

The Caffeine case study (extended)

Michael (Mike) Wells prepared this case study to support class discussion designed to foster the development of a cohesive understanding of general purpose financial information about biological assets in agricultural activity and the use of 'forward' contracts in the agriculture sector; and as a basis for developing capacity to make the judgements necessary to prepare/audit/regulate/analyse such financial information.

Caffeine¹ is an Ethiopian coffee grower that prepares its financial statements in accordance with International Financial Reporting Standards (IFRS).

In 2015, in accordance with IAS 41 *Agriculture*, Caffeine measures its growing coffee plants at fair value less costs to sell.

Its coffee cherries are dried in a four-week period before storing the dried cherries in its purpose-built temperature-controlled silo. The dried beans are then sold at the regional coffee-market. Because its silo enables it to time the release of its dried cherries to the market Caffeine accounts for its inventory of drying and dried cherries at their net realisable value in accordance with the optional measurement exception specified in IAS 2 *Inventories*.

Coffee forward contracts

On 31 March 2015 Caffeine enters into fixed-price commodity forward contracts to sell the quantity of the type of dried coffee cherry that it expects to harvest over the next three seasons (ie through December 2017). Some of the contracts must be settled net in cash and others are for physical delivery.

During 2015, the price of dried coffee cherries falls significantly as a result of oversupply. Consequently, an identical new contract through December 2017, entered into on 31 December 2015, would have a significantly lower fixed price. In other words, Caffeine's coffee forward contracts are 'deeply in the money'.

Diesel forward contract

On 1 January 2014 Caffeine enters into commodity forward contracts to buy 500,000 litres of diesel in each of the three years after the contracting date (terminating on 31 December 2016), at a fixed price (ETB40 per litre). Some of the contracts must be settled net in cash and others are for physical delivery.

During 2014, the price of diesel declined significantly due to a combination of both reduced demand for fossil fuels and an oversupply driven largely by the increased supply from

¹ The names of individuals, entities and places in this case study are fictitious. Any resemblance to people, entities or places is purely coincidental.

US shale oil.

At 31 December 2014 and throughout 2015, the outlook for the foreseeable future is uncertain with widely varying estimates of possible future crude oil prices. Nevertheless, at 31 December 2014 and 31 December 2015 commodity (forward) contracts with one-year to two-year timeframes, that are otherwise identical to Caffeine's contracts, have a significantly lower fixed price (2014: ETB20 per litre; and 2015: ETB25 per litre). In other words, Caffeine's diesel forward contracts are 'deeply out of the money'.

QUESTIONS FOR CLASS DISCUSSION:

Questions for Day 4 Session 4 IFRS 9 *Financial Instruments*:

1. What are the economics/finance of forward contracts of the types entered into by Caffeine?
 - a. How are forward contracts are priced?
 - b. Why would Caffeine enter into such forward contracts?
2. Before their maturity do fixed-price contracts of the types entered into by Caffeine give rise to: an asset; a liability (ie a single element); both an asset and a liability (ie two separate elements); or neither an asset nor a liability?
3. What information about contracts of the type entered into by Caffeine is relevant to primary users of its financial information—existing and potential investors, lenders and other creditors, who cannot demand such information directly from Caffeine—in order to make decisions about providing resources to Caffeine?
4. Does IFRS require Caffeine recognise any asset or liability in its statement of financial position at 31 December 2015 in respect of the forward contracts that it is party to?
5. What judgements and estimates would Caffeine make in determining whether the contracts it is party to have become onerous?

Questions for Day 5 Session 2 *Agriculture*:

6. What are the economics of coffee farming?
 - a. how is coffee grown (what is a coffee plant's biological transformation process)?
 - b. what is harvested from coffee plants and when is it harvested?
 - c. what process after after harvest before selling the coffee beans and what is the timing of those processes?
 - d. where is the market for Ethiopian coffee produce; and what is the mechanism for price setting in that market?
7. What are a coffee grower's assets (and liabilities)?
8. What information about those assets and liabilities is relevant to primary users of a coffee grower's financial information—existing and potential investors, lenders and other creditors, who cannot demand such information directly from the coffee grower—in order to make decisions about providing resources to individual coffee growing entities?
9. What judgements and estimates would Caffeine make in accounting, in accordance with IFRS effective in 2015 (ie without early application of the bearer plant amendments), for:
 - a. its growing coffee plants?
 - b. its harvested drying coffee cherries?
 - c. its dried coffee cherries stored in its climatically controlled purpose built silo?
10. Must Caffeine, with effect from 1 January 2016 (ie when applying IFRS including the bearer plant amendments), account for its growing coffee plants in accordance with IAS 16 *Property, Plant and Equipment*? Why or why not?
 - a. Would your answer to Question 10 change if Caffeine grew pine trees from which it harvests only timber when the tree is 20 years old after which the trees' roots perish? Why or why not?
 - b. Would your answer to Question 10 change if Caffeine grows eucalyptus trees from which it harvests timber multiple times before the trees' roots perish? Why or why not?
11. What judgements and estimates would Caffeine make in accounting in accordance with IAS 16 for its growing coffee plants? For example: in determining and applying its:
 - a. cost accumulation policy?
 - b. depreciation accounting policy?
 - c. cost model or revaluation model?
12. Would your answer to Questions 6 to 11 be different if Caffeine prepared its financial statements in accordance with the IFRS for SMEs? If so, how would they differ?