

PUTTING A VALUE ON BIOLOGICAL ASSETS

AN AREA OF JUDGEMENT

What is the “fair” value of a living animal or plant? This question may not seem highly applicable to Singapore, where the agriculture industry contributes less than 0.1% of the country’s Gross Domestic Product (GDP)¹ but recent months have seen debates over how companies should determine the “fair” value of the animals, crops and other biological assets they hold.

The accounting standards in Singapore follow closely the international accounting standards, including the one on biological assets. Compliance with accounting standards is a local statutory requirement and it is therefore not a matter of choice. Hence, companies with biological assets are required to comply with the relevant accounting standard for biological assets where such assets are measured at fair value and changes in fair values between periods are recognised in the profit and loss.

THE STANDARD - PAST, PRESENT AND FUTURE

The use of fair value accounting in measuring the value of biological assets is consistent with the international shift in the measurement paradigm away from the traditional historical cost accounting – a shift that is being jointly championed by the US Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB)². This shift sees the international financial reporting conceptual framework embracing fair value in its measurement of assets and liabilities. Biological assets are no exception. “Why then these debates over the fair value of biological assets?” one might ask. This is because a great deal of judgement has to be exercised

in determining what is considered “fair”. Coupled with the diverse range of breeds, strains, types and varieties of biological assets, it is more challenging to place a fair value on biological assets compared to other assets.

While there were many dissenting views prior to IASB giving its stamp of approval, this standard was eventually adopted in most countries – in all likelihood because the merits of fair value measurement outweigh the effect of the challenges that come with it.

Like any accounting standard that is reviewed periodically to keep up with developments in the market and ensure consistency with other standards, certain aspects of the accounting standard for biological assets are currently being re-examined by IASB. Just recently, IASB has embarked on a limited scope project³ under this standard to address what qualifies as “bearer biological assets”⁴ and how they should be accounted for. This project stemmed from the argument that “bearer biological assets” are similar to property, plant and equipment and should therefore be accounted for as such. As the project is ongoing, it is premature to ascertain its implications on the international and local fronts. Consequently, the focus of the remaining article relates only to the extant standard on biological assets and its requirements.

WHY CARRY BIOLOGICAL ASSETS AT FAIR VALUE?

Biological assets are measured at fair value in order to allow users to gain more timely information for decision-

¹ Statistical Tables from Economic Survey of Singapore: Gross Domestic Product by Industry, Department of Statistics of Singapore; this is the result for three quarters in 2012

² Fair Value Accounting in the Agricultural Sector: An Analysis of Financial Statement Preparers’ Perceptions Before and After the Introduction of IAS 41 Agriculture, Accounting and Finance Association of Australia and New Zealand (2010)

³ Staff Paper on Accounting for Bearer Biological Assets, International Accounting Standards Board (IASB), 2012

⁴ Bearer biological assets are not agricultural produce and are self-generating. Examples are livestock from which milk is produced, grape vines, fruit trees, and trees from which firewood is harvested while the tree remains. As at 21 January 2013, IASB has yet to finalise the scope of the definition of bearer biological assets.



making. For example, they are better able to assess the value of their investment and efforts of management over the period to accrete value to the biological assets.

In fact, proponents of fair value acknowledge that the use of fair value paints a more realistic scenario of market conditions. This is because the volatility that is introduced into profits arising from the changes in fair values more clearly reflects the risk of an investment in the agricultural sector⁵. Hence, market conditions can be better communicated to the investors to assist them in their investment decision process.

Fair value accounting is relevant in today's economic climate. Although the application of the standard on biological assets presents many practical challenges, this is so for any standard that uses fair value measurement including but not limited to standards relating to financial

instruments and investment properties. One should not shun this standard because of the difficulty, but rather take steps to ensure that proper safeguards are put in place to address the challenges.

One such challenge is having unrealised gains or losses included in the profit and loss. The actual trading results of the business operations may be masked by the unrealised gains or losses of the biological assets. In particular, the recognition of unrealised gains may mislead certain shareholders into believing that the company is making cash profit and put undue pressure on the company to issue dividends, when in fact, it may not have enough funds to do so.

The need to apply judgement is another. As will be enumerated in the following paragraphs, there are many points of subjectivity in the process of determining the latest market value, and if careful judgement is not applied

⁵ International Accounting Standards: How adequately are forest assets reported in the balance sheet and income statement?, Herbohn K, presented at the IUFRO World Conference 2005, 8 to 13 August, Brisbane, Australia

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at these points, the reliability of information may be diminished.

AREAS OF JUDGEMENT AND THE AUDITORS' ROLE

The first point of subjectivity comes at the initial stage when the biological asset is to be recorded in the books. At this point, a decision has to be made as to whether fair value can be reliably measured. The company should use fair value accounting unless a measurement of fair value is clearly unreliable.

The second point of subjectivity is in determining whether there exists an active market from which the fair value of the biological assets can be inferred. Very often, even when there is an active market, the market value from a particular market may not truly reflect the value of the biological asset a company is determining due to the diverse range of breeds, strains, types and varieties within the same group of assets. The market value would hence have to be adjusted to reflect the particular circumstances of the asset.

If a company determines that there is no active market to their biological asset, a third point of subjectivity would be introduced. This is the point where the company has to decide on the appropriate valuation model to be used. Assuming that the commonly used discounted cash flow model is selected, the subjectivity is further compounded by the injection of highly judgemental inputs into the model. Such inputs would include the projected cash flows, discount rate, growth rate, number of years in projection and other key assumptions used. All these inputs are affected by a number of externalities including climate change, adverse weather and market forces, volatility and cyclical nature of the biological asset. Given the highly complex and subjective nature of the valuation process, it is common for companies to engage valuation experts to determine the fair values of their biological assets.

Both management and auditors are affected by these points of subjectivity. Management, in whichever country, is faced with almost the same degree of uncertainty when trying to put a fair value to their biological assets. Auditors, on the other hand, have to exercise the same degree of vigilance

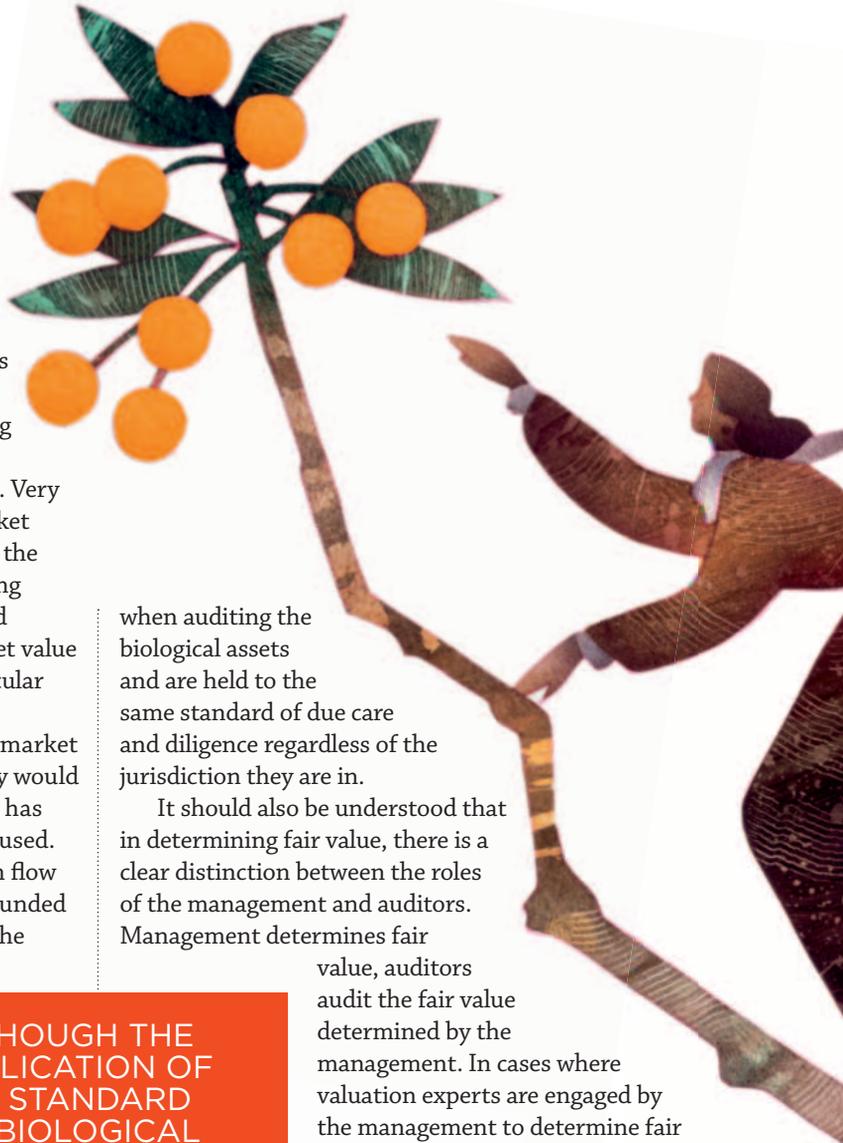
when auditing the biological assets and are held to the same standard of due care and diligence regardless of the jurisdiction they are in.

It should also be understood that in determining fair value, there is a clear distinction between the roles of the management and auditors. Management determines fair

value, auditors audit the fair value determined by the management. In cases where valuation experts are engaged by the management to determine fair value, auditors will then play a key role in assessing the independence, objectivity and competence of prospective valuers. The auditor's job does not end there. In the valuation process by the experts, auditors would challenge the appropriateness of the valuation methods and inputs used in determining fair value.

It is this notion of subjectivity that has probably triggered the recent move by Hong Kong Exchanges and Clearing Limited (HKEx) to issue a guidance to entities engaged in agricultural activities to exclude unrealised fair value gains on biological assets for the

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purpose of demonstrating compliance with the three-year trading record and profit requirements under the HKEx Main Board Rules when seeking a listing on HKEx. HKEx explained that compared to other assets subject to fluctuations in unrealised fair value gains or losses, they “consider that the risks in biological assets are higher as they are perishable and their valuation is usually subject to higher uncertainty due to the complex and not easily

verifiable assumptions adopted”⁶. It is noteworthy that apart from the above purpose, all Hong Kong entities involved in agricultural activities are required to comply with the Hong Kong accounting standard for biological assets which essentially is the same as the international standard. This means that all unrealised gains or losses will need to be recognised in the profit and loss in accordance with the standard.

REBUTTABLE PRESUMPTION CLARIFIED

The accounting standard does allow historical cost to be used if fair value is determined to be “clearly unreliable”. However, most companies still use the fair value model to measure biological assets. One reason may be that the term “clearly unreliable” is not used elsewhere in the accounting literature and is therefore subject to interpretation. Based on the interpretation of one of the larger accounting firms, it appears that this condition is very difficult to prove because any history of large variations in the outcome of the biological transformation process and large fluctuations in the price of the final produce should have been factored into the measurement model. These are not excuses not to measure biological

assets at fair value. Only when the asset is unique or of a very special nature may the estimates be

unreliable⁷. Whether or not

this interpretation is too strict could be an area for future research.

Globally, the fair value standard is already widely applied by most



⁶ www.hkex.com.hk/eng/rulesreg/tistrules/tistguid/Documents/g146-12.pdf

companies in countries like New Zealand⁷, the United Kingdom and Australia. Elsewhere, an analysis of annual reports in France revealed that most of the French companies analysed apply historical cost accounting for their biological assets. This act likely arises from the concept of conservatism as a construct of culture, in which most French companies tend to be more prudent and value their biological assets at historical cost as fair value cannot be determined reliably.

The differences in accounting treatments across countries can be attributed to cultural influences to some extent, and despite the convergence towards a global set of accounting standards, there are systematic differences in the way these countries respond to the standards⁸.

UNDERSTANDING FAIR VALUE THROUGH INCREASED DISCLOSURES

How can the notion of fair value be better understood in the financial statements? One avenue is through the disclosures in the financial statements. IASB recognises this and in a new accounting standard on measuring fair value, preparers of financial statements are now required to provide a description of the valuation techniques and inputs used in the fair value measurement. If users deem that the inputs used are of low quality, they may perform their own sensitivity analysis by tweaking the inputs disclosed. Coupled with the existing disclosures on significant assumptions applied in determining fair value as required under the standard on biological assets, users will be able to assess the quality of the inputs and appropriateness of assumptions used in measuring fair value and determine the reliability they can place on the fair value information in the financial statements to aid their decision-making.

At present, there are accounting standards which require disclosures focusing on the sensitivity analysis of

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various variables like exchange rates and interest rates for financial instruments so that users can be informed of the impact of the changes in assumptions. Such disclosures could be extended to biological assets to explain to users the effect of any changes in assumptions and inputs used in the valuation models. This may be something which IASB could consider.

In addition, the recent improvements to the auditor's report proposed by the International Auditing and Assurance Standards Board (IAASB), which call for the auditor to highlight matters most important to the readers' understanding of the financial statements, may also be of significance to this sector in the near future. With the proposed improvements,

should the valuation of biological assets be significant to users' understanding of the financial statements, users' attention would be drawn to the disclosure of this item in the auditor's report.

CONCLUSION

All things considered, recent IASB developments have indicated that the accounting standard for biological assets will be tweaked to ensure its consistency with other standards. The full implications of the changes have still not been assessed. But for now, all companies are still required to comply with the existing standard.

Whatever developments there may be, fair value is here to stay and companies should continue

to embrace the spirit of fair value accounting. Companies should ensure that the competence of the valuers, valuation methodologies, assumptions and inputs used are properly documented and can stand up to scrutiny. Adequate disclosures on fair value in the financial statements and auditor's report will also go a long way towards helping users better understand fair value in the respective contexts. CPA

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⁷ A Practical Guide to Accounting for Agricultural Assets, PricewaterhouseCoopers, November 2005

⁸ Implementing Fair Value Accounting in the Agricultural Sector, Charles Elad and Kathleen Herbohn, 2011

