

Measuring and Valuation of Asset: Accounting Theory Perspective

Ruswan Nurmadi¹, Sumardi Adiman¹, Iskandar Muda¹ and Syafruddin Ginting¹

¹*Faculty of Economics and Business, Universitas Sumatera Utara, Medan -Indonesia*

Keywords: Measuring of the asset, valuation of the asset, accounting theory

Abstract: This article defines that measurement and valuation of the asset in accounting are important, that draw concern of the problems that related with measurement and valuation in practice. Firms usually use different methods techniques of measurement, financial and non-financial, and apply mixed valuation methods, which they consider the best for their firms. Considering many factors in measuring and valuation of assets will make the company obtain maximum benefits and reduce the risk of future use of these assets. A lot of literature reviews show that arguments made in accounting theory perspective and business perspective of how firms use decision-useful of their asset measurement and valuation. The terminological change from valuation to measurement increased attention to see what accounting could gain from the classical measurement theory. This measuring and valuation in accounting cause theoretical basis and contemporary dilemmas, by considering between bases non-basic-resources and resources, instrumental and economic values, between measurements and estimates and between measurement and allocation, with the main objective to make useful assessments of possible assets to achieve firms' goals. Although firms will be considered a business valuation framework for asset measurement that will suit their interests, accounting theory perspective will be one of the bases of that decision making.

1 INTRODUCTION

The definition of an asset as a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity (Financial Accounting Standards Board, 2010) has been revised as a present economic resource controlled by the entity as a result of past events. An economic resource is a right that has the potential to produce economic benefits (IFRS, 2018).

Assets can be known by several characteristics. These characteristics are a differentiator with several things. The characteristics of assets are: Assets are economic benefits obtained in the future; Assets are controlled by companies that are controlled by the company; Assets are the result of transactions or events that occurred in the past.

There are various types that makeup assets. This is known as the elements that are able to compile assets as they should. The asset elements are: Current Assets (the definition of current assets is an asset that is expected to be realized which results in long-term benefits of around one year or within the

traditional operational cycle of the corporate. Assets consist of cash, short-term investments, inventory, accounts receivable, accrued income and other accounts, and costs to be paid); Investment / Participation (definition of investment is an asset that is used for the growth of wealth through the distribution of investment returns. The investments made in these assets are also categorized into two types. The types of investments in assets are short-term investments and long-term investments); Fixed Assets (definition of fixed assets is tangible assets obtained in the form that is ready to be used or functioned or built more deeply, which are functioned in the operations of the company, are not intended to be sold which aim at the existence of normal company activities and have a useful life of more than one year. Fixed assets consist of land, buildings, long-term investments, and others), Intangible Assets (the definition of non-referring assets is fixed assets that are not intangible which are beneficial by providing economic and legal rights to an owner. Intangible assets have different types of forms or forms such as goodwill,

trademarks, copyrights, and franchises); Other Assets (as for the other types of assets which are other asset elements, it is described that the items cannot be adequately classified into current assets, investments, ownership, intangible assets, and fixed assets).

From the definition, characteristics, and types of asset, its important to manage assets. (The Institute of Asset Management, 2012) stated that asset management is more than doing things to assets. It is about using assets to deliver value and achieve the organization's business objectives. Its also brings a different approach and way of reflection and a transformation of organizational alignment and organizational culture. Each organization must determine the best way to specify its value, and how to determine the procedures for managing its assets in order to obtain the best total value. Asset management must relevant to all kinds of organization or company, whether they are large, small, private, public, government or not-for-profit. There is growing evidence around the world that effective asset management can improve an organization's reputation and its ability to operate safely; fulfill its regulatory and statutory obligations; significantly minimize the cost of managing assets over their lives; and assess future business strategies for the delivery of differing performance, cost and tolerable risk profiles.

In discussing the measurement and valuation of assets, we must have an understanding of some terms used for the valuation of assets. Historical Cost, as the quantity of cash that paid to acquire an asset ; Current Replacement: The amount of cash that would have been paid to acquire currently the best asset available in the market; Net Realizable Value: The amount of cash expected to be derived from sale of an asset; Net Present Value: This is equal to expected future cash inflows—cash outflows i.e. net cash flows. Thus for the aim of valuation of assets, we've got four bases and our selection can rely on what explicit facet of the quality is to be measured. For an accountant, for example, a historical cost can be used to measure the number of monetary units spent for obtaining the asset, and present value or replacement value can be used to measure the physical aspect of the asset or its replacement aspect.

Valuation of Different Types of Assets: The method of assigning monetary values to the assets, is valuation. Historical cost used is most commonly used bases in traditional accounting. Other bases like current value, replacement value or net realizable value have also included in the process of valuation

of the assets. Valuation of Tangible Fixed Assets: Tangible fixed assets contain long-term assets which provide services beyond one accounting period. They are bought with the objective not to sell. Their value depends upon future cash flows they are adequate of generating. Valuation of Current Assets: Current assets also noticeable as fluctuating or circulating assets, as cash and other assets, which are reasonably expected to be realized in cash, consumed or sold through the normal operating cycle of the business. Monetary assets as if Cash, Bank, Debtors and Bill Receivables, can be valued with more accuracy in comparison to non-monetary assets like stocks. In a matter of non-monetary assets, valuation relies upon a judgment of accountants become a difficult assignment. As valuation of Inventories, (IASB, 2016) has defined inventories as "Inventories are assets: Held for sale in the ordinary course of business; In the process of production for such sale; In the form of materials or supplies to be consumed in the production process or in the rendering of the services.

A lot of literature reviews show that discussions made in accounting theory perspective and business perspective of how firms use decision-useful of their asset measurement and valuation. (Amihud, Mendelson and Pedersen, 2005) reviewing the theory of liquidity and empirical studies that examine these theories. The theory forecasts that both the level of liquidity and liquidity are risky, and the empirical risk factors for controlling asset risk and asset characteristics.

(Acharya and Pedersen, 2005) said that their paper solves explicitly a simple equilibrium model with liquidity risk. In their liquidity-adjusted capital asset pricing model, a security's required return depends on its expected liquidity as well as on the covariances of its own return and liquidity with the market return and liquidity. In addition, a persistent negative shock to a security's liquidity ends up in low contemporaneous returns and high foretold future returns. The model provides a unified framework for understanding the varied channels through that liquidity risk could have an effect on quality asset costs.

(The Institute of Asset Management, 2012) stated that asset can be managed by extracting value more than what you do to assets, it is about using assets to deliver value and reach the organization's business goals. This article explains the importance of valuation and measurement of the asset in accounting, that draw attention to the problems of valuation and measurement in practice, based on literature researches or studies.

2 THEORETICAL FRAMEWORK

Main changes in the definition of an asset are (IFRS, 2018): separate definition of an economic resource—to clarify that an asset is an economic resource, not the ultimate inflow of economic advantages; deletion of ‘expected flow’—it doesn’t ought to make sure, or maybe seemingly, that economic advantages can arise; an occasional likelihood of economic advantages would possibly have an effect on recognition decisions and the measurement of the asset. (IFRS, 2018) also describes measurement. Historical cost measurement bases noted that historical cost provides information derived, at least in part, from the price of the transaction or other event that gave rise to the item being measured, historical price of assets is reduced if they become impaired and historical price of liabilities is accumulated if they become burdensome, a method to use a historical cost measuring basis to monetary assets and monetary liabilities is to live them at amortized value. Current value measurement bases include fair value (the cost that would be received to sell an asset, or paid to transfer a liability, in a presentable transaction between market participants at the measurement date; reflects market participants’ current hopes about the timing, amount, and uncertainty of future cash flows), value in use for assets (reflects entity-specific current hopes about the timing, amount, and uncertainty of future cash flows) and current cost (reflects the current amount that would be paid to achieve an equivalent asset).

(IFRS, 2018) express that the factors to be considered when selecting a measurement basis are relevance and faithful representation because the purpose is to supply information that is useful to lenders, investors, and other creditors. Relevance of information supplied by a measurement basis is influenced by characteristics of the asset or liability (the variability of cash flows; sensitivity of the value to market factors or other risks; for example, amortized cost cannot provide relevant information about a derivative) and contribution to future cash flows (whether cash flows are generated directly or indirectly in combination with alternative economic resources; the character of the entity’s business activities; as an example, if assets are utilized in combination to provide products or services, historical value can offer relevant information about margins achieved in a period). Whether a measurement basis can offer a faithful representation is affected by: measurement inconsistency (if financial statements content measurement inconsistencies (accounting mismatch), those financial statements may not faithfully represent

some aspects of the entity’s financial position and financial performance) and measurement uncertainty (does not necessarily avoid the use of a measurement basis that provides relevant information ; but if too high might make it necessary to consider selecting a different measurement basis.is essentially a process that is marked by changes in a person.

In accounting theory perspective, it can not be separated from the Agency Theory (Jensen, M., & Meckling, 1976). Jensen and Meckling their paper reveal the integrate factors from the theory of agency, the theory of property rights and the theory of finance to construct a theory of the ownership structure of the firm. They establish the concept of agency costs, indicate its relationship to the control and separation issue, inspect the nature of the agency costs produces by the existence of debt and outside equity, show who endures these costs and why, and inspect the Pareto optimality of their presence. They also give a new definition of the firm and show how their analysis of the factors affecting the creation and issuance of debt and equity claims is a special case of the provisioning aspect of the completeness of markets drawback. In various cases, company directors are managers who are also interested in their money, not just other people’s money, so that they cannot be fully expected, that they must watch company directors with the same vigilance as partners in personal business who often oversee themselves. There is a tendency to make it easier to get things without the proper process. This results in negligence in the process of managing corporate affairs. To avoid this, management must take full responsibility in managing the company’s finances. This means that management is responsible for managing the balance of assets, debt, and capital to achieve the goals of companies and investors. In this case, of course, includes the valuation and measurement of assets.

(Barberis, Huang and Santos, 2001) reveal their research about asset prices in an economy where investors acquire direct utility not only from consumption but also from fluctuations in the worth of their financial wealth. They are loss refuse over these fluctuations, and the degree of loss aversion relies on their prior investment performance. They find that their framework can help clarify the excess volatility, high mean and predictability of stock returns, as well as their low correlation with consumption growth. The design of their model is influenced by prospect theory and by experimental evidence on how prior outcomes affect risky choice.

3 RESEARCH METHOD

This article uses literature reviews to explain about the essence and the importance of measurement and valuation of the asset in accounting, that draw concern of the problems that related with measurement and valuation in practice.

4 ANALYSIS AND RESULTS

(Riahi-Belkaoui, 2005) said that there are alternative asset-valuation and income-determination models. There are four attributes of assets and liabilities that may be quantified: historical cost, current entry price, current exit price, capitalized or the present value of expected cash flows. Two units of measure may be used to measure assets and liabilities: money and purchasing power. Asset valuation and financial gain determination models: Historical-cost accounting, Replacement-cost accounting, Net-realizable-value accounting, Present-value accounting, General price-level accounting, General price-level replacement cost accounting, General price-level net realisable-value accounting, General price-level present-value accounting.

(Riahi-Belkaoui, 2005) expressed that in measuring of asset, although theoretically considered the best accounting models, present-value models have recognized practical deficiencies : they require the estimation of future net cash receipts also the temporal order these receipts, as well as the selection of the appropriate discount rates ; when applied to the valuation of individual assets, they require the arbitrary allocation of estimated future net cash receipts and the timing of those receipts as well as the selection of the appropriate discount rates; when applied to the valuation of individual assets, they need the discretionary allocation of calculable future net benefit receipts among the individual assets.

Another approach carried out by (Barberis, Huang and Santos, 2001). They suggest a new framework for pricing assets, derived in part from the traditional consumption-based approach, but which also incorporates two long-standing ideas in psychology: the prospect theory of Kahneman and Tversky - 1979 (Kahneman and Tversky, 1979), and the evidence of Thaler and Johnson - 1990 (Thaler and Johnson, 1990) and others on the influence of previous outcomes on risky alternative. Consistent with prospect theory, the investor in their model derives utility not only from consumption levels but also from changes in the value of his financial

wealth. He is rather more sensitive to reductions in wealth than to will increase, the "loss-aversion" feature of prospect utility. Moreover, according to with experimental proof, the utility he receives from gains and losses in wealth depends on his prior investment outcomes; prior gains cushion subsequent losses -- the so-called "house-money" result -- whereas previous losses intensify the pain of ulterior shortfalls (Barberis, Huang and Santos, 2001). They study asset prices in the presence of agents with preferences of this type and find that our model reproduces the high mean, volatility, and predictability of stock returns. The key to our result is that the agent's risk-aversion changes over time as a operate of his investment performance. This makes costs rather more volatile than underlying dividends, and along with the investor's loss-aversion, results in large equity premia. Their results obtain reasonable values for all parameters (Barberis, Huang and Santos, 2001).

(Chordia, Huh and Subrahmanyam, 2009) link valuation of the asset with liquidity. They said that many proxies of illiquidity have been used in the kinds of literature and studies that connects illiquidity to asset prices. These proxies have been motivated from an empirical viewpoint. In their research, they approach liquidity estimation from a theoretical perspective. Their method explicitly acknowledges the analytic dependence of illiquidity on more primitive drivers such as information asymmetry and trading activity. The empirical results offer evidence that theory-based estimates of illiquidity are priced in the cross-section of expected stock returns, even after accounting for risk factors, firm characteristics are known to influence returns, and other illiquidity proxies prevalent in the literature (Chordia, Huh and Subrahmanyam, 2009).

(Duffie, 2010) stated Dynamic Asset Pricing Theory on the theory of asset pricing and portfolio selection in multiperiod settings under uncertainty. The asset pricing results are built upon the three more and more restrictive assumptions: absence of arbitrage, single-agent optimality, and equilibrium. These results are unified with two key ideas, state prices, and martingales. Technicalities are given comparatively very little pressure, so as to draw connections between these concepts and to make plain the similarities between discrete and continuous-time models. The new chapter is on corporate securities that offer alternative approaches to the valuation of corporate debt (Duffie, 2010).

(Simpson, 2010) notes cover old and new investment methods, regulatory and legal developments and the role of technology as a game changer in asset management. The discussion offers constant weight to the theoretical and practical aspects of asset management. The focus is on

portfolio constructions, asset pricing on the theoretical facet. It contains an asset management industry overview, introduce to data analytics, blockchain, and crypto-currency, demographics and technology (Simpson, 2010).

The opinions of the researchers about the measurement, valuation, and management of assets that may be different, still have the same purpose, namely to provide a view of the importance of the value of assets to the company as a whole.

5 CONCLUSIONS

This article reviews the views of researchers regarding assets and how to measure and evaluate assets, from the point of view of accounting theory. Clearly, the importance of asset management is clearly seen. With good asset management, companies can guarantee the survival of their company, by choosing the best capital structure for the company, maintaining a balance between debt and capital, and understanding and optimizing the value of assets.

The process of valuing assets in providing an estimate of economic value, both tangible assets and intangible assets, based on the results of analysis of objective and relevant facts using valuation techniques, methods and principles apply.

Along with the times, of course, measurement and valuation of assets will experience changes and developments. But the point is, how can we use our assets as optimally as possible to achieve our company's goals. This will not happen without good measurement, assessment and asset management.

REFERENCES

Acharya, V. V. and Pedersen, L. H. (2005) 'Asset pricing with liquidity risk', *Journal of Financial Economics*. doi: 10.1016/j.jfineco.2004.06.007.

Amihud, Y., Mendelson, H. and Pedersen, L. H. (2005) 'Liquidity and Asset Prices', *Foundations and Trends® in Finance*. doi: 10.1561/05000000003.

Barberis, N., Huang, M. and Santos, T. (2001) 'Prospect theory and asset prices', *Quarterly Journal of Economics*. doi: 10.1162/003355301556310.

Chordia, T., Huh, S. W. and Subrahmanyam, A.

(2009) 'Theory-based illiquidity and asset pricing', *Review of Financial Studies*. doi: 10.1093/rfs/hhn121.

Duffie, D. (2010) *Dynamic Asset Pricing Theory, Third Edition*. doi: 10.2307/2329081.

Financial Accounting Standards Board (2010) *Conceptual Framework for Financial Reporting: Chapter 1 The Objective of General Purposes Financial Reporting; Chapter 3 Qualitative Characteristics of Useful Financial Information, Statement of Financial Accounting Concepts No. 8*. doi: http://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=1218220340119&acceptedDisclaimer=true.

IASB (2016) 'IAS 2 Inventories', in *IFRS Green Book 2016 Part A*. doi: 10.1007/978-3-8349-6633-9.

IFRS (2018) 'Conceptual Framework at a glance', *IFRS Conceptual Framework Project Summary*. doi: 10.1016/j.ifacol.2015.09.287.

Jensen, M., & Meckling, W. (1976) 'Theory of the Firm: Managerial', *Journal of Financial Economics*. doi: [http://dx.doi.org/10.1016/0304-405X\(76\)90026-X](http://dx.doi.org/10.1016/0304-405X(76)90026-X).

Kahneman, D. and Tversky, A. (1979) 'Prospect Theory: An Analysis of Decision under Risk Author(s): Daniel Kahneman and Amos Tversky Source', *Econometrica*. doi: 10.1111/j.1536-7150.2011.00774.x.

Riahi-Belkaoui, A. (2005) 'Accounting Theory', *Society*. doi: 10.1016/j.fuel.2015.10.046.

Simpson, C. (2010) 'Asset management', *Fire Risk Management*. doi: 10.1109/MPAE.2005.1436514.

Thaler, R. H. and Johnson, E. J. (1990) 'Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice', *Management Science*. doi: 10.1287/mnsc.36.6.643.

The Institute of Asset Management (2012) *Asset Management – An Anatomy, Asset Management 2011*. doi: 978-1-908891-00-6.