Larson, R.K. and Street, D.L. 2004. Convergence with IFRS in an Expanding Europe: Progress and Obstacles Identified by Large Accounting Firms' Survey, ***Journal of International Accounting, Auditing and Taxation***, 19: 89-119.

Lopes, P.T. and Rodrigues, L.L. 2007. Accounting for Financial Instruments: An Analysis of the Determinants of Disclosure in the Portuguese Stock Exchange, ***International Journal of Accounting,*** 42: 25-56.

Nelson, K.K. 1996. Fair Value Accounting for Commercial Banks: An empirical Analysis of SFAS No. 107, ***The Accounting Review***, 71 (2): 161-182.

Omet, G. 1999. The Jordanian Stock Exchange: Prospects and Challenges, ***Dirasat: Administrative Sciences,*** 26 (1): 132-139.

Omet, G. and Bino, A. 2000. On the Assessment of Risk and Return in Amman Financial Market, ***Dirasat: Administrative Sciences,*** 27 (1): 233-241.

Owusu-Ansah, S. and Yeoh, J. 2006. Relative Value Relevance of Alternative Accounting Treatments of Unrealized Gains: Implications for the IASB, ***Journal of International Financial Management and Accounting***, 17 (3): 228-255.

Pacter, P. 2005. What Exactly is Convergence? ***International Journal of Accounting, Auditing and Performance Evaluation***, 2 (1/2): 67-83.

Penman, S.H. 2007. Financial Reporting Quality: Is Fair Value a Plus or a Minus?, ***Accounting and Business Research***, Special Issue: International Accounting Policy Forum: 33-44.

Rayman, R.A. 2007. Fair Value Accounting and the Present Value Fallacy: The Need for an Alternative Conceptual Framework, ***British Accounting Review,*** 39 (3): 211-225.

Riahi-Belkaoui, A. 2004. ***Accounting Theory***, Fifth edition, Thomson Learning.

Ronen, J. 2008. To Fair Value or not to Fair Value: A Broader Perspective, ***ABACUS***, 44 (2): 181-208.

Turel, A. 2007. The Use of Fair Value Accounting in Turkey: Evidence from Real Estate Investment Trusts, Paper presented at The Future of Accounting and Accounting Profession conference, 30/5-3/6 2007, Istanbul.

Whittington, G. 2005. The Adoption of International Accounting Standards in the European Union, ***European Accounting Review***, 14 (1): 127-153.

Wolk, H.I., Dodd, J.L. and Tearney, M.G. 2004. ***Accounting Theory: Conceptual Issues in a Political and Economic Environment***, Sixth edition, Thomson South-Western, USA.

Yonetani, T. and Katsuo, Y. 1998. Fair Value Accounting and Regulatory Capital Requirements, ***Economic Policy Review,*** 4 (3). Available at SSRN: http://ssrn.com/abstract=1028734

Zeff, S.A. 2008. Political Lobbying on Accounting Standards – US, UK and International Experience, in Nobes, C. and Parker, R. (editors), ***Comparative International Accounting,*** Ninth edition, Pearson Education Limited, Prentice Hall, Financial Times: 206-234.

نتائج تطبيق محاسبة القيمة العادلة للأدوات المالية في الدول النامية: حالة القطاع المصرفي الأردني

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ملخـص

لقد شكل تطبيق معايير الإبلاغ المالي الدولية بشكل ملزم لكثير من الشركات في الدول النامية تحديا بالنسبة للمحاسبين بسبب تركيز المعايير على القيمة العادلة كوسيلة لتحسين عرض القوائم المالية. وهدفت هذه الدراسة إلى تحليل أثر تطبيق محاسبة القيمة العادلة للأدوات المالية في الأداء المالي للشركة وعائد السهم من الأرباح لها. وقد غطت هذه الدراسة البنوك التجارية والاستثمارية الأردنية للفترة من عام 2002 إلى عام 2006، حيث قام الباحثان بعمل مقارنة بين النتائج المحاسبية المنشورة باستخدام القيمة العادلة وتلك المحسوبة باستخدام مبدأ الكلفة لنفس السنوات و تحليل التغير الناتج عن محاسبة القيمة العادلة في النتائج المالية ومدى ملائمة معلومات القوائم المالية لمستخدمي هذه القوائم.

وقد وجدت الدراسة أن الأداء المالي للمصارف تأثر بشكل هام بسبب تقويم الأدوات المالية بالقيمة العادلة، حيث كانت هناك قيم موجبة عالية جدا لعائد السهم من الأرباح عند تطبيق القيمة العادلة في تقويم الأدوات المالية مقارنة بالعائد عند حذف مكاسب أو خسائر حيازة الأدوات المالية. إنه في حالة بعض الدول النامية مثل الأردن، حيث هناك سوق مالية غير كفؤة تتأثر بالفقاعات السوقية لبعض السنوات، فإن استخدام محاسبة القيمة العادلة لتقويم الأدوات المالية يمكن أن يشوه الأرباح ويضلل مستخدمي القوائم المالية. وقد خلصت الدراسة إلى التشكيك في مدى صلاحية تطبيق معايير الإبلاغ المالي الدولية فيما يخص محاسبة القيمة العادلة بنفس الطريقة عالميا.

الكلمات الدالة: محاسبة القيمة العادلة، الأدوات المالية، المصارف، معيار المحاسبة الدولي رقم 39، عائد السهم من الأرباح.

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