Look at the Whole Picture!

Mohammed Alsurayhi
Morgan State University

Ebenezer K. Lamptey
Tarleton State University

Bilal Makkawi
Morgan State University

ABSTRACT

Look at the Whole Picture is a real-life teaching case designed for accounting students who are taking intermediate accounting or auditing classes. The case is about Ahmed, a senior auditor, who was tasked to audit the financial statements for Modern Construction Company. Students will be asked to report income/loss for some of the company's projects. The case aims to assist instructors in assessing their student's ability to apply their knowledge of financial reporting. The case also presents a platform to develop students' thought processes to understand the relations between different accounts and their impact on financial statements.
Keywords: Revenue recognition, Percentage of completion, Going concern, audit opinion, Construction accounting.

INTRODUCTION:

Revenue recognition is one of the hot areas in accounting and auditing. The Accounting Standards Codification (ASC 606) provides guidance on how revenue should be recognized. This is even more important for situations where the timing and nature of the revenue are complicated. Such complications provide some accountants with the opportunity to engage in misbehaviors and adopt practices that are not strictly consistent with the accounting standard based on their interpretation. Revenue recognition is a critical element in financial reporting and could provide the opportunity for manipulating accounting numbers (Dobler, 2008). In the construction industry, the percentage of completion (stages of completion) method is preferred for revenue recognition. This is because constructing the asset is the earnings process that satisfies the performance obligation.

Ahmed is a senior auditor at Al-Harbi accounting firm. Ahmed was engaged to audit the financial statements of Modern Construction Company (MCC). After a review of the percentage of completion worksheets provided by Mahmoud, the CFO, Ahmed discovered that the MCC net income had been understated by 25 percent. Understatement of net income is quite unusual as most companies would rather overstate their revenues and net income to demonstrate better performance.

The Client

MCC is a limited liability company owned by three individuals, Mohammed, Hameed, and Zayed. These three business partners conceived the idea of a construction company during their days at King Saud University, where Mohammed and Hameed studied civil engineering, and Zayed studied mathematics. Mohammed and Zayed made equal initial contributions of $500,000 each, and Hameed contributed $350,000. In addition to his initial contribution, Hameed brings extensive construction experience to the partnership. The partners agreed that they would share partnership profits and losses evenly.

Modern Construction Company enjoyed great success because of the quality of its work. The company was a key player in the construction industry in Saudi Arabia and has completed many major construction projects for the government of Saudi Arabia. Net income was $28 million in 2015 and $35 million in 2016. However, MCC made a loss of 8 million in 2017. The company had some financial difficulties due to the recession in 2017. In 2017, MCC completed 29 projects. Only four of the 29 projects were considered major projects that brought in significant revenues. The remaining 25 projects were small projects or projects that were losing money. Nevertheless, all the company projects were about to be completed and delivered to clients.

The Auditor

Ahmed holds a master's degree in accounting with a concentration in auditing. He has about three years of audit experience and worked on different engagements in various industries, including, banking, insurance, manufacturers, and retail. However, in the 2018 audit season, Ahmed was assigned to audit Modern Construction Company, his first client in the construction industry. He was a bit apprehensive because of his lack of experience auditing a company in the construction industry. But he was also excited about his new challenge.

Ahmed was a top performer and well-respected among his colleagues. He engaged most of the managers and partners at the audit firm affirming his superior abilities to those of his colleagues at the same level. Ahmed was therefore held in high regard and enjoyed promotions to higher levels of responsibility every year since he joined the Al-Harbi accounting firm. Additionally, Ahmed was nominated for excellence awards in all three years that he worked for the Al-Harbi accounting firm.

The Audit Engagement

Ahmed prepared for this engagement by reviewing his intermediate accounting textbook, reading the audit documentation of similar clients audited by the Al-Harbi accounting firm, reviewing industry publications, and reviewing the auditing, and accounting standards applicable to auditing a construction company. He also had meetings with the audit manager on this engagement.

Ahmed scheduled a walkthrough with Mahmoud to gain an understanding of the client and specifically, the accounting system used. Mahmoud provided all the supporting documents prepared by the client (PBC), including the unadjusted trial balance to Ahmed at the start of the audit. Ahmed asked Mahmoud directly if there were any issues he should be aware of. Mahmoud replied, "Everything was fine, in 2017, we finished most of our contractual obligations. We are concerned about the future of the company, not the past." Therefore, Ahmed asked, "Why are you concerned about the future?" Mahmoud responded, "We are not expecting many new projects to come in 2018. Our projections for the future do not look good." They agreed to start the audit the following week.

Ahmed came on the agreed day to commence the audit. Mahmoud introduced him to the accounting and finance team. Mahmoud also introduced him to Aziz, the audit coordinator. Ahmed was satisfied with the PBC he received. Upon detailed examination of the documents, he noticed an increase in the accrued expenses provision. Ahmed also noticed a significant decline in net income from the prior year. The net income for the year ended December 31, 2016, was about $35 million. But for the year ended December 31, 2017, there was a loss of about $8 million. Given the significant change from the prior year, he called Aziz and asked if the financial statements were accurate, to which Aziz responded in the affirmative.

Concerned with the significant change in earnings, Ahmed requested to meet with Mahmoud as soon as possible. Upon meeting with Mahmoud later that day, Ahmed inquired about the sudden drop in earnings and the larger-than-expected increase in the accrued expenses provision. Mahmoud told Ahmed that "we had hired a new chief engineer who reviewed our projects, and the change in the numbers is due to changes in cost estimates." Ahmed immediately realized the risk associated with changing key personnel and estimates, Therefore, he needed to pay particular attention to these two accounts. Additionally, Ahmed felt that he needed to discuss these accounts with his manager to evaluate any potential risk associated with the changes in estimates.

Ahmed did not notice any other unusual activity or red flags during the audit process. The overall audit process was smooth. So, he started working on the percentage of completion contracts and focused on the four major projects. He got the sub-trial balance (Exhibit 1). Ahmed matched the opening balances for the projects with the prior year's audited financial statements. He checked the supporting document for the additions and other credits for each project. The ending balance was calculated as follows:

Ending balance = Beginning balance + Debit transactions – credits or transfers.

He noticed that most of the additions were recorded as accrued provisions for each project. (See Exhibit 2 for the breakdown of accrued expenses for project No. 1467). Ahmed was skeptical of the accuracy of the calculated accrued expenses provision, which was about $32 million (Exhibit 3). His skepticism was based on the fact that the accrued expenses were more than 50% of the costs incurred during the year. So, Ahmed requested the engineer's calculation sheets for the accrued expenses (Exhibit 3) so that Ahmed could reperform the computations. In addition, Ahmed obtained the reported income for these projects. Exhibit 4.

Ahmed Concern

After getting the required audit requirements from the client, Ahmed calculated the revenues, costs, net income/losses, and the accrued expenses provision for each contract. Ahmed found some discrepancies between his and the client's calculations. So, he was unsure if his calculations were right since his conclusion suggested that the client was trying to maximize the losses based on his findings. So, should he report the misstatement to his manager?

EPILOGUE

The manager and the engagement partner agreed with Ahmed that the financial statements were misleading because of the excess accrued expenses that the company recognized. The company agreed with the auditors and restated its financial statement.

INSTRUCTORS' MANUAL

Overview of the Instructional Resources

An audit senior on his first audit of a construction found that the company overstated its accrued expenses in an attempt to understate its net income in the current year. Modern Construction Company is a Saudi Arabian company founded in 1982 by three individuals. The company applies the United States Generally Accepted Accounting Principles (GAAP). The company name, the audit office, and the auditor's name have been changed for anonymity reasons.

The objective of this case is to reinforce students' knowledge and understanding of construction accounting. The case is unique and different from other cases because it focuses on the calculation and emphasizes the accounting relation between different accounts. Also, most students think that accounting manipulation is only about overstating a company's income. However, this case shows that accounting manipulation may also be adopted to understate income.

This real-world case addresses the computation of the cost of projects using the percentage of completion (POC) method. This case also emphasizes the use of accrued expense provisions in the construction industry. The case is very technical and requires students to read the textbook before answering the case. Also, it is recommended that instructors ask students to learn and understand the following accounting equations and formulas.

Accounting equation:

Assets = Liabilities + Shareholders' equity

Account ending balance (Or could be used for the account's movement):

Ending balance = beginning balance + additions – subtractions

To apply this equation, students need to know the difference between the nature of the account (debit or credit).

Percentage of completion

Cost to date / Estimated total cost.

<u>Learning objectives</u>

The case aims to help the students develop their understanding of the POC and apply their knowledge. The case learning objectives are:

- Calculating costs and revenues for POC contracts.
- Calculating the projected losses or net income from POC contracts.
- Accounting for changes in POC estimates.
- Preparing the journal entries for POC revenue, accrued expenses, net income, and costs.

- Considering the information provided in the case, what audit opinion should the auditors issue?

Discussion questions and solutions

- Calculate the costs and revenues for the project (1410).
  The numbers needed to solve this question can be found in Exhibit 1, "Sub-trial balance."
  The solution is as follows:
  1) Calculate the percentage of completion as
     The cost up to date / the estimated completed cost.
     (Data can be found in Exhibits 1 and 3).
  2) Multiply the percentage in Step 1 by the projected revenue. (Data can be found in Exhibit 3.)
  3) Detect from the number you got in Step 2, the reported income in previous years. (Data can be found in Exhibit 4.)

  The percentage of completion= 52,081,064 / 55,645,985 = 94%
  The revenue for the current year= 94% x (60,000,000 – 55,645,985) = 4,354,015.
  The period income for project No. 1410 = 4,354,015 – 7,200,000 = (2,845,985).
  Here the student will realize that the estimation change makes the project a loser project for the company and explain why the company had accrued provision for this project.
- Calculate the net income/loss for the project (1473,1490) for the year ended on 12/31/2017.
  Net income (losses) for project 1473 = ((415,987,478 – 381,004,420) x 91%) – 29,458,667 = 2,375,915
  Net income (losses) for project 1490 = ((21,500,000 – 19,347,582) x 98%) – 3,144,009 = (1,034,639)
- Write the required journal entries for the changes on the project (1467) as per the year ended on 12/31/2017.

Dr. Accrued– project 1467	15,000,000	
Cr. Accrued expense – Provision project 1467		15,000,000

  (This journal means that the company has made a provision equal to $15 million. The purpose of the provision is to use it for the subsequent years without having an impact on their income statements)
- Write the required journal entries for reporting of the project (1467).

Dr. Project 1467	2,673,149	
Cr. Costs		2,673,149

  (This entry is for recognizing all the incurred costs for project No. 1467)

Dr. Accrued– project 1467	15,000,000	
Cr. Accrued expense – Provision project 1467		15,000,000

  (This entry makes the company have expenses of $15,000,000 in their income statement and the same amount in their current liability. The purpose is to use it in the future and prevent the coming years).

Dr. Receivables	79,050	
Cr. Gain from contract 1467		79,050

(This entry is to recognize the amount that the company has as a receivable from the client for project No. 1467)

- Why did the company provide its accrued expenses provision?

  This is the trickiest question. Students may have different answers. But most likely, their answers can be categorized into two groups. The first group would think that the estimation change is the reason behind providing accrued expense provision. On the other hand, the second group would think that the CFO clearly mentioned to the auditor the company would not get any construction projects for the coming year. So, the company has made provisions to decrease the losses in the coming years.

  The company was trying to maximize its losses as much as it could. They violated the law and the accounting standards. Their financial statements were misleading. They wanted to have a high balance in the accrued expenses provision and hit the income for the year ended December 31, 2017. As a result, they would have that provision to use in the following years with zero impact on their income statement for the coming years.

- Considering the information provided in the case, what audit opinion should the auditors issue?

  The company is so concerned about the future because their projections for the future are not encouraging, which is the reason they understated net income. The overstatement of accrued expenses and the understatement of net income is a departure from GAAP. The auditors should consider issuing a qualified opinion. Additionally, the auditors should also consider going concern.

Teaching plan:

The students should read the textbook and understand the concept. The concept is available in all intermediate accounting textbooks. After reading the textbook, the student should be able to solve it individually. After giving the students about 50 minutes to solve the case, it is suggested that instructors go through it with the students to show them the right application of the equations.

Exhibit 1: Sub-Trial Balance

	Opening Balance		Movements		Closing balance	
Project	Debit	Credit	Debit	Credit	Debit	Credit
Project No. 1410	$43,578,614	-	$9,247,450	$745,000	$52,081,064	-
Project No. 1467	$2,673,149	-	$27,458,657	$0	$30,131,806	-
Project No. 1473	$345,547,741	-	$41,598,214	$2,252,110	$384,893,845	-
Project No. 1490	$13,989,620	-	$1,455,083	$741,698	$14,703,005	-
Total	**$405,789,124**	**-**	**$79,759,404**	**$3,738,808**	**$481,809,720**	**-**

Exhibit 2

Account No#	Account Name	Amount
567548	Accrued expenses - Provision	15,000,000
111531	Salaries - Basic	745,986
111532	Allowance - housing	223,796
111533	Allowance - medical	111,898
111534	Allowance - transportation	74,599
433258	Cement - materials	3,944,701
433658	Dielectric	3,479,960
433252	Concert - materials	984,336
433237	Asphalt - materials	1,273,220
433960	Cobble - Materials	567,426
985562	Financial charges	303,778
144007	Management allocation	748,957
	Total	**27,458,657**

Exhibit 3 - Engineer Memo Estimates

Project	Contract Amount	Initial Estimated cost	Current estimated cost	Estimation difference	Percentage of change in estimation	Percentage of completion
Project No. 1410	60,000,000	52,500,000	55,645,985	(3,145,985)	-6%	94%
Project No. 1467	41,500,000	21,600,000	36,600,000	(15,000,000)	-69%	94%
Project No. 1473	415,987,478	368,594,712	381,004,420	(12,409,708)	-3%	91%
Project No. 1490	21,500,000	17,548,962	19,347,582	(1,798,620)	-10%	98%
Total	**538,987,478**	**460,243,674**	**492,597,987**	**(32,354,313)**	-7%	

Exhibit 4 = The Reported Income for Each Project as of December 31, 2017

Project	Reported income
Project No. 1410	7,200,000
Project No. 1467	4,526,950
Project No. 1473	29,458,667
Project No. 1490	3,144,009
Total	**44,329,626**

Reference

Dobler, M. (2008). Rethinking revenue recognition? the case of construction contracts under International Financial Reporting Standards. *International Journal of Revenue Management*, *2*(1), 1-22.