

An Analysis on Accounting Assumptions and Principles from Islamic Shariah Perspective

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ABSTRACT

Accounting is a systematic process of recording, reporting, and analysis of financial transactions of a business organization. Accounting assumptions and principles are indispensable for Islamic financial institutions, thus making it imperative to assess their compatibility with Islamic law and principles. These principles are deduced from the sources of Islamic jurisprudence and from traditions as far they do not oppose the rules of the Islamic jurisprudence. Some of these principles may be similar to those applied in the contemporary accounting, but they have evidences from the Islamic juridical literatures.

The main purpose of this paper is to adapt the conventional approach to the study of accounting assumptions and principles to Islamic ideals in an effort of achieving the way of value justification in its practicality in which it could be applied. This research uses a normative-deductive approach to develop an Islamic accounting theory which suggests that anything is permissible unless it is prohibited clearly by the Shari'ah. This paper basically reviews the compatibility of conventional accounting with Islamic law and principle based on the data collected from various secondary sources. It includes a general review of accounting postulates and principles, and considers it in the light of Islamic shariah whether they are acceptable. This study suggests that Islamic banks should be more conscious to maintain Islamic Shariah preparing their financial statement through following these suggestive principles of what the study reveals. The paper also observes some limitations in both theoretical and empirical fields of orientation in terms of applying Islamic accounting which demands more research based study.

Keywords: Accounting assumption, Principles, Islamic Shariah.

1. INTRODUCTION

Accounting is a service activity which provides quantitative information, generally financial in nature, for use in making economic decision. Since the dawn of civilization till the date, monetary transactions are at the core of accounting practices. Accounting is the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information¹. Accounting studied, taught, analyzed and assessed as a separate discipline in the academic world. But at the same time, a financial decision is not merely economic activity alone but it also exhibits its relation to morality, ethnicity, religious practices, history and sociology. Though, accounting indicates the financial transactions as its foremost concern, but it is an outcome of other aspects as well. Allah says in the Holy Quran,

“With Him are the keys (to the treasures) of the Unseen that no one knows but He

¹ AAA(1966), A Statement of Basic Accounting Theory, US: American Accounting Association, p-1.

knows whatever is on the earth and in the sea. Not a leaf falls but with His knowledge: there is not a grain in the earth's shadows, not a thing, freshly green or withered, but it is (inscribed) in a clear record” (Quran 6: 59).

Islamic accounting method helps Muslims to evaluate their own accountabilities and responsibility to Allah in respect of both inter-human and environmental transactions. Allah says in the Quran,

“Allah commands that you should render back the trusts to those to whom they are due”(Quran 4:58). This makes crystal clear the multidisciplinary canon of Islamic Accounting. This paper basically reviews accounting postulates that are generally acceptable and can be used as the basis of accounting in Islamic financial institution.

2. OBJECTIVES OF THE STUDY

The main objective of the study is to analyse accounting assumption and principles in the light of Islamic Shariah. However the specific objectives of this study are as follows-

1. To evaluate basic accounting from the Islamic point of view.

2. To compare accounting principles and postulates with Islamic Shariah.

3. SIGNIFICANCE OF THE STUDY:

Despite myriads of conventional doctrinal viewpoints concerning accounting postulates and principles, the standpoint of Islamic shari'ah relating to this concept is seldom applied in the concern field due to dearth of stakeholders' adequate knowledge. Some study materials show how these principles could place in the accounts field; but lacks of meticulous way-indications it fails to achieve its ground of implication. The study, in this regard, might be catalytic piece with showing indicative measures based on Islamic jurisprudence with a view to making viable accounts system in the concern fields of orientation.

3. METHODOLOGY OF THE STUDY

The study is based on data collected from both primary and secondary sources. The primary data are collected from the text of the Holy Quran and the secondary data included both local and international studies conducted on the subject. The secondary data are collected from the following sources:

- Various research publications.
- Journal
- Books relating to Islamic Accounting.

4. LITERATURE REVIEW

Ahmed E A G (1994) in his paper mentioned that accounting principles are generally accepted for fairness accounting in Islamic banks. Although Islamic banks operate in a different way from conventional banks that does not mean that they are totally different financial institutions which need entirely different accounting. All principles and procedures which maintain fairness and justice are accepted in accounting for Islamic banks.

Baydoun & Willet, (1998) mentioned in his paper that the concept of accounting ensures only economic events, which are reliably measurable in monetary terms, are measured and reported. Hence the so-called externalities are left out. Since Islamic accounting has a social accountability dimension, Islamic accounting cannot restrict itself to the monetary measurement concept. The researcher proposes that to the extent possible, externalities be measured in monetary terms where possible and included in the Islamic accounting report. If not, at least qualitative disclosure is required.

Ijiri (1971) argued in his paper that, Islam frowns on unearned income and wishes the dignity of labour to be recognised. Hence if we use the net change in value method, using NRV (Net Realisable Value) or CCE (current cost equivalent),

the operational aspect of the business is not emphasized. Further the way in which the year end assets and liabilities came about is not known. This is especially important in *mudharaba* accounting where entrepreneurs are rewarded on their effort. Islamic accounting should not ignore transactions based - historic cost accounting all together even it might be the best system to avoid disputes.

Ibrahim S H B M told in his research paper that accounting for Islamic banks and financial institutions is not Islamic Accounting but only a subset of it. Islamic accounting is not the just technicalities of accounting for Islamic financial instruments employed by Islamic banks but much more requiring whole new areas of performance measurement including the social, environmental, and economic and the Shariah.

Ziad M F Al Sadiat (2014) in his research paper mentioned that there is a need to restructure the financial statements to be prepared in accordance with current market value instead of being prepared according to the historical cost convention.

Shehata H in his paper told that the main objective of Islamic accounting is Islamic accountability. *Zakat* calculation, Shari'ah compliance, equitable wealth distribution and the creation of a co-operative and conducive environment instead of competition and conflict were seen as subsidiary objectives of Islamic accounting.

Rahim A & Goddard (1998) in this paper the researcher explored that the Islamic economic system may need an alternative "Islamic accounting" System that would provide appropriate information which hopefully would induce user behaviour consistent with the Islamic worldview. This research project hopes to make an initial contribution in this area.

Buchman (2001) views that the value of land and buildings remains stable and that there is a simple change from one year to another because they do not use the level of other fixed assets. Similarly, Caste (2001) pointed to improve the objectivity and neutrality of accounting as well as Obert (2004) that companies can get over the reliability of financial statements through the process of re-evaluation.

5. Limitations of the study: For preparing this article the researcher faces some problems. These are as follows:

1. For research purpose various relevant data and information are most essential. But the researcher found very little research work on this relevant field.
2. Some principles of accounting still create confusion among Islamic scholars. They could not reach to the

complete conclusion about this concept till now.

3. Time to prepare the report is also an important for research work which was not available to the researcher.

In spite of these limitations it can be said that, such limitations are common to almost all research study. Yet the researcher has tried her best to minimize the profitability of errors.

6. ANALYSIS AND FINDINGS

6.1 Meaning of Islamic Accounting

Islamic accounting can be defined as the “accounting process” which provides appropriate information (not necessarily limited to financial data) to stakeholders of an entity which will enable them to ensure that the entity is continuously operating within the bounds of the Islamic Shari’ah and delivering on its socio economic objectives.² The Holy Quran says,

“o ye who believe when ye deal with each other, in transaction involving future obligations in a fixed period of time, reduce them to writing. Let a scribe be written down faithfully as between the parties” (2:282).

The Islamic accounting can be differentiated from conventional accounting from the following point of view:

1. The objectives of providing the information
2. Identify the type of information, and how is it measured and valued, recorded and communicated, and
- 3 Who will be the users of this information.

While conventional accounting aims to permit informed decisions whose ultimate purpose is to efficiently allocate scarce resources available to their most efficient (and profitable) uses by providing information efficiency in the market (FASB, 1978). Islamic Accounting, on the other hand, hopes to enable users to ensure that Islamic organisations abide by the principles of the Shari’ah or Islamic Law in its dealings and enables the assessment of whether the objectives of the organisation are being met.³

6.2 Accounting Assumptions and Principles from an Islamic Perspective

Accounting assumptions are fundamental propositions concerning the economic, political and

² Md. Jahirul Hoque & others, Financial Accounting: Conventional and Islamic Approach, Dhaka: BIIT, 2013, p 10.

³ Baydoun and Willet (2000), “The Islamic Corporate Report”, Abacus, Vol. 36, No. 1, 2000.

sociological environment in which accounting operates. They serve as a foundation for the logical derivation of further propositions, and they must be generally accepted by accountants. Some key accounting assumption and principles, and their acceptability in the light of Islamic Shariah are analyzed here in brief:

6.2.1 Accounting Entity Assumption

Under the entity theory, net income does not belong to the proprietor but to the entity, which is regarded as separate and distinct from providers of capital. Not all income accruing to the entity, but only that part of income which is earmarked for distribution to the shareholders really belongs to the owners. This assumption enables the user to differentiate between the person or persons who own the enterprise and the enterprise itself.⁴ The entity theory has its main application in the corporate form of business enterprise because it has a separate existence from the lives of individual owners.

6.2.2 Accounting Entity from the Islamic Point of View

The entity theory expresses the firm as a separate and distinct entity from the owners and other firms. The firm itself act as a person and can own, purchase or disposed its assets.

The basic of this theory are now can be considered from Islamic shariah point of view in order to see whether the entity theory contradicts with islam or not. The principles and rules which govern financial contracts in Islam, as summarized by Ibn al A'rabi, are:

1. Interest is prohibited but trade is allowed with a certain restriction on trade condition and practices.
2. Unjustified enrichment is prohibited. Al-Quran says: "*do not eat up your property among yourselves for vanities*" (Qur'an, IV:29)
3. Uncertainty in trade contracts is not permitted that is, a sale which involves fraud or unfair exchange is not allowed.
4. Intentions and aims of all transaction is to welfare of all parties. It is not permitted to commit an illegitimate act through a trick.

The accounting entity theory does not contradict with any of these four rules; indeed it is compatible with Islamic principles. Because this entity assumption makes matters easier for the clients of the

⁴ L.S.Porwal (2003), “Accounting Theory” Tata McGraw-Hill Publishing Co.Ltd,N.D.

enterprise instead of dealing with many owners the clients are dealing with only one nominal person.

6.2.3 The Going Concern Assumption

The underlying Assumption is that “the business will not be sold or terminated in the near future but will continue to carry on its operational objectives independently. The financial statements of an entity are prepared on the assumption that it is a continuing enterprise. That’s why it is also called continuity postulates.

The postulates assume either that the entity is not expected to liquidate in the foreseeable future or that it will continue for an indefinite period of time.⁵

This assumption however, has come under several criticisms from many accountants. Sterling describes it as an unreasonable and absurd assumption. He argues that the high rate of business failures makes it difficult to build an evidential case for a projection of continuity.⁶ Fremgen also attacks the going concern assumption, arguing that it is not a scientific fact or even a completely rational assumption.”⁷

6.2.4 The Going-Concern Assumption from an Islamic Perspective

This assumption assumes that the entity is a going-concern or is remaining in operation in the absence of any evidence to the contrary. This assumption does not apparently contradict any of the Islamic principles. Because In Islamic jurisprudence there is a similar principle to this postulate, that is, the principle of ‘Istihab’ which means retaining any event or verdict experienced in the past, until any contrary evidence is found to the fact that the event has changed or verdict has changed.⁸

6.2.5 Accounting Period Assumption

The financial statements representing the financial performance and financial position of the business are periodically disclosed based on this assumption.

Although the continuity principle assumes that the organization will continue for a long time,

⁵ Belkaoui, “Accounting Theory”,Harcourt Brace, Javonovich,1981 P. 103.

⁶ R.R. Sterling, "Conservatism: the Fundamental Principles of Valuation in Traditional Accounting", in: S.A. Zeffand T.F. Keller (eds.), Financial Accounting Theory, McGraw-Hill, Inc., N.Y., 1973, p.536.

⁷ J.M.Fremgen, “The Going Concern Assumption: A Critical Appraisal”, The Accounting Review, volume XLIII, October 1968,pp.649-56

⁸M.Zohurul Islam, Accounting Philosophy Ethics and Principles: the Islamic Perspective, Dhaka: BIIT, 2000,p 54.

users require a variety of information about financial position and performance of a company for taking short term decisions.

Paton considers this postulate as a very important convention of accounting. For comparing between revenues and applicable costs related to fiscal year, the accounting period postulate enables accountants to analyze and rearrange original accounting data to reflect immediate and future administrative decisions.⁹

6.2.6 The Accounting Period Assumption from an Islamic Perspective

In Islamic point of view, this assumption may be accepted based on the ground that Zakat is paid annually and conditions for applicability of Zakat is holding of assets for one year.

Accrual accounting entails the assignment of revenue to the fiscal year in which it was earned rather than received. This basis of accounting could cause firms to pay Zakat for revenues not yet received, and according to the Maliki school of thought loans are exempted from Zakat.

6.2.7 The Unit-of-Measure Assumption

The unit-of-measure assumption states that accounting focuses on the measurement and reporting, in monetary terms, of the flows of resources into and out of an organization, of the resources controlled by the organization, and of the claims against those resources.¹⁰ In view of the general stability of money, this unit of measure postulate was regarded as a ‘stable monetary postulate’ in accounting theory. In this assumption it is assumed that over a period of time the purchasing power of money either remains stable or changes insignificantly. Belkaoui states that’s accounting is limited to the production of information expressed in terms of a monetary unit, it does not record and communicate other relevant but non-monetary information.

6.2.8 The Unit-of-Measure assumption from an Islamic Point of view

Money as a unit of measure can be accepted in Islam under a stable monetary system, where stability in the value of money is maintained, because of the unequivocal stress of Islam upon honesty and justice in all measures of value.¹¹ Give just measure and weight, nor withhold from the people the things that are their due (7:85).

Money as a unit-of-measure has a universal acceptance among Islamic jurists. Money

⁹ W.A. Paton and A.C. Littleton, An Introduction to Corporate Accounting Standards, 1967, p-22.

¹⁰ Welsch and Anthony, Fundamentals of financial Accounting, Richard Irwin,1977,p.3

¹¹ M.U. Chapra, Towards a Just Monetary System, the Islamic Foundation, Leicester, 1985, p37.

has the attribute of exchange as well as store of value. However, if the denominations of money differ, it is allowed to exchange them hand-to-hand, provided the sale and transfer of the two quantities of the different currencies take place on the spot.

6.3. Accounting Principles

Accounting principles are set of rules adopted by the accounting profession as guides for use in recording and reporting the affairs and activities of a business to its shareholders, investors, creditors and other outside parties.

Allah say's in the Holy Quran:

"And come not near to the orphan's property, except to improve it, until he (she) attains the age of full strength; and give full measure and full weight with justice." (Quran, 6: 152).

It is instructed that measure and weight should be given with justice and without withholding from people what is theirs (Qur'an, 7:29, 11:85, 17:35, 55:9, 57:25). Therefore accounting principles in a Muslim Community should be formulated so as to provide fair and just information (i.e. fairness accounting) which is also essential for Zakat determination. However some key accounting principles from Islamic point of view are summarized now in briefly.

6.3.1 The Objectivity Principle

Financial information mostly depends on the reliability of the measurement procedure used in preparing statement containing the information. Financial reporting is considered useful if it provides useful information to potential investors, creditors and other users, on which to base rational investment, credit and similar decisions. The objectivity principle holds that accounting must be carried out on an objective and factual basis. The accounting data should be verifiable, neutral and bias free. This principle has different meanings to different writer. Some writer express that an objective measure is an impersonal measure in the sense that it is free from the personal bias of the measurers that is it should be neutral. For others, measurements which are based on verifiable evidence are treated as objective. The objectivity principle, from an Islamic point of view, is a desired principle especially when recording different transactions, that is assets, goods and services at the price prevailing during the date of acquisition (historical cost). Therefore, the objectivity realized by using cost price at acquisition date is not necessarily achieved when valuation is made at a later date. As a result, it is believed that objectivity can be accepted for recording transactions at the prices of the date of acquisition in Islamic financial institutions.

6.3.2 The Matching Principle

The matching principle is related to the revenue and the expense principles. The matching principle states that when you recognize revenue, you should match related expenses with the revenue. "The matching principles holds that all of the expenses incurred in generating revenue should be identified or matched with the revenue generated, period by period."¹² The accountant should determine whether a cost pertains to future revenues and hence should be deferred; whether a cost is related to past revenues and therefore should be written against prior income; or whether a cost, although not yet paid, is related to current revenues and therefore should be accrued. One of the most desirable and acceptable principles for fairness accounting from an Islamic point of view is the matching principle because it allocates expenses to their related revenue which provides justice and fairness to shareholder and depositors in Islamic financial institution.

5.3.3 The Cost Principle

This principle states that the basis on which assets are recorded in the books of accounts at their cost price that is the price paid to acquire them. Cost will form the basis of which further accounting will be done as regards the asset. No adjustment is made in the cost to reflect the market value of the asset. The cost concept does not imply that asset will always appear at cost in the balance sheet. It only means that cost will be the basis for further accounting treatment. The cost of the asset may be reduced gradually by the process of charging depreciation.

Paul Grady has explained the cost concept in the following words.

"Value as used in accounts signifies the amount at which an item is stated in accordance with the accounting principles related to that item. Using the word value in this sense, it may be said that balance sheet values generally represent cost to the accounting unit or some modifications thereof; but sometimes they are determined in other ways, as for instance on the basis of market values or cost of replacement, in which cases the basis should be indicated in financial statements. The word value should seldom if ever, be used in accounting statement without a qualifying objective."

One of the questionable principles from the Islamic point of view is the cost principle. It contradicts with justice and fairness if valuation made in an inflationary environment. Besides this, financial statement based on cost principles will passively affect depositors who withdraw from investment in Islamic financial institution.

¹² Welsch and Anthony, Fundamentals of financial Accounting, Richard Irwin, 1977, p.144.

6.3.4 The Consistency Principle

The principle indicates that economic events should be recorded and reported in a consistent manner from year to year. The principle implies that the same accounting procedures will be applied to similar items over time. Application of the consistency principle makes financial statements more comparable and more useful, especially within the same firm. Comparing the accounts of different companies is more difficult because of the absence of the consistency in using accounting records. This principle does not allow changes at will from one accounting approach to another. "The application of the consistency principle makes financial statements more comparable and more useful. Inter period comparison and trend analysis can easily be carried out if there has been consistency in the methods and policies of accounting of an entity from period to period."¹³ The consistency principle is desirable from the Islamic point of view, as it helps to provide more useful information and more accurate and fair financial statement.

6.3.5 The Disclosure Principle

There is a general consensus in accounting that there should be fair and adequate disclosure of accounting data. Fair accounting presentation necessitates the adequate disclosure of material information. Adequate disclosure requires that financial statements be designed and prepared to disclose accurately the economic events that have affected the firm for the period and to contain sufficient information to make them useful and not misleading to users and average investors. The term, "disclosure", does not mean that any and all information is to be included in the accounting statements. It implies adequate disclosure of information which is essential to different users for taking financial decision. Adequate disclosure, from an Islamic perspective is also one of the desired principles for fair accounting. It provides the public with the needed information for proper financial decisions.

6.3.6 Realisation Principle

The realisation principles hold that 'revenue' should be recognised in the accounting period only when it is realised. The AICPA has defined revenue as "Revenues results from the sale of goods and the rendering of services and is measured by the charge made to customers, clients or tenants of goods and services furnished to them. It also includes gains from the sale or exchange of assets other than stock in trade, interest and dividend earned on investments and other increase in owner's equity except those arising from capital contribution and capital adjustment. Revenue is sometimes described as operating revenue."

¹³ L.S.Porwal (2003), "Accounting Theory" Tata McGraw-Hill Publishing Co.Ltd,N.D.

The realisation principle can be accepted from the Islamic viewpoint as far as recording of transactions are considered. It is accepted to all to recognize revenue only when it is realized. But this convention might harm transitional investors who withdraw from investment from Islamic financial Institution. Depositors in some Islamic banks have right to withdraw their funds at any time. Thus if some depositor withdraw their fund before the full liquidation of the venture in which their funds or part of them have actually invested, they may lose all or part of the profit that might be realised in the future. Hence it may be argued that this principle conflicts with the requirement of justice and fairness. To overcome this problem it is essential to get a useful insight from the Islamic jurisprudence. In Islamic Shariah, a small percentage of uncertainty in trade is accepted. Thus a small degree of "unfairness" which may affect the bank or its investors may be considered acceptable in eliminating highest degree of unfairness i.e. interest

6.4 Findings

This paper summarizes following findings by analyzing accounting postulates and principles from Islamic point of view:

1. The entity assumption creates possibility to establish huge joint-stock companies, in which a large number of people are involved in the business. This can confirm to the distribution of wealth among a large number of people, where the possibility of concentration of wealth in few hands is reduced. The entity assumption also makes it easier for the court to deal with a nominal person in case of disputes.
2. Going concern assumption does not apparently contradict any of the Islamic principles. In Islamic Shariah there is a similar principle that is *Istihab* which means entity is remaining in operation in the absence of evidence to the contrary.
3. Periodicity assumption may be accepted from Islamic point of view but it creates some confusion for accrual basis accounting. However under this system income not yet received could be deducted for the purpose of zakat calculation because this is not universally accepted among all Muslim jurists.
4. The matching principle as it allocates expenses to their related revenues provides fairness and justice simultaneously to shareholders and depositors in Islamic banks.
5. The consistency principle is desirable from the Islamic point of view. Failure to maintain consistency might lead to unrealistic profit which might have negative impact on Zakat calculation and

- distribution of profit to investment depositors in Islamic Banking.
6. Cost principles conflicts with justice and fairness if valuation is based on it in an inflationary environment which tends to reduce the base value of Zakat.
 7. Realisation Principle might harmful for transitional investors who withdraw their fund before liquidation that may lose all or part of the profit which will realized in the future.
 8. Base value of Zakah and its distribution can also be attained as a result of disclosure principle. It has been pointed out that disclosure is minimal in some Islamic bank, as there is no strong pressure from the public or from the shareholders.

Indeed, it is believed that difficulties involved with other principles can be solved through practice.

7. CONCLUSION

Accounting in Islam, refers to the operations of recording, countess, measurement of financial dealings within Islamic jurisprudence to provide useful, right, timely trust and fair information for decision-making. Accounting for Islamic institutions should be based on justice and fairness to ensure all parties' rights and dues. All principles which help to achieve the objective of justice are acceptable and desirable in Islamic point of view. Fair presentation of financial statement requires not only for the justice and fairness of all parties also needs for the accuracy in terms of Zakat calculation which is the main pillar of Islam. Zakat encourage the truth financial statement. So Islamic financial institutions should prepare their financial statement which ensures recognition, measurement, presentation and disclosure principle of accounting.

REFERENCES

- AAA (1966), *A Statement of Basic Accounting Theory*, US: American Accounting Association.
- Ahmed Belkaoui,(1985) *Accounting Theory*, 2nd edition, Harcourt Brace Jovanovich, Inc., N.Y., London.
- Baydoun and Willet (2000), "The Islamic Corporate Report", *Abacus*, Vol. 36, No. 1.
- Belkaoui, "Accounting Theory",Harcourt Brace, Javonovich,1981
- B Newman and M. Mellmen, *Accounting Theory: ACPA review*, john wiley& Sons, Inc., N.Y.
- Fregmen.J.M, (1968) "The Going Concern Assumption: A Critical Appraisal", *The Accounting Review*, volume XLIII, October.
- Islam.M.Z (2000), *Accounting Philosophy Ethics and Principles : the Islamic Perspective*, Dhaka: BIIT.
- L.S.Porwal (2003), "Accounting Theory" Tata McGraw-Hill Publishing Co.
- Md. Jahirul Hoque & others, *Financial Accounting: Conventional and Islamic Approach*,Dhaka: BIIT,2013,p 10.
- M.Zohurul Islam, *Accounting Philosiphy Ethics and Principles: the Islamic Perspective*, Dhaka: BIIT, 2000,p 54.
- M.U.Chopra,(1985) *Towards a Just Monetary System*, The Islamic Foundation, Leicester.
- Newman and M. Mellmen, *Accounting Theory: ACPA review*, john wiley& Sons, Inc., N.Y.,
- Paton.W.A,(1965) "The Postulates of Accounting", in: M. Moonitz and A.C. Littleton (eds.), *Significant Accounting Essays*, Prentice-Hall, Inc., Englewood Cliffs.
- Sterling.R.R, "Conservatism: the Fundamental Principles of Valuation in Traditional Accounting", in: S.A. ZeffandT.F. Keller (eds.).
- Welsch and Anthony, *Fundamentals of financial Accounting*, Richard Irwin, 1977.