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# Forensic Audit in the Bankruptcy Context: A Teaching Case

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## ABSTRACT

Inspired by real-world bankruptcy events, we developed a case where students assist appointed forensic accountants in investigating pre-bankruptcy activities and accounting transactions to assess the likelihood of bankruptcy fraud. Students studied the guidance issued by the Association of Chartered Certified Accountants (ACCA) or other relevant sources to investigate the differences between forensic and statutory external auditing. They then identified the related parties and evaluated the purposes and consequences of transactions among them. Furthermore, students investigated why bankruptcy filings can be subject to fraud or abuse and performed a financial ratio analysis. They also investigated the value of fixed assets and trade receivables and reflected on the ethical issues. Feedback from the students revealed they felt the assignments had stimulated their critical and ethical thinking skills. This case can fit in an introductory forensic accounting, intermediate accounting, or ethics course.

**Keywords:** forensic audit; bankruptcy; fraud; related party; asset valuation; depreciation; ethical issues

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## I. CASE INTRODUCTION

Real-world cases, such as those of Enron, WorldCom, and Lehman Brothers, demonstrate that bankruptcy fraud is not only a theoretical challenge but also prevalent in actual business contexts. Bankruptcy fraud is a form of corporate fraud that encompasses dishonest and misleading business practices engaged in by a business or its executives. Those practices may occur before or during bankruptcy proceedings. Bankruptcy fraud can include hiding the firm's assets, falsifying the firm's financial records, or depriving creditors, investors, or the government of payments to which they are entitled. Corporate bankruptcy fraud often involves substantial sums of money and can impact numerous stakeholders.

While it may be uncommon for businesses to commit fraud intentionally, the bankruptcy process often reveals various forms of financial misconduct<sup>1</sup> that business owners may have used to avoid financial collapse (Poltzer 2020). According to the 2022 ACFE Report to the Nations (ACFE 2022), financial statement fraud, which often accompanies bankruptcy fraud, accounts for about nine percent of all corporate fraud cases. Additionally, W. Albrecht, C. O. Albrecht, C. C. Albrecht, and Zimbelman (2011) report that concealing a debtor's assets makes up approximately 70 percent of all bankruptcy fraud. This concealment prevents assets from being liquidated and transferred to creditors to settle debts. The purpose of the forensic audit in this case study is to investigate pre-bankruptcy activities and accounting transactions to assess the likelihood of corporate bankruptcy fraud.

Bankruptcy is a legal process through which an insolvent firm may seek debt restructuring for some or all of its debts by filing for bankruptcy in court. Bankruptcy legislation and practical procedures related to the bankruptcy process differ by country (McCormack, Keay, Brown, and Dahlgreen 2016). In Sweden, the national context of this

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<sup>1</sup> We consider financial misconduct to be a wider concept than financial statement fraud. Rezaee (2005, 279) writes: "Financial statement fraud is a deliberate attempt by corporations to deceive or mislead users of published financial statements, especially investors and creditors, by preparing and disseminating materially misstated financial statements."

case study, approximately 2,150 companies filed for bankruptcy between March and June 2020. The figure represents an increase of approximately 25 percent from the previous year (Bisnode 2020).

The bankruptcy process usually unfolds as follows: 1) a firm faces severe financial distress, 2) the firm or its creditor(s) file for bankruptcy, 3) a court accepts the bankruptcy filing, 4) and officially declares the firm bankrupt, 5) the appointed insolvency practitioner sells the firm's assets, 6) and allocates the available cash to the creditors, and 7) the firm has ceased to exist as a legal entity and is removed from the register of companies. At the end of the bankruptcy process, a permanently insolvent and unprofitable firm is closed following a court process. In most European countries, directors and managers may be held personally liable and face civil and criminal penalties if they fail to file for bankruptcy in a timely manner or neglect to inform creditors that the firm is insolvent (Hotchkiss, John, Thorburn, and Mooradian 2008).

When a court handles a bankruptcy petition, it appoints an insolvency practitioner (such as a lawyer or trustee) to manage the debtor's assets and oversee actions that suspend creditors' claims. In Sweden, the court appoints an insolvency practitioner, and the Swedish Enforcement Agency oversees the work of such insolvency practitioners (McCormack et al. 2016). The insolvency practitioner organizes a mandatory auction to sell the firm's assets. If that auction raises sufficient funds to clear the firm's debts, the bankruptcy petition may be resolved. Before the auction, the insolvency practitioner may hire an external auditor or forensic accountant to conduct a forensic audit and investigate the likelihood of fraud.

Detecting bankruptcy fraud can be complicated, but forensic accountants employ specific techniques and procedures to gather evidence (ACCA 2024). In contrast to the role of an external auditor, the forensic accountant's primary focus is not on formulating a general opinion about financial statements as a whole using sampling methods within a reasonable

materiality threshold. Instead, the forensic accountant operates at a far more granular level, concentrating on smaller errors, irregularities, or frauds that may be below the external auditor's materiality threshold (Rezaee 2005). Forensic accountants meticulously develop factual information from both documentary and testimonial evidence to determine the who, what, when, where, how, and why of a suspected or known impropriety (Golden, Skalak, and Clayton 2011; Tiwari and Debnath 2017). While management justifiably requires flexibility in operating the business and reporting financial results, that same flexibility can also create opportunities for fraud. Financial accounting standards offer management various options for presenting the financial state and outcomes of a business. Thus, accounting transactions may signal fraud, but inconsistencies and anomalies may also result from incompetence, errors, or weak internal controls (Albrecht et al. 2011).

Forensic accountants analyze large volumes of financial data to find signs of fraud and hidden assets; that is, they seek to confirm *red flags* (Gullkvist and Jokipii 2013). Red flags can include hidden or undervalued assets, disorganized or misleading financial records, recent transfers of cash or high-value assets to relatives or associates to prevent confiscation during bankruptcy, the sudden departure of key staff, and preferential payments to creditors (Politzer 2020). Additionally, absent or insufficient information can indicate that something has been concealed (Albrecht et al. 2011; Golden et al. 2011). The above process requires forensic accountants to conduct detailed reviews of corporate financial statements, bank documents, and other business records, and also to track transfers and cash flows across multiple entities and individuals. Forensic accountants should know where to look and have a thorough understanding of potential red flags that may indicate irregularities and signal areas requiring further analysis (Golden et al. 2011).

However, forensic accountants should not be viewed solely as providers of fraud detection services. They are professionals offering a broad range of services, including

investigative work, consultancy, and non-scientific testimony (Van Akkeren and Tarr 2014). These services often overlap and are not mutually exclusive. Related to investigative services, forensic accountants collect evidence to identify the motive and opportunity for fraud, ascertain the duration of the fraudulent activities, and gather details of how the fraud was executed and concealed (ACCA 2024). As consultants, forensic accountants assist in disputes related to, for example, bankruptcy, insolvency, reorganization, insurance claims, valuation, and corporate filing manipulations. They may also be engaged in identifying financial irregularities in corporate disclosures (Huber 2014). In non-scientific testimony, forensic accountants serve as potential expert witnesses in court, assisting in fact-finding, collecting indisputable documents, and providing evidence for criminal investigations in legal and administrative proceedings (Huber 2014; Tiwari and Debnath 2017). While not all accountants are trained to detect fraud patterns, forensic accountants possess additional qualifications, such as the Certified Fraud Examiner credential (Golden et al. 2011).

## **II. CASE**

Smiths is a small, privately held firm with its headquarters in the capital of Sweden. It is owned by the CEO, Wayne, who took the business over from his father. Smiths is a retail business that sells wooden chairs to restaurants worldwide. It also offers employees the opportunity to buy its products. The chairs are sourced from a European manufacturer renowned for its exceptional quality.

Since Smiths' establishment in 2013, the business has grown rapidly. The firm employs seven people: Sophie, the accountant, who also manages an online shop; Tim, the chief buyer, who also fulfills orders from the warehouse, aided by Michael, a dedicated warehouse worker. There is also a sales team comprising Patrik, Jonathan, Alex, and Bob. They travel frequently and are in the Smiths' offices for only around two or three days each

month. Further, Smiths owns a warehouse about a half-hour drive from its offices. The warehouse was acquired in 2016 for EUR 4,000,000 and financed through a bank loan secured against the warehouse as collateral. Wayne negotiated the loan directly with the local bank manager, although his wife worked at the bank. Additionally, Smiths owns a black Ford sedan, which was purchased for EUR 64,990 in January 2020. Although Wayne has access to the company car, he usually commutes to work by train.

In early 2020, before the global outbreak of the coronavirus known as COVID-19, Smiths was performing well financially. However, in March 2020, the COVID-19 outbreak was declared a global pandemic (WHO 2022). The pandemic triggered a significant decline in global economic activity, caused significant reductions in consumer spending, and changes to forms of spending. The future seemed very uncertain, and people anticipated that the pandemic might last for two to three years, based on past pandemics. In April 2020, government lockdown regulations forced restaurants to close, and Smith's customers were among those businesses that remained closed for months.

While the lockdown policy offered the restaurant owners a good opportunity to renovate their interiors, very few restaurants invested in renovations during this uncertain time. Instead, the restaurants remained closed or amended their business model to offer takeaway and delivery services. During the lockdown, Smiths did not receive any new sales orders. In addition, many customers postponed or canceled their pending orders due to their weak financial situation and ongoing uncertainty. Even restaurants with significant renovation plans canceled their orders, as they put their investment plans on hold. Consequently, Smiths' sales revenue was hit hard, causing significant concern about the firm's ability to pay its liabilities.

Wayne discussed what to do with his father, who had founded the firm. Should he temporarily lay off staff? They pondered the pros and cons of layoffs. On the one hand,

temporary staff layoffs would help Wayne reduce payroll expenses and maybe allow him to rehire staff when business conditions improve. On the other hand, layoffs might create stress and insecurity among staff, and some might seek alternative employment and not return. Would the bank and creditors agree to extend payment terms? Wayne contacted the bank, but the bank manager was unwilling to extend the payment terms, citing Smiths' insufficient collateral to secure the extension and the increased risk for the bank if declining revenues at Smiths meant it was unable to meet extended repayment obligations. Furthermore, the bank manager argued that such an extension was against the bank's general policy and encouraged Wayne to explore alternative credit options. Then Wayne turned to Smiths' key European supplier, Best Chairs Europe. As the supplier wanted to keep Smiths as a customer in the future, the firm granted a two-month extension on the payment terms for three large unpaid purchase invoices. After further reducing marketing expenses to conserve cash, Wayne felt somewhat more optimistic and decided not to take further action and to adopt a wait-and-see approach.

In July 2020, just before payday, Wayne informed Sophie that he would no longer take his full monthly salary, reducing it from EUR 6,000 to EUR 2,000. While preparing the corporate accounts for July, Sophie noticed a payment of EUR 40,000 received from Wayne on the firm's bank statement. When she asked about the sum, Wayne explained that he had bought the Ford sedan. He mentioned that his father had also wanted to buy the car, but they had agreed that Wayne would do so. Sophie questioned the sales price, thinking that EUR 40,000 seemed too low. Wayne justified the price by stating that, having reduced his salary and always worked hard, he felt he deserved some compensation from the firm. He expected to take the adjusted EUR 2,000 salary for at least ten more months and viewed the car transaction as a form of compensation. Even though Sophie had no invoice, receipt, or other

proof of the transaction, she recorded EUR 40,000 in the company's accounts based solely on the bank statement entry.

Restaurants reopened between June and September, albeit with restrictions enforcing reduced seating capacity and mandatory mask-wearing. Many restaurants had to rearrange their seating to comply with these regulations, and as a result of the reduced seating restrictions, the restaurants' need for new furniture decreased. By the fall of 2020, restaurants had, however, restored normal opening hours, but another coronavirus outbreak soon triggered additional uncertainty. However, there seemed to be some hope for Smiths. As restaurants adjusted to evolving restrictions, some of Smiths' customers began to place new orders for previously canceled items. Smiths also acquired some new customers. Despite these positive signs, Smiths' total sales revenue did not return to pre-pandemic levels, as the remaining challenges, such as reduced restaurant budgets, ongoing uncertainty, and supply-chain disruptions, continued to affect global business.

In spring 2021, Wayne reviewed Smiths' financial statements for the year 2020 (see Appendix A). The numbers were troubling: Smiths' sales revenue did not cover the total expenses and the cash reserves were rapidly diminishing. He understood that action was necessary, as continuing business operations in the same manner would be unwise. What options did he have? The sales team had to quickly generate new revenue, and the warehouse had to be staffed to handle deliveries. Renegotiating supplier contracts or reducing operating expenses might buy some time, although cost savings would not be sufficient. He considered whether the firm could secure new customers to generate additional revenue. Wayne wrestled with a difficult decision: Closing Smiths was not something that he wanted to consider. Long-term customers trusted the products, and employees' livelihoods were at stake. However, without significant sales growth, the outlook for Smiths was bleak.

Wayne explored several options. He found that Smiths could not comply with all legal requirements to apply for debt restructuring. He familiarized himself with the bankruptcy filing process, though he hesitated to file because of concerns about damage to the firm's reputation. However, in November 2021, Wayne reluctantly decided that Smiths should file for bankruptcy, as the firm could not service the loans for its warehouse or car. He viewed bankruptcy as the only way to escape the financial crisis that had severely impacted both Smiths and its restaurant customers in the wake of the COVID-19 pandemic. Although Smiths had some unsold chairs in stock, the firm was unable to sell them, even at discounted prices. By November 2021, Smiths owed creditors approximately EUR 3,400,000. While there were outstanding accounts receivable from customers, it was uncertain whether the firm could collect these receivables. Furthermore, new sales orders were almost nonexistent.

After receiving Smiths' bankruptcy filing, the Swedish professional body appointed lawyer Anna to manage the proceedings. According to the outstanding accounts payable, the largest creditors were the bank and tax authorities, while Smiths had primarily paid its key European supplier. After reviewing Smiths' corporate financial statements, Anna met with CEO Wayne at the firm's premises. During her visit, Anna inspected the warehouse. She found 35 bicycles and 50 electric scooters, which were not part of Smiths' normal sales inventory. When she asked for an explanation, Wayne replied that he had leased part of the warehouse to a company called Smart Bikers since June 2021, as Smiths was not using the entire space.

Following her visit, Anna recognized the need for professionals with expertise in accounting and auditing to conduct forensic investigations and evaluations of Smiths' financial accounts. She requested a forensic audit to determine if fraud was an issue within the firm. Anna asked the forensic accountants, John and Stefanie, to examine transactions with related parties (insiders), assess valuations and any recent asset transfers, and investigate any

preferential payments made to creditors, all of which are common themes in bankruptcy cases. She also requested an assessment to determine whether Smiths showed signs of over-indebtedness and insolvency that could trigger its dissolution through bankruptcy proceedings.

### **III. REQUIREMENTS**

You will assist John and Stefanie with their forensic audit as a trainee. Given that you are new to the role, they have asked you to familiarize yourself with key topics, including forensic auditing, related-party transactions, bankruptcy, and asset valuation. Some literature sources have been provided for your reference. You also have access to Smiths' financial statements, lists of trade receivables, trade payables, and its inventory (Appendix B). Moreover, industry averages are available and will facilitate comparisons with Smiths' financial ratios (Appendix C). The following questions outline your assignment:

#### **1. Forensic audit**

For these questions, please familiarize yourself with resources on forensic services by, for example, the ACCA or other relevant guidelines.

- a. What are the common tasks and duties of forensic accountants? How do these tasks differ from the tasks of statutory external auditors? Please also consider the materiality aspects.
- b. What challenges might forensic accountants face in this case?

#### **2. Related parties**

For these questions, please familiarize yourself with resources on the related parties, for example, the IAS 24 by the International Accounting Standards Board (IASB 2005) and Accounting Standards Codification (ASC) 850 by the Financial Accounting Standards Board (FASB 2009).

- a. Define a related party (insider) according to IAS 24 or ASC 850.

- b. What might be the purposes and potential consequences of transactions with related parties? Are related-party transactions illegal? Please explain your response.
- c. Identify related parties in the Smiths' case. Please also consider the trade receivables and trade payables lists. Please note that the chairs have been sold at the same price to every customer, as Smiths has not offered discounts to any specific customers.

### **3. Bankruptcy**

Information on the bankruptcy process in Sweden is available if required (see McCormack, Keay, Brown, and Dahlgreen 2016).

- a. Discuss legitimate and illegitimate reasons for corporate bankruptcy filings.
- b. Determine why financial reports for bankruptcy filings have the potential for fraud or abuse.
- c. Which corporate ratios or other factors best predict a firm's financial health (or lack thereof)? Which factors are relevant in Smiths' case?
- d. Calculate the financial ratios for profitability, liquidity, solvency, and bankruptcy predictions. Prepare a trend analysis over time. What conclusions can you draw about Smiths' financial situation? Please also compare against industry averages.

### **4. Asset valuation and depreciation**

- a. What was the book value of the Ford car in July 2020 when Wayne bought it? According to the notes in Smiths' financial statement for 2020, vehicles depreciate using the straight-line method over five years.
- b. Wayne purchased the Ford car for EUR 40,000. What is the common selling price for a six-month-old car (any car)? How much does the car's value depreciate in six months? Decide if Wayne paid an appropriate amount and explain your reasoning. Use online resources to

determine market prices for used cars and apply your findings to assess Ford's value after six months.

c. Discuss the implications of the straight-line method used for computing depreciation for the car.

d. Perform an inventory reconciliation between the inventory list (Appendix B) and the information in the financial statements (Appendix A). What conclusions do you draw?

e. Did your investigation identify any other asset- or income-related concerns?

## **5. Ethical aspects**

a. How would you record the EUR 40,000 paid by Wayne for the car? Explain your reasoning.

b. Discuss the ethical issues arising when a CEO sells a firm car to himself in normal times and prior to bankruptcy.

c. How should the firm record the bank loan related to the Ford sedan in its corporate accounts after selling the car to Wayne?

d. Discuss the ethical issues related to corporate bankruptcy fraud.

## **STUDENT RESOURCES**

AICPA. 2023. Statement on Standards for Forensic Services. Durham, NC: AICPA.  
<https://www.aicpa-cima.com/resources/download/statement-on-standards-for-forensic-services>

Albrecht, W. S., C. O. Albrecht, C. C. Albrecht, and M. F. Zimbelman. 2011. *Fraud Examination*. Cengage Learning.

Association of Chartered Certified Accountants (ACCA). 2024. *Forensic auditing*.  
<https://www.accaglobal.com/gb/en/student/exam-support-resources/professional-exams-study-resources/p7/technical-articles/forensic-accounting.html>

Baker & McKenzie Advokatbyrå KB. 2024. *Global Restructuring & Insolvency Guide: Sweden*. <https://restructuring.bakermckenzie.com/wp-content/uploads/sites/23/2017/01/Global-Restructuring-Insolvency-Guide-New-Logo-Sweden.pdf>

- Crumbley, D. L., L. E. Heitger, and G. S. Smith. 2009. *Forensic and Investigative Accounting*, 4th ed. Chicago: CCH Incorporated.
- Financial Accounting Standards Board (FASB). 2009. *ASC 850. Related Party Disclosures*. Norwalk CT: FASB.
- Golden, T. W., S. L. Skalak, and M. M. Clayton. 2011. *A Guide to Forensic Accounting Investigation*. Hoboken, NJ: John Wiley & Sons.
- Hopwood, W. S., J. J. Leiner, and G. R. Young. 2011. *Forensic Accounting and Fraud Examination*. New York: McGraw-Hill Irwin.
- International Accounting Standards Board (IASB). 2005. *IAS 24. Related Party Disclosures*. London, U.K.: IASB. Brief version: <https://www.iasplus.com/en/standards/ias/ias24>
- Kranacher, M-J., R. A. Riley Jr., and J. T. Wells. 2011. *Forensic Accounting and Fraud Examination*. Hoboken, NJ: John Wiley & Sons.
- Lessambo, F.I. 2018. *Auditing, Assurance Services, and Forensics*.  
[https://doi.org/10.1007/978-3-319-90521-1\\_13](https://doi.org/10.1007/978-3-319-90521-1_13)
- McCormack, G., A. Key, S. Brown, and J. Dahlgreen. 2016. *Study on a new approach to business failure and insolvency – Comparative legal analysis of the Member States' relevant provisions and practices (Tender No. JUST/2014/JCOO/PR/CIVI/0075)*.  
[https://commission.europa.eu/system/files/2017-03/insolvency\\_study\\_2016\\_final\\_en.pdf](https://commission.europa.eu/system/files/2017-03/insolvency_study_2016_final_en.pdf)
- White & Case LLP. 2022. *New Swedish Restructuring Act*.  
<https://www.whitecase.com/insight-alert/new-swedish-restructuring-act>

## REFERENCES

- AICPA. 2023. Statement on Standards for Forensic Services. Durham, NC: AICPA.  
<https://www.aicpa-cima.com/resources/download/statement-on-standards-for-forensic-services>
- Albrecht, W. S., C. O. Albrecht, C. C. Albrecht, and M. F. Zimbelman. 2011. *Fraud Examination*. Cengage Learning.
- Association of Certified Fraud Examiners (ACFE). 2022. *Occupational fraud 2022*. A report to the nations. <https://acfe-public.s3.us-west-2.amazonaws.com/2022+Report+to+the+Nations.pdf>
- Association of Chartered Certified Accountants (ACCA). 2024. *Forensic auditing*.  
<https://www.accaglobal.com/gb/en/student/exam-support-resources/professional-exams-study-resources/p7/technical-articles/forensic-accounting.html>
- Baker, M., and K. B. Advokatbyrå. 2024. Global restructuring & insolvency guide: Sweden.  
<https://restructuring.bakermck-enzie.com/wp-content/uploads/sites/23/2017/01/Global-Restructuring-Insolvency-Guide-New-Logo-Sweden.pdf>

- Bisnode. 2020. *Antalet konkurser ökar i Sverige och Norge, men minskar i Danmark under Coronakrisen*. <https://news.cision.com/se/bisnode/r/antalet-konkurser-okar-i-sverige-och-norge--men-minskar-i-danmark-under-coronakrisen,c3136321>
- Crumbley, D. L., L. E. Heitger, and G. S. Smith. 2009. *Forensic and Investigative Accounting*, 4th edition. Chicago, IL: CCH Incorporated.
- Financial Accounting Standards Board (FASB). 2009. *ASC 850. Related Party Disclosures*.
- Golden, T. W., S. L. Skalak, and M. M. Clayton. 2011. *A Guide to Forensic Accounting Investigation*. Hoboken, NJ: John Wiley & Sons.
- Gullkvist, B., and A. Jokipii. 2013. Perceived importance of red flags across fraud types. *Critical Perspectives on Accounting* 24 (1): 44–61. <https://doi.org/10.1016/j.cpa.2012.01.004>
- Hopwood, W. S., J. J. Leiner, and G. R. Young. 2011. *Forensic Accounting and Fraud Examination*. New York, NY: McGraw-Hill Irwin.
- Hotchkiss E.S., K. John, K.S. Thorburn, and R.M. Mooradian. 2008. Bankruptcy and the resolution of financial distress. In: Eckbo B.E. (ed.) *Handbook of Corporate Finance: Empirical Corporate Finance*. Amsterdam: Elsevier BV, Chapter 14: 235–290.
- Huber, W. D. 2014. Forensic accounting: An Anglo-American comparison—forensic accounting in the USA. *Journal of Forensic and Investigative Accounting* 6 (3): 154–170.
- International Accounting Standards Board (IASB). 2005. *IAS 24. Related Party Disclosures*. London, U.K.: IASB. Brief version: <https://www.iasplus.com/en/standards/ias/ias24>
- Kranacher, M.-J., R. A. Riley, Jr., and J. T. Wells. 2011. *Forensic Accounting and Fraud Examination*. Hoboken, NJ: John Wiley & Sons.
- Lessambo, F. I. 2018. Auditing, assurance services, and forensics. [https://doi.org/10.1007/978-3-319-90521-1\\_13](https://doi.org/10.1007/978-3-319-90521-1_13)
- McCormack, G., A. Keay, S. Brown, and J. Dahlgreen. 2016. *Study on a new approach to business failure and insolvency – Comparative legal analysis of the Member States’ relevant provisions and practices (Tender No. JUST/2014/JCOO/PR/CIVI/0075)*. [https://commission.europa.eu/system/files/2017-03/insolvency\\_study\\_2016\\_final\\_en.pdf](https://commission.europa.eu/system/files/2017-03/insolvency_study_2016_final_en.pdf)
- Politzer, M. 2020. Spotting fraud during the bankruptcy process: Top red flags. *Journal of Accountancy*, October. <https://www.journalofaccountancy.com/issues/2020/oct/fraud-red-flags-during-bankruptcy-process.html>
- Rezaee, Z. 2005. Causes, consequences, and deterrence of financial statement fraud. *Critical Perspectives on Accounting* 16 (3): 277–298. [https://doi.org/10.1016/S1045-2354\(03\)00072-8](https://doi.org/10.1016/S1045-2354(03)00072-8)
- Tiwari, R. K., and J. Debnath. 2017. Forensic accounting: a blend of knowledge. *Journal of Financial Regulation and Compliance* 25 (1), 73–85. <https://doi.org/10.1108/JFRC-05-2016-0043>

- Van Akkeren, J., and J. A. Tarr. 2014. Regulation, compliance and the Australian forensic accounting profession. *Journal of Forensic and Investigative Accounting* 6 (3): 1–26.
- White & Case LLP. 2022. New Swedish Restructuring Act.  
<https://www.whitecase.com/insight-alert/new-swedish-restructuring-act>
- World Health Organization (WHO). 2022. WHO Director-General’s opening remarks at the media briefing on COVID-19. March 11, 2020.

## APPENDIX A

### Financial Statements (in EUR)

	Jan-Dec 2017 EUR	Jan-Dec 2018 EUR	Jan-Dec 2019 EUR	Jan-Dec 2020 EUR	Jan-Nov 2021 EUR
<b>Income Statement</b>					
Revenue	4,687,500	4,927,110	5,221,890	1,921,040	1,870,000
Trading goods and services	-4,275,000	-4,233,884	-4,738,316	-1,760,314	-1,853,200
Changes in inventories	56,250	-132,888	110,288	-213,118	-67,800
Staff expenses	-36,875	-37,613	-38,365	-33,125	-33,788
Depreciation, building	-160,000	-160,000	-160,000	-160,000	-160,000
Depreciation, car	-1,000	-1,000	-1,000	-7,499	0
Depreciation, other assets	-8,567	-6,425	-4,819	-3,614	-2,711
Sale of assets (loss)	0	0	0	-1,849	0
Other operating expenses	-22,345	-24,580	-27,037	-29,741	-32,715
Operating profit (loss)	239,963	330,721	362,641	-304,862	-280,213
Financial income and expenses	-104,533	-97,067	-89,600	-89,600	-89,600
Income taxes	<u>-33,857</u>	<u>-58,414</u>	<u>-68,260</u>	<u>0</u>	<u>0</u>
<i>Profit (loss) for the financial year</i>	101,572	175,241	204,781	-394,462	-369,813
	<b>Dec 31, 2017</b>	<b>Dec 31, 2018</b>	<b>Dec 31, 2019</b>	<b>Dec 31, 2020</b>	<b>Nov 30, 2021</b>
	<b>EUR</b>	<b>EUR</b>	<b>EUR</b>	<b>EUR</b>	<b>EUR</b>
<b>Balance Sheet</b>					
<i>Assets</i>					
Property, plant, and equipment	3,680,000	3,520,000	3,360,000	3,200,000	3,040,000
Machinery and equipment	25,700	19,275	14,456	10,842	8,132
Vehicles	3,000	2,000	1,000	0	0
Inventories	336,250	203,362	313,650	100,532	32,732
Trade and other receivables	179,795	188,985	200,292	73,684	71,726
Cash and cash equivalents	<u>255,299</u>	<u>453,399</u>	<u>464,974</u>	<u>478,738</u>	<u>347,186</u>
<b>Total Assets</b>	4,480,044	4,387,021	4,354,372	3,863,796	3,499,776
<i>Equity</i>					
Shareholders' equity	20,000	20,000	20,000	20,000	20,000
Retained earnings	371,600	473,172	648,413	853,194	458,732
Profit (loss) for the financial year	<u>101,572</u>	<u>175,241</u>	<u>204,781</u>	<u>-394,462</u>	<u>-369,813</u>
<b>Total Equity</b>	493,172	668,413	873,194	478,732	108,919
<i>Liabilities</i>					
Liabilities to credit institutions, long	3,466,666	3,199,999	2,933,332	2,666,665	2,399,998
Liabilities to credit institutions, short	266,667	266,667	266,667	533,334	800,001
Payables for car	0	0	0	64,990	64,990
Trade and other payables	245,959	243,593	272,615	101,278	106,622
Accruals	<u>7,580</u>	<u>8,349</u>	<u>8,563</u>	<u>18,797</u>	<u>19,246</u>
<b>Total Liabilities</b>	<u>3,986,871</u>	<u>3,718,608</u>	<u>3,481,178</u>	<u>3,385,065</u>	<u>3,390,857</u>
<b>Total Equity and Liabilities</b>	4,480,044	4,387,021	4,354,372	3,863,796	3,499,776

## APPENDIX B

### Lists of inventories, trade receivables, and trade payables as of Nov 2021

<b>Inventories</b>			
	<b>Items</b>	<b>Price</b>	<b>EUR Total</b>
Blue chairs	55	225	12,375
Red chairs	44	227	9,988
Black chairs	27	226	6,102
White chairs	15	225	3,375
	<u>141</u>		<u>31,840</u>

  

<b>Trade Receivables</b>			
<b>Name of Customer</b>	<b>Name</b>	<b>Date of Sale</b>	<b>EUR Total</b>
Café & Bar Best Friends	Elizabeth	November 1st, 2021	12,100
Brother's Kitchen	George	November 5th, 2021	9,900
Bistro Red Apple	Donald	October 17th, 2021	11,440
Hot Coffee Shop	Jonathan	March 31st, 2020	13,200
Nice Horse Bistro	Jackie	October 3rd, 2021	4,400
Restaurant At Home	Sylvia	October 22nd, 2021	6,600
Bistro Best Food Ever	Michelle	November 7th, 2021	7,586
Café & Bar Come As You			
Are	Steven	September 30th, 2021	6,100
	Jonathan	October 15th, 2021	400
			<u>71,726</u>

## APPENDIX C Industry averages of financial ratios

	Year 2021	Year 2020	Year 2019	Year 2018	Year 2017
<b>Profitability</b>					
<b>Contribution Margin (%)</b>					
Mean	39.68	42.97	41.07	41.21	42.62
Median	44.04	46.84	40.83	42.04	43.14
Max	57.10	66.56	72.56	73.08	71.67
Min	21.62	14.93	11.21	13.03	14.06
<b>Operating Profit (%)</b>					
Mean	4.45	4.82	0.16	1.43	1.90
Median	5.29	2.05	0.83	1.07	0.95
Max	12.42	13.98	9.25	9.88	8.76
Min	-4.22	-5.35	-6.84	-8.87	-5.59
<b>ROE (%)</b>					
Mean	23.39	-97.12	-50.26	-29.10	13.93
Median	18.45	20.71	3.37	3.08	5.16
Max	84.64	41.40	28.70	75.09	95.10
Min	-29.91	-811.22	-299.71	-178.35	-37.76
<b>ROA (%)</b>					
Mean	8.43	6.62	-2.03	2.41	5.13
Median	7.29	3.27	1.90	1.94	0.82
Max	28.83	34.88	23.07	24.08	23.61
Min	-12.61	-30.40	-23.41	-20.85	-11.22
<b>Liquidity and Solvency</b>					
<b>Solvency (%)</b>					
Mean	44.74	43.35	36.97	33.85	35.81
Median	44.40	47.02	42.87	36.52	36.84
Max	71.76	77.50	68.05	60.73	62.83
Min	11.44	3.75	7.81	4.98	15.86
<b>Leverage (%)</b>					
Mean	55.26	56.65	63.03	66.15	64.19
Median	55.60	52.98	57.13	63.48	63.16
Max	88.56	96.35	92.19	95.02	84.14
Min	28.24	22.50	31.95	39.28	37.17
<b>Quick Ratio</b>					
Mean	1.19	1.53	1.03	0.93	0.91
Median	1.14	1.23	0.86	0.98	0.80
Max	2.25	3.65	1.97	1.41	1.74
Min	0.42	0.55	0.50	0.50	0.58
<b>Current Ratio</b>					
Mean	2.35	2.57	2.12	1.89	1.66
Median	1.70	1.88	1.73	1.94	1.68
Max	4.66	5.02	3.40	2.94	2.57
Min	1.06	1.02	0.97	0.99	1.06
<b>Bankruptcy Prediction</b>					
<b>Altman Z-score</b>					
Mean	3.77	3.43	3.09	3.09	3.07
Median	2.92	3.49	2.65	2.97	2.81
Max	8.55	4.54	4.54	4.11	4.39
Min	2.33	2.11	1.93	2.02	1.94

#### **IV. CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE**

This educational case is based on real events related to bankruptcy, an area that has the potential for fraud or abuse (Albrecht, Albrecht, Albrecht, and Zimbelman 2011; O'Bryan, Quirin, and Goedeke 2020). The case aims to help students expand their skill sets and explore fraud examination, which is relevant for forensic accountants and external auditors who may work on this type of engagement. Furthermore, the case aims to enhance students' awareness of fraud-related matters and help them identify red flags in various assets and asset valuation, an invaluable insight for every accounting student. Upon completing the Smiths' case, the students should be able to demonstrate enhanced insights into forensic accounting practice related to accounting transactions investigation and ethics matters related to potential bankruptcy fraud.

This case also seeks to extend prior teaching cases on bankruptcy (e.g., Lehavy and Udpa 2011; Caplan, Dutta, and Marcinko 2012; Churyk, Yu, Gross, and Stoettner 2015; O'Bryan et al. 2020) by applying it to the context of forensic auditing. Published teaching cases on bankruptcy have covered the following areas: The Kmart bankruptcy case focuses on bankruptcy prediction, applying fresh-start accounting, and the valuation of Kmart at the time of distress (Lehavy and Udpa 2011); The Lehman case focuses on how or why an entity enters into bankruptcy, thus covering the entity bankruptcy process and related ethical issues (Caplan et al. 2012); The Johnson case discusses the steps to take when a company enters or exists the Chapter 11 bankruptcy process in the USA (Churyk et al. 2015). Finally, O'Bryan et al. (2020) present a case related to the bankruptcy auditor's use of tax returns to determine the primary sources of income and assets for the debtor. Consequently, our Smiths' case differs from the above by focusing on pre-activity activities and accounting transactions from a forensic accounting point of view, exemplifying the aspects that would be examined in a

real-world case. Furthermore, we aim to contribute to the literature on related-party transactions (Lessambo 2018; Licata, Bremser, and Rollins 1997; Louwers, Henry, Reed, and Gordon 2008), as related-party transactions can sometimes play a significant role in bankruptcy investigations. Additionally, we believe forensic auditing warrants more attention in both the context of education and literature.

### **Learning Objectives**

Upon completion of the case, students will be able to:

1. Improve their ability to identify and distinguish between forensic audits and statutory external audits.
2. Enhance their understanding of the related-party concept, enabling them to identify related parties and evaluate the purposes and consequences of transactions with them.
3. Deepen their comprehension of bankruptcy and bankruptcy fraud, including the reasons a firm files for bankruptcy, the factors that predict bankruptcy, and the ethical aspects of bankruptcy fraud.
4. Strengthen their financial ratio and trend analysis skills to effectively assess the corporate financial situation.
5. Improve their ability to apply depreciation method(s) for fixed assets, analyze differences between book value and selling price, and make informed judgments about asset valuation and depreciation.
6. Improve their capacity for critical and ethical thinking when addressing matters related to potential financial fraud.

### **Implementation Guidance**

We recommend incorporating this case study into, for example, an introductory forensic accounting, intermediate accounting, or ethics course. It is highly recommended that students have previous knowledge about financial accounting (assets, depreciation), financial ratios, bankruptcy, and related-party transactions as a prerequisite for this case. Without the required knowledge, the students may spend numerous (even 40–50) hours on self-studies to learn the subjects. An introductory course in auditing can also be helpful for students. Based on our case testing, accounting students are usually familiar with financial statement analysis and asset valuation issues but less familiar with bankruptcy and related-party issues. However, this likely varies with the university and curriculum. Accordingly, we recommend the instructor align the case or adopt only parts of the case to correspond with the students' expected level of pre-knowledge.

We also recommend that instructors align the case requirements with their course learning objectives. Accordingly, instructors may choose to focus specifically on selected learning objectives and related questions, excluding subjects not yet dealt with in their course. Alternatively, instructors could cover the subject of bankruptcy in class in conjunction with a brief introduction of the case, especially as bankruptcy may not be covered even in more advanced accounting courses (Churyk et al. 2015). Although this educational case originates in Sweden, the case can be applied to various jurisdictions when country-specific accounting regulations and bankruptcy procedures are incorporated. Thus, instructors should decide whether students should use relevant professional standards in their responses and whether covering both U.S. GAAP and IFRS in the valuation task aligns with their course goals. While U.S. GAAP and IFRS-related party and fixed assets standards have largely converged, some differences remain in the accounting treatment and bankruptcy regulation. If the case appears too easy, we have provided some ideas on extending it to more advanced fraud examination and judgment-related issues in the teaching notes.

We suggest three alternative instructional approaches based on our experience developing and implementing this case. In the first approach, students work in groups of between two and four and submit their responses to the instructor. Since students would typically divide tasks among themselves, we recommend that all group members review and refine the entire draft together before final submission. After submission, instructors can determine the most suitable feedback method, such as in-class discussions or formal assessments. If the primary feedback method is a classroom discussion, we suggest that while one group presents its findings, other groups act as critical reviewers, asking questions or taking notes. Additionally, instructors might include a role-playing exercise in which students assume the roles of Wayne, his father, accountant Sophie, and lawyer Anna. The class time required for the discussion and activities is estimated to be approximately 50 minutes.

The second approach is to conduct the case study as an in-class assignment. The students will need approximately four hours, possibly spanning multiple sessions, if the method is to be effective. The required time is determined by the need to research, discuss, reflect, and prepare their answers. Instructors may improve the efficiency of the lesson time by sharing the case and providing an introductory session beforehand, for example, on the bankruptcy process. Then students could familiarize themselves with the material before the in-class assignment. Time should also be reserved for class discussions and/or student presentations.

The third approach assigns the case as an individual, non-collaborative exercise. Students submit their responses for assessment or later review in a class discussion. Our experience suggests that students usually allocate far more time when working alone. Moreover, the students often arrive at different answers to the ethical questions. Therefore, we strongly recommend that the instructor dedicate part of the discussion to the ethical aspects of the case to emphasize the role of judgment in decision-making.

While we have described a classroom environment above, we believe the case study could also be undertaken online with little or no modification. However, we have not tested the case in an online format. Providing the students with the material in advance may be beneficial. The students' activity could likely be enhanced by utilizing breakout rooms in Zoom, Microsoft Teams, or similar applications, and allowing students to work in groups of two to four people. Each group could be given a different question. Alternatively, the same specific questions are given to all groups. The discussion at the end of the breakout sessions can be conducted so that one group presents their thoughts on the assigned question(s) and the other students contribute to a discussion.

### **Evidence of Learning Efficacy**

We have tested this teaching case in two different settings: individual and group assignments. Based on our experience, both formats work effectively. However, we recommend using group work rather than individual task work. Working in groups allows the students to discuss the case and learn from each other, especially when pre-knowledge is low. In our testing cases, the assignment was completed outside the classroom. However, we recommend holding an in-class discussion afterward to help students understand that sometimes there is no explicit correct answer to a question. Based on our observations, one week of preparation period should be sufficient for the group assignment, while the instructor may allow two to three weeks for an individual assignment.

We asked two non-author instructors from different universities to use the case in their accounting courses to assess students' perceptions of the case and evaluate its effectiveness in achieving the intended learning objectives (LOs). After receiving full approval from both the instructor and the Dean, we verified that no institutional review board (IRB) approval letter

was required<sup>2</sup>. In February 2023, the first instructor assigned part of the case as an extra credit project (adding three percent to the final course grade) in a master's-level accounting program at a large public university in Finland (Group 1 in Table 1, Panel A). That was a mandatory intermediate accounting course, and the students were specializing in accounting and finance. One of the authors delivered a two-hour guest lecture on forensic accounting and bankruptcy, thus providing brief instructions to start the assignment. Due to time constraints, students were asked to respond to Questions 2, 3c–d, 4, and 5. The students had three weeks to complete the assignment. While they were allowed to work in groups, three of them chose to complete the task individually.

The second instructor introduced the case to the class using materials provided by one of the case authors. This was an elective course on a master's degree accounting program at a large Finnish public university (Group 2 in Table 1, Panel B). The case was one of three teaching cases used in the course and was worth a maximum of ten points of the total of 25 course points. This assignment was completed individually, with students required to respond to all the questions and submit their answers electronically. The assignment would be returned in three months, as the course was part of the university's 2023 summer program. Of the eligible master's-level students, only 14 opted to complete the elective course. The same instructor also tested the case in a similar course in the fall of 2024, following a minor revision of the case text. Fifteen students completed the course and worked on the case at that time. Group 2 includes student responses from both the first and second tests.

After submitting their case solutions, all students were asked to provide feedback by completing an online survey. The Webropol tool was used to distribute the questionnaire and instructions, and it also recorded student responses and provided an overview of the results.

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<sup>2</sup> Finnish universities and researchers are committed to follow the ethical guidelines and principles for research set forth by TENK. A formal ethical permission from the Ethical board of the respective educational institution is not necessary, unless conducting medical research. For more information, please see: <https://www.tenk.fi/en/ethical-review-in-finland>

We used a single survey instrument, incorporating questions that assessed students' pre-case knowledge within the post-survey. A reminder was sent once to the student groups to encourage participation.

The participating students voluntarily and anonymously recorded their level of agreement or disagreement on statements Q 2–13 using a Likert scale anchored with *fully agree* (5) and *fully disagree* (1). Table 1 shows the statements and responses from the anonymous student survey, with statements related to each learning objective (Q 2–13) and students' overall perceptions of the case (Q 14–17). The response rate was 100 percent for Group 1 and 93 percent for Group 2 in the first testing, and 67 percent in the second testing. We amended the case text based on feedback from the initial tests. The amendments included adding details and descriptions of the case, revising student resources, and refining a couple of the questions to clarify the requirements.

We also asked students to estimate and report the hours spent on the assignment. The first group, working in groups and not responding to all questions, reported an average of approximately 6 hours. The second group, completing the case individually, estimated an average of 25 hours with a standard deviation of 20. The excessive hours spent on the task by Group 2 (Individuals) can be attributed to their limited prior knowledge of bankruptcy and related-party transactions. Therefore, they had first to familiarize themselves with these topics before completing the task. In addition, students in Group 2 were required to submit a written report of 15–20 pages, which included their calculations, analysis, reasoning, and discussion. Producing the report is likely to have taken a considerable time. In other situations, fewer hours would likely be required, but instructors should consider that individual assignments may require significantly more time to complete than group assignments.

Regarding prior knowledge of the case themes, we interpreted the responses to Q1 as indicating that students had some familiarity with the topics (means ranging between 2.38 and

3.63 on a scale 1=very low, 2=low, 3=moderate, 4= high, and 5= very high. Group 1 was not required to complete the assignment for LO 1, which explains the lower mean (3.38), as this score reflects only the information provided during the guest lecture. For LO 2 through LO 6, the survey results indicate positive and significant case effectiveness, with mean scores ranging from 3.17 to 4.25, which were fairly consistent across the survey groups.

Additionally, student feedback in Q14–17 shows that most students agreed, at least to some extent, that the case study represented a realistic accounting scenario (mean 3.78 and 3.96, respectively), that completing the case was a valuable learning experience (mean 4.22 and 4.30), that the case suited their current level of knowledge (mean 4.06 and 3.91), and that they would recommend the case to future accounting students (mean 4.25 and 4.17). Finally, a Mann-Whitney test on differences in means between the test groups (Group 1 and 2) indicates that both groups perceive the case as useful and relevant, with no statistically significant differences in mean responses between them. Based on these results, we conclude that the case study is an effective learning tool.

**Table 1 Panel A**  
**Student Assessments of the Case Assignment**

PANEL A: Responses from Group 1 (Group work) (N=32)					
	Mean	Median	SD	Mean t-test (H0=3)	Different from neutral (median =3) Sign Test
<b>Q1 Prior knowledge about the key themes was ...</b>					
<b>Scale:</b> 1 = very low, 2= low, 3 = moderate, 4= high, 5= very high					
bankruptcy and bankruptcy prediction	2.66	3.00	0.90	-2.16**	-2.00**
financial statement analysis (financial ratios)	3.44	3.00	0.62	4.00***	3.30***
asset valuation and depreciation	3.63	4.00	0.79	4.46***	3.53***
related-party transactions	2.38	2.00	0.91	-3.90***	-3.23***
<b>Your agreement or disagreement on the following statements:</b>					
<b>Scale:</b> 1= strongly disagree, 5 = strongly agree					
The case study improved my understanding of or ability related to ...					
<b>Q2</b> differences between forensic and external auditing (LO 1)	3.38	4.00	1.07	1.98**	1.90*
<b>Q3</b> the related-party concept (LO 2)	3.59	4.00	0.91	3.69***	3.12**
<b>Q4</b> identification of related parties (LO 2)	3.69	4.00	0.78	4.98***	3.70***
<b>Q5</b> purposes & consequences of related party transactions (LO 2)	3.66	4.00	0.70	5.30***	3.83***
<b>Q6</b> corporate bankruptcy (LO 3)	4.16	4.00	0.68	9.66***	4.71***
<b>Q7</b> corporate bankruptcy prediction (LO 3)	4.25	4.00	0.67	10.52***	4.77***

Q8	financial ratio analysis (LO 4)	3.97	4.00	0.74	7.41***	4.42***
Q9	evaluation of the corporate financial situation (LO 4)	4.13	4.00	0.66	9.64***	4.73***
Q10	depreciation method(s) for fixed assets (LO 5)	3.69	4.00	0.93	4.18***	3.38***
Q11	difference between book value and selling value (LO 5)	3.91	4.00	0.78	6.60***	4.22***
Q12	decisions about the asset value (LO 6)	3.78	4.00	0.91	4.88***	3.68***
Q13	critical thinking and professional judgment skills (LO 6)	4.00	4.00	0.80	7.04***	4.30***
Overall assessment:						
Q14	The case study represented a realistic accounting scenario	3.78	4.00	0.94	4.70***	3.54***
Q15	Overall, the case study proved to be a valuable learning experience	4.22	4.00	0.71	9.76***	4.69***
Q16	Overall, the case study was well suited to my current level of knowledge	4.06	4.00	0.76	7.92***	4.49***
Q17	I would recommend this case to future accounting students	4.25	4.00	0.62	11.37***	4.88***
	Estimated number of hours worked	5.91	5.00	4.28		

Note: Significant mean difference at  $p < 0.001$  (\*\*\*),  $p < 0.05$  (\*\*) and  $p < 0.10$  (\*)

**Table 1 Panel B**  
**Student Assessments of the Case Assignment**

PANEL B: Responses from Group 2 (Individual) (N=23)						
		Mean	Median	SD	Mean <i>t</i> -test (H0=3)	Different from neutral (median =3) Sign Test
Q1	<b>Prior knowledge about the key themes was ...</b>					
	<b>Scale:</b> 1 = very low, 2= low, 3 = moderate, 4= high, 5= very high					
	bankruptcy and bankruptcy prediction	2.48	3.00	0.85	-2.96**	-2.55**
	financial statement analysis (financial ratios)	3.43	3.00	0.66	3.15**	2.67**
	asset valuation and depreciation	3.22	3.00	0.80	1.31	1.31
	related-party transactions	2.52	3.00	1.08	-2.12**	-1.94*
	<b>Your agreement or disagreement on the following statements:</b>					
	<b>Scale:</b> 1= strongly disagree, 5 = strongly agree					
	The case study improved my understanding of or ability related to ...					
Q2	differences between forensic and external auditing (LO 1)	3.91	4.00	0.99	4.40***	3.24***
Q3	the related-party concept (LO 2)	3.96	4.00	0.88	5.23***	3.42***
Q4	identification of related parties (LO 2)	3.87	4.00	0.97	4.31***	3.12**
Q5	purposes & consequences of related party transactions (LO 2)	3.70	4.00	0.97	3.43**	2.72**
Q6	corporate bankruptcy (LO 3)	4.04	4.00	0.83	6.07***	3.69***
Q7	corporate bankruptcy prediction (LO 3)	4.00	4.00	0.74	6.49***	3.82***
Q8	financial ratio analysis (LO 4)	3.70	4.00	0.93	3.60***	2.84**
Q9	evaluation of the corporate financial situation (LO 4)	3.70	4.00	0.93	3.60***	2.78**
Q10	depreciation method(s) for fixed assets (LO 5)	3.17	3.00	1.07	0.78	0.79
Q11	difference between book value and selling value (LO 5)	3.39	4.00	1.03	1.82*	1.71*
Q12	decisions about the asset value (LO 6)	3.43	4.00	0.99	2.10**	1.93*
Q13	critical thinking and professional judgment skills (LO 6)	3.78	4.00	1.00	3.76***	2.88**
Overall assessment:						
Q14	The case study represented a realistic accounting scenario	3.96	4.00	0.56	8.16***	4.12***
Q15	Overall, the case study proved to be a valuable learning experience	4.30	4.00	0.77	8.18***	4.02***
Q16	Overall, the case study was well suited to my current level of knowledge	3.91	4.00	0.99	4.40***	3.14**
Q17	I would recommend this case to future accounting students	4.17	4.00	0.83	6.75***	3.75***
	Estimated number of hours worked	24.70	20.00	13.72		

Note: Significant mean difference at  $p < 0.001$  (\*\*\*),  $p < 0.05$  (\*\*) and  $p < 0.10$  (\*). LO 1–6 refer to learning objectives

## TEACHING NOTES

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## REFERENCES

- Albrecht, W. S., C. O. Albrecht, C. C. Albrecht, and M. F. Zimbelman. 2011. *Fraud Examination*. Cengage Learning.
- Caplan, D. H., S. K. Dutta, and D. J. Marcinko. 2012. Lehman on the brink of bankruptcy: A case about aggressive application of accounting standards. *Issues in Accounting Education* 27 (2): 441–459. <https://doi.org/10.2308/iace-50126>
- Churyk, N.T., S. Yu, G. M. Gross, and R. Stoettner. 2015. Johnson Manufacturing case study—bankruptcy. *Journal of Accounting Education* 33 (4): 309–316. <https://doi.org/10.1016/j.jaccedu.2015.10.001>
- Finnish National Board on Research Integrity TENK. 2021. Ethical review in Finland. <https://tenk.fi/en/ethical-review/ethical-review-finland>
- Lehavy, R., and S. Udpa 2011. Kmart: Predicting bankruptcy, fresh start reporting, and valuation of distressed securities. *Issues in Accounting Education* 26 (2): 391–419. <https://doi.org/10.2308/iace-10017>
- Lessambo, F.I. 2018. *Auditing, Assurance Services, and Forensics*. [https://doi.org/10.1007/978-3-319-90521-1\\_13](https://doi.org/10.1007/978-3-319-90521-1_13)
- Licata, M. P., W. G. Bremser, and T. P. Rollins. 1997. SEC enforcement actions against auditors: Auditing education linked to the pitfalls of audit practice. *Issues in Accounting Education* 12 (2): 537–560.
- Louwers, T. J., E. Henry, B. J. Reed, and E. A. Gordon. 2008. Deficiencies in auditing related-party transactions: Insights from AAERs. *Current Issues in Auditing* 2 (2): A10–A16. <https://doi.org/10.2308/ciia.2008.2.2.A10>
- O'Bryan, D. W., J. J. Quirin, and M. J. Goedeke. 2020. Tax return analysis in a fraud examination: The case of the bankruptcy auditor. *Journal of Forensic Accounting Research* 5 (1): 123–141. <https://doi.org/10.2308/JFAR-19-015>