A Revisit to the Definition of Accounting Estimates

Purpose and scope of ASAF discussion

1. The purpose of ASAF discussion is to shed some light on the definition of 'accounting estimates' – by proposing an alternative route to articulating it, focusing on the concept of 'accounting estimation' and 'uncertainty.'
2. Our discussion covers the concept of accounting estimation and the typology of measurement uncertainty; while the argument about distinguishing changes in accounting policies and changes in accounting estimates and the definition of accounting policies are not covered.

'Estimation' and 'uncertainty' in accounting

3. The starting point for our discussion on the definition of 'accounting estimates' is that a number of accounting decisions involve the use of estimation when absolute certainty is not available. Understanding what 'accounting estimation' in light of 'uncertainty' is a fundamental issue, given the impact it has on measuring items in the financial statements.
4. By and large, 'accounting estimation' occupies much of the IFRS Standards; while somehow may be overlooked. For example, the term 'estimation' and 'uncertainty' appear 620 and 159 times, respectively, in the IFRS Standards (Table 1). In the case of the Conceptual Framework, the use of those terms increases significantly when comparing the Conceptual Framework (2018) and the Conceptual Framework (2010) (Table 2).

Table 1. The use of the term 'estimation' and 'uncertainty' in the IFRS Standards

Term	Number of Use	
	Currently active IFRS Standards	IFRS 17
Estimation	511	109
Uncertainty	125	34

Table 2. The use of the term 'estimation' and 'uncertainty' in the Conceptual Framework

Term	Number of Use	
	CF (2010)	CF (2018)
Estimation	22	60
Uncertainty	7	71

5. Moreover, ‘estimation’ in accounting is critical and prevalent in practice, and the multitude of estimates are embedded in most financial statement items, for example, from the simplest level such as ‘average’ to the most complicated level such as ‘manufacturing cost.’ Practically, all accruals are based on estimates.

6. Even though we may gain some insight into the concept of ‘accounting estimation’ and ‘uncertainty’ from the Conceptual Framework (2018) as below, those terms are not explicitly defined anywhere in the IFRS Standards[1].

*2.19 When monetary amounts in financial reports **cannot be observed directly** and **must instead be estimated**, **measurement uncertainty** arises. (the rest omitted)*

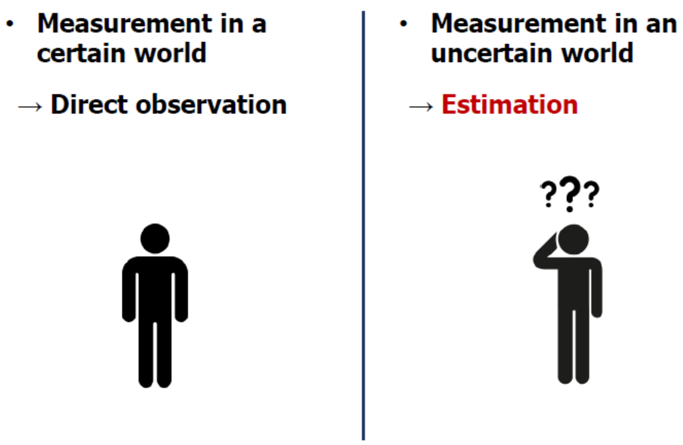
An exploration into ‘measurement uncertainty’

7. We basically focus on ‘measurement uncertainty’ to lay a foundation for how best ‘accounting estimation’ and ‘accounting estimates’ can be defined. The ‘measurement uncertainty’ can be a useful device to understand the concept of ‘estimation’ in accounting (Figure 1).

8. In a certain world, we can measure items in the financial statements through direct observation. Measurement by direct observation includes the process of objectively identifying actual figures such as volume, amount, quantity or price – i.e., the quantity of inventory, transaction price, etc. – by counting, weighing, gauging, etc., and does not require judgment.

9. However, as direct observation is inapplicable in an uncertain world, estimation is required to measure the items. Estimation employs measurement techniques, and judgments and assumptions are used in selecting and applying them.

Figure 1. Direct observation and estimation



[1] Even though ‘accounting estimates’ are defined in the Exposure Draft IAS 8 for the distinction between ‘accounting policies’ and ‘accounting estimates,’ we believe that ‘estimation’ in accounting is a much more fundamental concept.

10. Therefore, it is essential to understand the important features of 'measurement uncertainty.' We attempt to figure out various cases where measurement uncertainty exists based on their common characteristics and categorize them into three different types as follows. Monetary amounts cannot be directly observed:

    (a) Type 1- due to physical or economic barriers ;

    (b) Type 2 – *ex-ante* but can be directly observed *ex-post*; and

    (c) Type 3 - by its nature

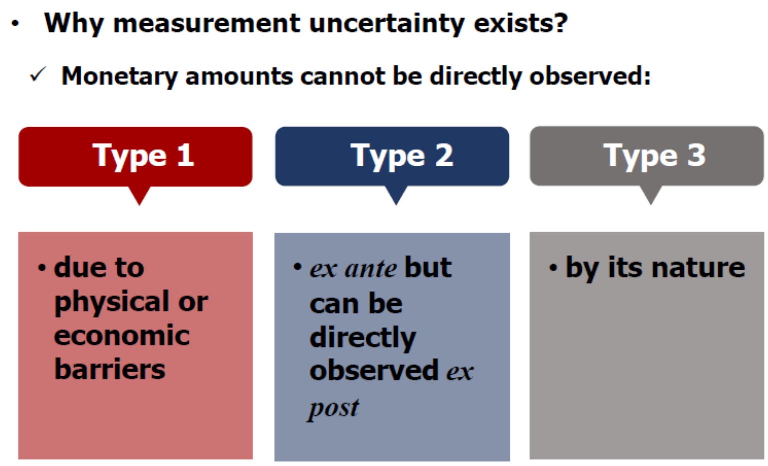
    Type 1 and Type 2 refer to the cases when constraints exist, while Type 3 is when inherent measurement uncertainty exists.

11. ***Type 1 – monetary amounts cannot be directly observed due to physical or economic barriers*** – refers to the case that items might be directly observable, but an entity choose to measure them by estimation because of physical or economic barriers. The archetype of Type 1 is oil reserve – theoretically, we might be able to directly observe it, but the significant cost will be incurred in measuring the storage; moreover, there also can be physical barriers so that oil reserve cannot be measured with precision. Similarly, fire damage, inventories in a disputed area, inventories with incomplete or missing documents can be an example of Type 1.

12. ***Type 2 – monetary amounts cannot be directly observed ex-ante but can be directly observed ex-post*** – refers to the case that items cannot be directly observable as of now, but an entity can directly observe them after a certain amount of time. The archetype of Type 2 is bad debts – the amount owed to a creditor that is unlikely to be paid cannot be measured with precision at the moment, but the uncollectible amount will be settled in the future. Examples of Type 2 also include warranty obligations, lawsuits, inventory obsolescence.

13. ***Type 3 – monetary amounts cannot be directly observed by its nature*** – refers to the case that items cannot be directly observable inherently. The archetype of Type 3 is depreciation – it is a way of allocating the cost of a tangible asset over its useful life and does not represent real cash flow. Fair value and impairments are also examples of Type 3 measurement uncertainty.

Figure 2. The typology of measurement uncertainty



An alternative approach to the definition of 'accounting estimates'

Our approach

14. Based on the discussion so far, we think that conceptually:

    (a) Accounting estimation is to measure an item in financial statements using measurement techniques[2] when, in the presence of measurement uncertainty, monetary amounts cannot be observed directly; and

    (b) Accounting estimates are the output of accounting estimation.

Case - Measurement of per-unit inventory cost

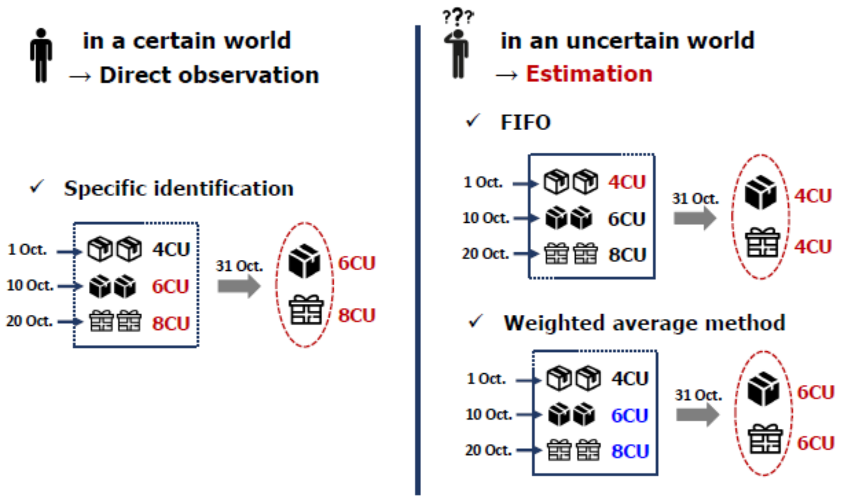
15. Now let's look at a case – the measurement of per-unit inventory cost – using our approach to 'accounting estimation' and 'accounting estimates.'

16. Specific identification of cost means that specific costs are attributed to identified items of inventory (paragraph 24 of IAS 2) - which is the measurement by 'direct observation.'

17. However, the FIFO formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. Under the weighted average of the cost formula, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period (paragraph 27 of IAS 2). Both the FIFO formula and the weighted average of the cost formula involve an entity making judgments and assumptions – which are the measurement by 'estimation'.

18. Therefore, we think that the *nature* of selecting an inventory cost formula for interchangeable inventories constitutes selecting an accounting estimate. For ease of understanding, we provide a simplified illustrative example in Figure 3.

Figure 3. Measurement of per-unit inventory cost



2 Judgments and assumptions are used in selecting and applying measurement techniques.

Suggestions

19. Despite our conceptual review on the definition of 'accounting estimation' and 'accounting estimates,' the discussion on 'accounting estimates' may be incomplete, because further consideration needs to be given to important issues, from definitional or conceptual perspectives, such as:

    (a) The principle for distinguishing between the retrospective application and the prospective application of changes in accounting; and

    (b) The constraint on when a change in accounting estimate can be permitted

20. Nonetheless, we think it is important to revisit the definition of 'accounting estimates' by discussing the substance of 'estimation' in accounting as this would be the clear foundation for further discussion on the pertinent issues.

Short-term

21. In the short-term, it may be necessary to consider that:

    (a) the use of terms in finalizing the ED IAS 8 should be in line with the revised Conceptual Framework (2018) – i.e., measurement uncertainty, etc.; and

    (b) the circumstances when a change in accounting estimate can be permitted should be thoroughly discussed

Long-term

22. In the long-term, we think that accounting estimation in light of measurement uncertainty should be explicitly defined in the Conceptual Framework.

Questions for the ASAF members
1. What is your thought on our approach to the concept of 'estimation' in accounting?
2. Do you agree with the proposed typology of measurement uncertainty? Do you think this can be helpful to better understand the concept of 'estimation' in accounting?
3. Which do you think would be the circumstances when a change in accounting can be permitted?