Understanding the measurement of intangible assets in accordance with IFRS *13 Fair Value Measurement*

Date: 31 May 2023

Addis Ababa

WORLD BANK GROUP

AABE

Accounting and Audit Board of Ethiopia

የኢትዮጵያ የሂሳብ አያያዝ እና ኦዲት ቦርድ

Established under proclamation no 847/2006

The views expressed in this presentation are my own and not necessarily those of any organization with which I am associated.

Disclaimer and applicable version of IFRS Accounting Standards

» The sponsors, the authors, the presenters and the publishers do not accept responsibility for loss caused to any person who acts or refrains from acting in reliance on the material in this PowerPoint presentation, whether such loss is caused by negligence or otherwise.

» Unless specified otherwise, the accounting requirements that are the subject matter of this presentation are International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) that are applicable for annual period beginning on or after 1 January 2023 without early applying new and amended IFRS Accounting Standards that have a later mandatory application date.

Aim

» The aim of this session is to enhance knowledge and understanding, in the Ethiopian accountancy market, of the fair value of intangible assets measured in accordance with IFRS 13 *Fair Value Measurement.*

» *[Note: the valuation session that follows after the coffee break is dedicated to enhancing skills in the Ethiopian accountancy market in the practical application of IFRS 13 to measuring the fair value of intangible assets in the Ethiopian context.]*

Which assets are intangible assets?

Nature of intangible assets

- Because assets are defined in the Conceptual Framework with reference to rights, is can be argued that all assets are intangible assets.
- IAS 38 defines intangible assets (identifiable, non-monetary assets without physical substance) take many and wide ranging forms, including: research and development, brands, software, licences and quotas, customer lists and supplier relationships, carbon emission certificates, crypto assets, etc.

Many of today's assets incorporate both intangible and tangible elements. An entity uses **judgement** to assess which element (tangible or intangible) is more significant in determining whether to apply IAS 38 *Intangible Asset* or another standard (for example, IAS 16 *Property, Plant and Equipment*) to such items. (paragraph 4 of IAS 38)

Intangible assets identifiability
Summary of class discussion

- Identifiable assets are either (Appendix A Defined Terms to IFRS 3):
  - separable, ie capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so; or
  - arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.
- **Which of the following is not an identifiable asset?** Choose one of: 1) goodwill; 2) customer relationships; 3) head-office building; 4) brand.

Ethiopian context

8

Ethiopian context
Which intangible assets do Ethiopian companies have?
Summary of class discussion

- Computer software
- Brands
- Customer relationships
- Supplier relationships
- Licences

Ethiopian context: Example 1

COMMERCIAL BANK OF ETHIOPIA
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(18) INTANGIBLE ASSETS

2021		Software
Cost	**ETB**	
Balance at 1 July 2020		580,752,847
Additions		7,862,764
Balance at 30 June 2021		**588,615,612**
Amortization and impairment		
Balance at 1 July 2020		(361,573,653)
Additions		(90,583,324)
Balance at 30 June 2021		**(452,156,977)**
Net carrying value		**136,458,635**

Ethiopian context: Example 2

Ethiopian Airlines Group
Notes to The Financial Statements (Continued)
30 June 2021

10 INTANGIBLE ASSET

	Balance at 30 June 2020 Birr	Additions Birr Birr	Balance at 30 June 2021 Birr
COST			
Software costs	831,882,431	243,031,208	1,074,913,640
Amortization	(623,608,219)	(201,110,385)	(824,718,603)
Net book value	**208,274,212**		**250,195,036**

Ethiopian context
Ethiopian brands

» The top 25 Most Admired African Brands (Prompted) list included Ethiopian brands Anbessa at #4, Ethiopian Airlines at #5, and Sole Rebels at #19 respectively.

Source: https://businessinfoeth.com/three-ethiopian-brands-are-among-the-top-25-most-admired-brands-in-africa/

» Greenpath Food identifies the following Ethiopian home-grown brands paving the way for sustainability practices in their supply chains: Sabahar (textiles), Forested Foods (bee products and other botanicals), Maryiza honey (a Forested Foods brand), Tchakka origins (Ethiopian plant-based), Ya coffee (premium coffee), Teki bags (plastic-free Ethiopia), Penda paper recycling.

Source: www.greenpathfood.com/journal/sustainable-ethiopian-brands

Ethiopian context
Ethiopian coffee brands

» Ethiopia is the largest coffee producer in Africa and the fifth-largest in the world.

» Arabica and native heirloom varietals are most commonly grown on small plantations throughout the country.

» While over 850 million pounds of coffee is produced in Ethiopia, only around half of that is exported – the rest is consumed domestically.

» Yirgacheffe, Harrar and Sidama are the most well-known regions. Sidama produces some lower quality coffee so is usually the cheapest you can get from Ethiopia. Other beans, such as Yirgacheffe, can be more expensive, but tend to reflect better price-to-quality value.

Source: https://coffeebeansdelivered.com.au/blogs/news/the-ethiopian-coffee-industry

» Arabica coffee originated in Ethiopia.

» Ethiopian coffee brands are valued across the coffee drinking world.

Source: https://coffeeaffection.com/best-ethiopian-coffee-brands/

Ethiopian context
Ethiopian coffee market (2021/22 Ethiopian coffee production)

- **Domestic market** = 42%
- **Export market** = 58%, of which:
  - 80–85% goes through the Ethiopian Coffee Exchange (ECX);
  - 5–10% through direct trade by cooperatives; and
  - 5% through commercial farms.
- In January 2022 only, Ethiopia sold around 11,200 bags (672 MT) of coffee online during the Ethiopian coffee brands launch on China's largest E-commerce platform, Alibaba (Tmall Global) because of joint effort with the United Nations Economic Commission for Africa (ECA) and the Government of Ethiopia.
- The main reason behind the increased coffee export from Ethiopia is the recurrent drought and the frost that occurred in parts of Coffee Arabica producing areas of South America which affected the volume and quality of coffee arabica production.

Source: USDA, Ethiopia: Coffee Annual, 09 2022, p3&4 see www.fas.usda.gov/data/ethiopia-coffee-annual-7 15

15

Ethiopian context
Ethiopian coffee market: current developments

- June 2021: Ethiopia launched a state-of-the-art coffee training center that aims to enhance the sustainability and value chain in Ethiopia's coffee sector (at Ethiopian Coffee and Tea Authority (ECTA) in Addis).
- Factors considered for coffee quality during export in Ethiopia:
  - Certification (eg fair-trade)
  - Coffee grade and coffee cupping tests
  - origin: from well-recognized geographical location in particularly Harar and Yirgacheffe
  - Post-harvest treatment: sun dried or washed coffee.
- Good quality coffees are sometimes labelled under specialty coffee that account for 25% of export volumes.

Source: USDA, Ethiopia: Coffee Annual, 09 2022, p2 see www.fas.usda.gov/data/ethiopia-coffee-annual-7 16

When are intangible assets measured at fair value?

When are intangible assets measured at fair value?
Summary of class discussion

IFRS Accounting Standard	At initial recognition	Subsequent measurement
IAS 38 *Intangible Assets*	Fair value when acquired in: (i) exchange of non-monetary items; (ii) government grants (fair value alternative); and (iii) business combinations.	**Revaluation model** (available when fair value can be measured with reference to an active market) **Cost model** when **impaired** to fair value less costs to sell.
IFRS 5 *Non-current Asset Held for Sale* (NCAHFS)	Impair to **fair value less costs to sell**.	Impair to **fair value less costs to sell.**
IAS 2 *Inventories* (relevant to intangible asset dealer)	Acquired in: (i) exchange of non-monetary items; (ii) government grants (fair value alternative); and (iii) business combinations.	

Acquisition-date measurement of intangible assets
Quiz: Summary of class discussion

- **Which measurement applies to intangible assets acquired in a business combination on its acquisition date?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) it depends…
- **Which measurement applies to intangible assets acquired by way of government grant on its acquisition date?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) it depends on the filer's choice, either: (i) fair value; or (ii) nominal amount (IAS 20 applies).
- **Which measurement applies to intangible assets acquired by way of exchange of non-monetary items on its acquisition date?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) it depends…

Subsequent measurement of intangible assets
Quiz: Summary of class discussion

- **Which measurement applies to an intangible asset when it is classified as non-current asset held for sale?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) Lower of reclassification-date carrying amount and reporting-date fair value less costs to sell.
- **Which measurement applies to an intangible asset when it is revalued?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) it depends…
- **Which measurement applies to an intangible asset when it is impaired?** Choose one of: 1) historical cost; 2) fair value; 3) fair value less costs to sell; 4) value in use; 5) it depends, the higher of: (i) value in use; and (ii) fair value less costs to sell.

What is fair value?

Fair value: an asset
the concept

- The fair value of an asset is:
  - the price that would be received to sell an asset (exit price)
  - in an orderly transaction (not a forced sale)
  - between market participants (market-based view)
  - at the measurement date (current price) (IFRS 13 *Fair Value Measurement*)

Fair value
measurement objective

- **Objective** of fair value measurement: **estimate the price** at which an orderly transaction to sell an asset would take place between market participants at the measurement date under current market conditions (paragraph B2 of IFRS 13)
- The objective **provides focus** to fair value measurement
  - **Market participant perspective:** consequently, the entity's intention to hold an asset is not relevant when measuring fair value.

Fair value
market participants

- Characteristics of market participants (ie buyers and sellers in principal market (or most advantageous market)):
  - independent
  - knowledgeable
  - diligent
  - use all available information
  - willing to transact for the asset or liability
  - able to transact for the asset or liability
- Assumption: market participants act in their economic best interest

Measuring the fair value of intangible assets

28

Fair value: market participant perspective
application guidance: how to measure fair value

» To measure the fair value of an intangible asset:

- » determine <u>all characteristics</u> of the asset being measured (exclude things that are not characteristics of the asset or liability);
- » apply the <u>valuation premise</u>;
- » determine the <u>highest and best use</u>;
- » determine the <u>principal</u> (or most advantageous) market;
- » determine the appropriate <u>valuation technique/s</u> and <u>inputs</u> that **market participants would use** when pricing the asset
- » determine the level of the fair value hierarchy within which the inputs are categorised.

Source: paragraph B2 of IFRS 13

29

Fair value: market participants' viewpoint
application guidance: characteristic of an asset or liability

- Fair value measurement is for the **particular** intangible asset
  - it captures all characteristics of the intangible asset being measured that **market participants would take into account** when pricing the item
    - location
    - condition
    - restrictions on use or sale that are a characteristic of the item
  - it excludes things that are not characteristics of the asset
    - transactions costs
    - restrictions on use or sale that are not a characteristic of the item

Fair value of an intangible asset
application guidance: valuation premise

If an intangible asset provides **maximum value through its use in combination with other assets** market participants are assumed to hold complementary assets.

Fair value of intangible assets: valuation premise
Example 1: Summary of class discussion

When measuring the acquisition-date fair value of a non-transferable fishing licence acquired in a business combination, which complimentary assets, if any, are assumed to be held by market participants? Choose one of:

1) none;
2) fishing equipment (boat, nets, etc); or
3) other (specify…).

33

Fair value of an intangible asset
application guidance: highest and best use

» Fair value measurement logically assumes that a market participant would put a non-financial asset to its **highest and best use** because that maximises the value of the asset.

» The highest and best use must be
  » physically possible
  » legally permissible
  » financially feasible

34

Fair value of an intangible asset
application guidance: appropriate valuation technique/s and inputs

» Fair value is measured using the valuation technique/s and inputs that **market participants would use** when pricing the asset.

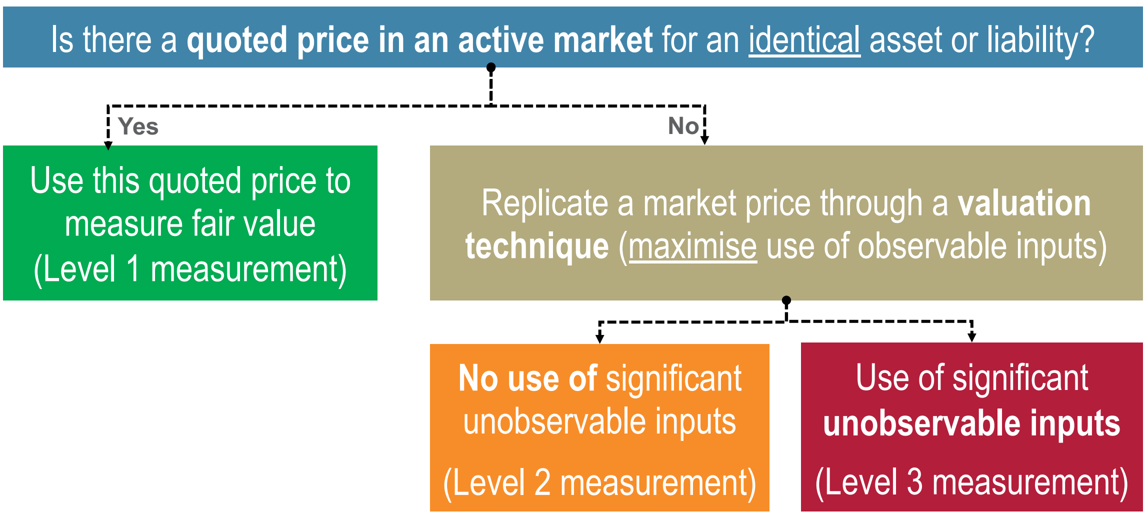
» The level of the fair value hierarchy within which the inputs are categorised must be determined because:

  » Unadjusted Price x Quantity rule applies to Level 1 fair value measurement.

  » To achieve a reliable measurement (faithful representation) different disclosures are specified for each level of the fair value measurement hierarchy.

42

Fair value hierarchy
application guidance: Levels 1, 2 and 3



Fair value measurement hierarchy
judging the boundaries of the artificial constructs

» Boundary between **levels 1 & 2**—do transactions in the market in which the **identical item** trades (and that the entity can access at the measurement date) take place with **sufficient frequency and volume** to provide pricing information on an ongoing basis? (Appendix A to IFRS 13)

» By definition an active market cannot exist for a unique intangible asset.

» Active markets exist only for a few standardised intangible assets.

Example: Tesla (2022) 10K Annual Report, (p63)
"We determine the fair value of our digital assets on a nonrecurring basis …, based on quoted prices on the active exchange(s) that we have determined is the principal market for such assets (Level I inputs)."

Fair value measurement hierarchy
judging the boundaries of the artificial constructs

» Boundary between **level 2 and level 3**—significant unobservable inputs?

Example entity-specific policy—HSBC (2020) financial statements, (p292)

» "significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit or greater than 5% of the instrument's valuation is driven by unobservable inputs

» 'Unobservable' in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used)"

FVM of intangible assets
unique intangible assets

- The valuation of unique intangible assets is multi-faceted and complex and requires a substantial amount of judgment.
- Nevertheless, the fair value of such assets must be measured in some circumstances, for example, when acquired in a business combination.
  - Note, IAS 38 limits use of the **revaluation model** to those intangible assets the fair value of which can be determined with reference to an active market (Level 1 of the fair value measurement hierarchy).
- Guidance:
  - identify the valuation technique market participants would use to measure fair value
  - identify market participants to which the asset could be sold in a hypothetical transaction
  - be mindful that market participants act in their economic best interest and are independent, knowledgeable, diligent, use all available information, willing and able
  - assume market participants have access to complimentary assets that put the unique intangible asset to its highest and best use (ie remember the non-financial asset valuation premise)

Fair value of an intangible asset
Appropriate valuation approach and appropriate valuation methods

- Neither IAS 38 nor IFRS 13 prescribe particular valuation approach/es or valuation method/s.
- Consequently, each reporting entity must determine the valuation approach/es and valuation method/s that are most representative for its intangible assets.
- Determine the appropriate valuation approach/es on the basis of judgement in light of all relevant facts and circumstances:
  - Market approach
  - Income approach
  - Cost approach
  - Multiple/combinations of approaches

Fair value of an intangible asset
Appropriate valuation approaches

TABLE 1: Intangible Valuation Approach Summary

ASSET	PRIMARY	SECONDARY	TERTIARY
Patents	Income	Market	Cost
Technology	Income	Market	Cost
Copyrights	Income	Market	Cost
Assembled workforce	Cost	Income	Market
Internally developed software	Cost	Market	Income
Brand names	Income	Market	Cost
Customer relations	Income	Cost	Market

Source: Chartered Global Management Accountant (CGMA) Three approaches to valuing intangible assets (p6)

FVM valuation approaches and methods/techniques
reportedly common use examples for intangible assets

Market approach (suitable for few intangibles)	**Income approach** (appropriate technique/s for **many** intangibles)	**Cost approach*** (suitable for few intangibles)
• Some standardised cryptoassets (e.g. Bitcoin) • Some standardised agricultural produce quotas • Some standardise licences • Some standardized carbon emission trading certificates (e.g. EU ETS)	• Customer and vendor relationships & enabling technology: multi-period excess earnings method (**MPEEM**) • For trade names, brands and technology assets: **relief-from-royalty** method • For non-compete agreements and customer relationships: **with-or-without** method • For long-lived government issued licences that are fundamental to the business: **greenfield method**	• Internally developed and used software • Assembled workforce (because it is a necessary input for multiple-period excess earnings method)

* the 'logic' of the cost approach is that an investor will pay no more for an asset than the cost to buy or construct a substitute asset of comparable utility.