

Stopping Hamburglars: Applying Effective Internal Control

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ABSTRACT: Understanding effective internal control is vital for accounting and business students. Examples of fraud and loss through poor internal control are widespread in practice. The learning objectives of this teaching case focus on improving students' ability to comprehensively evaluate internal control practices and suggest and justify new practices where applicable. The McDonald's Monopoly fraud is a real-life example of a situation where multiple internal control failures had substantial financial and reputational consequences for McDonald's, particularly its outsourcing partners involved in operationalizing the monopoly game. We use this factual case to illustrate control system shortcomings, allowing students to evaluate internal control and suggest internal control techniques with reference to all five components of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) *Internal Control—Integrated Framework*.

JEL Classifications: A22.

Keywords: internal control; COSO Internal Control—Integrated Framework; fraud triangle; fraud mitigation.

I. THE CASE

The Background

What follows is the real-life case of how a trusted security head took advantage of weak internal control in the context of the McDonald's Monopoly game to steal tens of millions of dollars through a web of accomplices for over a decade.¹

Originating in the United States in 1987, the McDonald's Monopoly game is a well known promotion used in restaurants worldwide (O'Keeffe 2016). Game pieces are applied to meal packaging, including burger boxes and drink cups, at McDonald's packaging factories. Customers peel off the game pieces to discover if they have won a prize. The game prizes vary from small, such as free meal items, to very substantial, including cars and cash prizes, for example, a million-dollar cash prize.²

The McDonald's corporation had a long-running association with Simon Marketing, which initially proposed the Monopoly game idea and then subsequently managed the game (Forbes 2001). Simon Marketing worked with Dittler

We would like to thank Ken Merchant, Kristina Vojvoda, Raechel Wight, *Issues in Accounting Education* editors and reviewers, and colleagues and students at the Saïd Business School, Keble College and UTS Business School for their valuable feedback and comments on this case.

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Editor's note: Accepted by Meredith Tharapos, under the Senior Editorship of Janet A. Samuels.

Submitted: September 2023
Accepted: May 2024
Early Access: July 2024

¹ The case is based on information reconstructed from a vast number of media reports and documentation concerning McDonald's Monopoly fraud and associated criminal case. The various sources of information have been referenced throughout the case.

² The highest prizes have traditionally been in the U.S., for example the highest cash prize ever was USD \$1,000,000. The highest U.K. prize was £100,000.

Brothers, in the United States, a secure print firm that produced the game pieces. Simon Marketing was a well regarded marketing firm, and McDonald's was its most substantial customer.

Game Security

As with lottery and lucrative prize-related activities, the potential for fraud is substantial, as reflected in *Occupational Fraud 2022: A Report to the Nations* (Association of Certified Fraud Examiners 2022). Therefore, the norm is extensive internal control procedures across the components of the control environment, risk assessment, control activities, information and communication, and monitoring activities (COSO 2013). As a key mechanism to mitigate fraud, Dittler Brothers and Simon Marketing selected a security head. The security head, in charge of security nationwide, was responsible for overseeing the printing of game pieces and transportation of high-value game pieces to McDonald's packaging factories across the U.S. Packaging factories produce the packaging used to serve meals, such as burger boxes. These packages were then used at McDonald's restaurants. Given the vast number of McDonald's restaurants, the complexity of distribution networks, and the high-value prizes, hiring a trustworthy person was critically important. A former police officer, Jerome Jacobson, who had experience in private security, was hired as security head. Jacobson was forced to leave the police force after developing a severe nerve condition that could lead to paralysis (Spencer 2020). His experience presumably gave the impression that Jacobson could be both trusted and was qualified to oversee game production and application of high-value game pieces to product packaging.

Delivery of high-value game pieces to packaging factories was an involved process. Jacobson was in charge of overseeing the printing of game pieces at Dittler Brothers, with high-value pieces locked in a secure safe where multiple employees were required simultaneously to open the safe, and therefore, no one individual employee could open the safe on their own. To move high-value game pieces from Dittler Brothers printing to the packaging factories, the safe was unlocked, and the game pieces were placed in an envelope sealed with a tamper-proof seal under the observation of multiple employees. The envelope was then placed in a briefcase handcuffed to Jacobson, which only he and an auditor could jointly open. The suitcase was taken by Jacobson, accompanied by a female auditor, to the packaging factories by air travel. The packaging factory destination was determined randomly by computer. The auditor supervised the whole process of transporting the high-value game pieces (Maysh 2020).

The briefcase had a pair of locking latches with different codes to open each. The security head, Jacobson, knew the code for one side, and the auditor knew the code for the other. Once the suitcase was opened at packaging factories, the high-value game pieces were taken out of the envelope and stuck randomly to different packages under the observation of multiple employees and the auditor. These were randomly placed in large batches of packages for distribution to restaurants within the packaging factory distribution catchment. It is understood that the package batches were so large that once a high-value game piece was applied to a package and put back into the batch, locating the high-value piece would be virtually impossible. This same process was undertaken for over ten years.

The Fraud

With complete oversight of the printing of game pieces and sole responsibility for transporting high-value game pieces, Jacobson was acutely aware of internal control flaws. The independent female acted in a supervisory capacity only and was therefore not jointly responsible for transporting the game pieces. Accordingly, Jacobson carried the suitcase containing the game pieces at all times during transportation. Given that the auditor was female, he was not supervised in the bathroom at airports. Given that such bathroom visits were only for a short time, the perceived risk of suspicious behavior was low. However, Jacobson had watched the auditor enter the briefcase combination code and knew both lock codes. This allowed Jacobson to open the briefcase and envelope in the airport bathroom. Jacobson removed the high-value game pieces from the sealed envelope and substituted them with ordinary ones. In theory, it should not have been possible for Jacobson to reseal the tamper-proof envelope. However, Jacobson received a page of tamper-proof stickers from the supplier, allegedly sent to him by mistake (Huddleston 2020). Jacobson used a new seal to reseal the envelope, thus providing no evidence that the envelope had been previously opened.

Perhaps most shockingly, Jacobson continued switching the game pieces in the airport restrooms from 1989 to 2001 (Reily 2020). McDonald's introduced far more lucrative prizes from 1995, providing further financial incentive for Jacobson. His role as security head appeared to provide him with control of the whole process of creating, transporting, and delivering high-value game pieces.

It is unusual that the process of storing and transporting high-value game pieces never materially changed across 13 years. One can only guess that Jacobson maintained the same process with no one challenging the integrity of this process. Perhaps Jacobson was an imposing figure or perceived as trustworthy thus discouraging interference. According to former colleagues he was very authoritative in implementing control to prevent theft. Former colleagues reported that

he would check staffs' shoes and was critical of female employees' clothing choices at Dittler Brothers printing. Former colleagues reported that they could not even use the bathroom without being monitored (Hernandez and Lazarte 2020). They also claim Jacobson was interested in get-rich-quick schemes. According to Jacobson's ex-wives (he had been married seven times and was recently divorced when appointed as security head) and son, he was abusive, ill-tempered, would snap easily, and wanted people to look up to him (Hernandez and Lazarte 2020). One of Jacobson's ex-wives was a security auditor (Coleman 2020), however, it is unclear whether this gave him insight into devising his fraudulent scheme.

Jacobson could not claim the stolen game pieces without raising suspicion. Games often have strict rules about employees and their immediate family members participating. Instead, he first sold the game pieces to close associates or, from a legal perspective, accomplices, such as his brother-in-law in 1989 and close friends. From 1995, as the value of prizes increased substantially, he expanded his network to include accomplices such as Jerry Colombo, a well known Mafia figure (Hanbury 2018). Earlier accomplices, including his brother-in-law, seemed uncomfortable with the scale of the fraud and were unwilling to be further involved. Accomplices, including Colombo, would sell the game pieces to people who would ultimately claim the prizes, often large cash prizes. Jacobson required that the people claiming the prizes should be in other states so as not to arouse suspicion of winning clusters living in the same area and connected in some way to Jacobson. From 1995 to 2001, it appears that Jacobson, his accomplices, and individuals who ultimately claimed the tickets stole approximately USD \$24 million in prize value (Horton 2020). This figure represented nearly all the major prizes available. It is reported that Jacobson received up to USD \$50,000 for million-dollar winning tickets, with accomplices also taking a cut (Harris 2001).

Despite Jacobson's requirement that prize winners be from other states, clusters of prize winners began to emerge. This went unnoticed by both the McDonald's corporation and Simon Marketing (Smith 2020). They did not appear to be monitoring where the high-value game pieces were claimed.

Investigation and Convictions

The FBI was tipped off about the fraud in 2000. The FBI's initial investigation identified that it was virtually impossible for so many people who were associated and in close relative proximity to win substantial value prizes. During 2001, FBI detectives contacted suspicious winners, claiming they were filming a promotional feature for McDonald's on how winners had come to find the game pieces. They tapped the phone lines of these winners to hear whom they contacted and what they discussed post-filming of the fictitious feature, providing further information on the scam (Chilton 2020).

In the final stages of the investigation, the FBI monitored several of Jacobson's accomplices, anticipating they would steal the largest prizes while the Monopoly promotion was in play. After this surveillance, the FBI made a series of arrests and went public with their investigation. Over 50 people were convicted, many of whom were accomplices and, thereby, distributors of the game pieces sold to them by Jacobson. Those convicted received a range of sentences depending on their degree of involvement. Jacobson received the longest sentence of 37 months in prison and was ordered to pay USD \$12.5 million in restitution (Lord 2018).

In November 1995, a 1-million-dollar winning McDonald's game piece was mailed to St. Jude Children's Research Hospital (Scassellati 2021), and there was no information on who had sent the game piece. During the trial, Jacobson claimed he mailed this ticket to the hospital, hoping that this "donation" would lead to a more lenient sentence if he were ever caught.

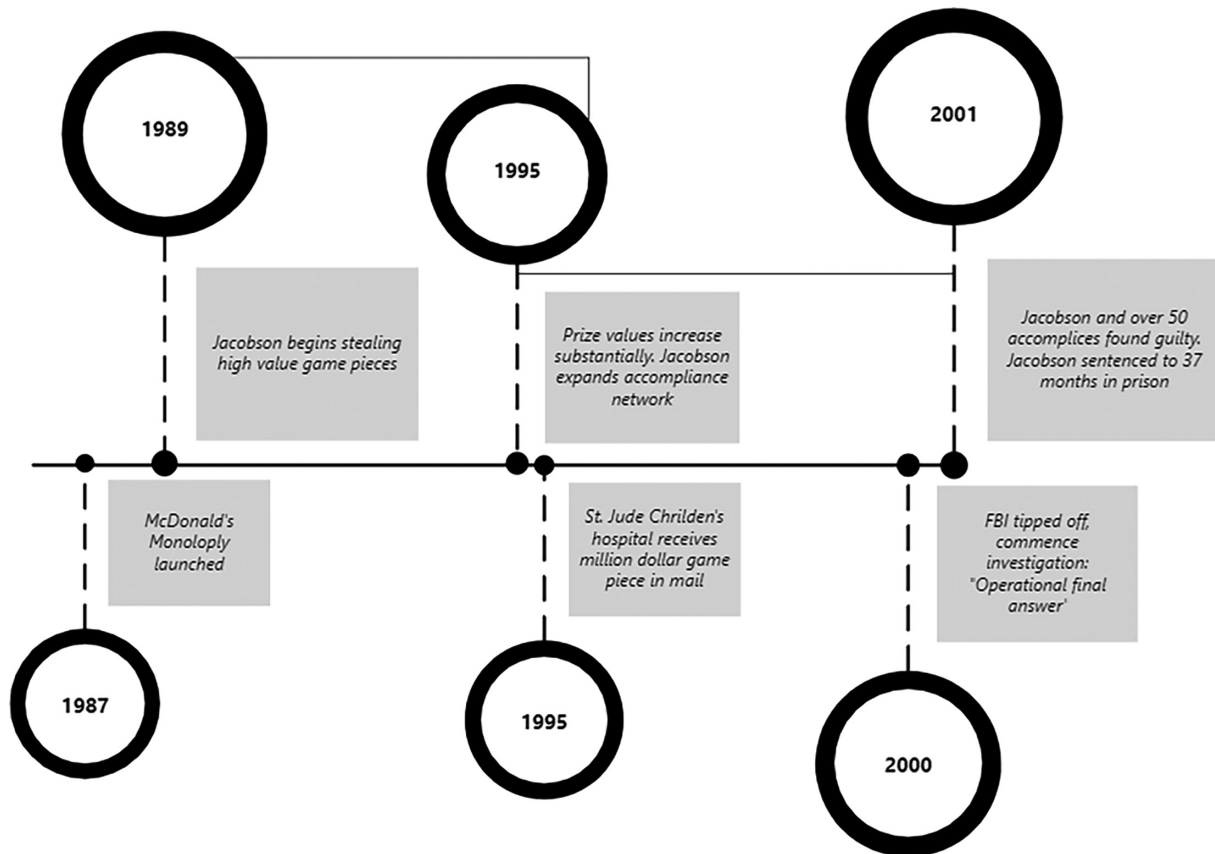
Although Jacobson's motive to commit the crime appeared to be financial, he claimed otherwise. He claimed the Monopoly game was rigged such that no large prizes were distributed to Canada but only to the United States (Shelton 2021). One of Jacobson's accomplices, Andrew Glomb, who distributed tickets from Jacobson, provided further justification. He claimed that the fraud was not "hurting anybody," winning tickets were often not peeled from packaging before disposal, and that he was helping people in need by giving them the winning tickets (Hernandez and Lazarte 2020).

See Figure 1 for a timeline associated with the McDonald's Monopoly fraud.

Costs of Fraud

There were many victims, some of whom suffered substantially. From a reputation perspective, McDonald's suffered with customers playing the game from 1989 to 2001, particularly from 1995 onward, having virtually no chance of winning substantial prizes. Over 1,000 Burger King franchises filed a class-action suit against McDonald's for promoting prizes customers could not genuinely win (Kubs 2020). The suit was dropped but was reputationally damaging for McDonald's and its franchisees. As a result of the fraud, McDonald's terminated all dealings with Simon Marketing, causing the firm's worldwide closure and job losses (Forbes 2001). In addition, the integrity of Dittler Brothers printing security was damaged, a company that specialized in printing items such as lottery tickets and post stamps. As a result

FIGURE 1
Timeline



of their losses Dittler Brothers also closed down. McDonald's corporation incurred tens of millions of dollars in legal costs related to events following the discovery of the fraud and ran another campaign to give large prizes in an attempt to recover reputationally (Reily 2020). In the end the fraud's cost was substantial from the perspective of job losses and financial losses incurred by Simon Marketing and Dittler Brothers.

Epilogue

The McDonald's Monopoly game, in various forms, continues to be used across McDonald's restaurants around the world. It is almost certain that the trial of Jacobson would have attracted further media attention if it was not for the September 11 attacks that occurred a day after Jacobson's trial commenced. The McDonald's fraud case was followed closely by the collapse of Arthur Andersen and Enron and other financial scandals in late 2001 and 2002, leading to the passing of the Sarbanes-Oxley Act of 2002 (SOX) and similar legislation around the world.

The *McMillions* documentary, produced by HBO, brought the fraud to the public's attention. It is understood that Jacobson, now in his eighties, is living a quiet life in Atlanta, GA, and does not like to discuss his fraudulent scheme with close friends, some of whom were accomplices, including Andrew Glomb. In contrast, Glomb is more than happy to share the details of his involvement and said, "I would do it all again," despite receiving jail time for the fraud (Hernandez and Lazarte 2020).

Assignment Questions

This case has been developed to improve your understanding of internal control, which is important in all businesses and organizations. Once you have read the case and the required readings, address the following questions:

1. Explain the role of internal control and what it is intended to prevent.

2. Explain how the fraud triangle, or a similar framework, provides insight into why the fraud occurred.
3. Critique and determine the deficiencies in internal control relating to the McDonald's Monopoly promotion before the fraud was uncovered. Make sure to read the Committee of Sponsoring Organizations of the Treadway Commission (COSO) *Internal Control—Integrated Framework* before answering this question.
4. Propose and justify a set of internal controls to mitigate fraud in the McDonald's Monopoly promotion. Make sure to justify the proposed set in the context of balancing the costs and benefits of internal controls.
5. Explain a real-life example of internal control that you are aware of in a context where there is a high risk of fraud in the absence of control. Critique the internal control. Propose and justify any modifications that are appropriate.

REFERENCES

- Association of Certified Fraud Examiners. 2022. Occupational fraud 2022: A report to the Nations. <https://legacy.acfe.com/report-to-the-nations/2022/>
- Chilton, L. 2020. Operation unhappy meal: How the FBI trapped the million-dollar McDonald's Monopoly cheats. <https://www.independent.co.uk/arts-entertainment/tv/features/mcmillions-mcdonalds-monopoly-fbi-series-true-crime-sky-documentaries-a9525801.html>
- Coleman, N. 2020. The 'McMillions' Monopoly scheme, explained. *The New York Times*. <https://www.nytimes.com/2020/02/03/arts/television/mcmillions-hbo-explained.html>
- COSO. 2013. Internal control—Integrated framework. <https://www.coso.org/>
- Forbes. 2001. Simon Marketing gets fried in McScandal. <https://www.forbes.com/2001/08/24/0824dog.html?sh=39b2cc135f09>
- Hanbury, M. 2018. A former cop masterminded a scheme to win nearly \$24 million in the McDonald's Monopoly game. Here's how he pulled it off. *Business Insider*. <https://www.businessinsider.com/how-mcdonalds-monopoly-game-was-rigged-2018-7>
- Harris, A. 2001. Accused swindler the 'McMystery' donor? *CNN*. <https://edition.cnn.com/2001/LAW/09/10/mcdonalds.indictment/index.html>
- Hernandez, J. L., and B. Lazarte. 2020. *McMillions*. New York, NY: HBO.
- Horton, A. 2020. McMillions: The bizarre story of how one man stole \$24m from McDonald's. *The Guardian*. <https://www.theguardian.com/tv-and-radio/2020/feb/03/mcmillions-bizarre-story-how-one-man-stole-24m-mcdonalds-hbo>
- Huddleston, T. 2020. How the 'McMillions' scammers rigged McDonald's Monopoly game and stole \$24 million. *CNBC*. <https://www.cnbc.com/2020/02/07/how-mcmillions-scam-rigged-the-mcdonalds-monopoly-game.html>
- Kubs, M. Y. 2020. The little know \$24 million fraud. *KTT Law Blog*. <https://kttlawblog.com/the-little-known-24-million-fraud/>
- Lord, D. 2018. McDonald's Monopoly game was rigged once. Here is how it happened. *The Atlanta Journal-Constitution*. <https://www.ajc.com/news/national/mcdonald-monopoly-game-was-rigged-once-here-how-happened/JaUZYIsf7memWDPdI9smlM/>
- Maysh, J. 2020. How an ex-cop rigged McDonald's Monopoly game and stole millions. *The Daily Beast*. <https://www.thedailybeast.com/how-an-ex-cop-rigged-mcdonalds-monopoly-game-and-stole-millions>
- O'Keeffe, K. 2016. McDonald's Monopoly game has a surprisingly wild history. *Business Insider*. <https://www.businessinsider.com/mcdonalds-monopoly-game-has-a-surprisingly-wild-history-2016-4>
- Reily, D. 2020. Everything to know about McMillions and the McDonald's Monopoly game scam. *Vulture*. <https://www.vulture.com/2020/02/mcdonalds-monopoly-game-fraud-true-story.html>
- Scassellati, E. 2021. The McDonald's Monopoly scam that resulted in a \$1 million donation to St. Jude's. *Do You Remember?* https://doyouremember.com/135849/mcdonalds-monopoly-scam-donation-st-judes#google_vignette
- Shelton, J. 2021. An ex-cop rigged the McDonald's monopoly game and won almost every prize for 12 years. *Ranker*. <https://www.ranker.com/list/jerry-jacobson-mcdonalds-monopoly/jacob-shelton>
- Smith, R. 2020. McMillions six-part documentary exposes \$24m McDonald's Monopoly game fraud. *News.com.au*. <https://www.news.com.au/entertainment/tv/mcmillions-sixpart-documentary-exposes-24m-mcdonalds-monopoly-game-fraud/news-story/ffdb04bbacf86de0dfcda745c26f096b>
- Spencer, S. 2020. 'McMillions': What is Guillain-Barré syndrome, the condition that caused Jerry Jacobson to leave the police? *News Week*. <https://www.newsweek.com/mcmillions-hbo-guillain-barre-syndrome-jerry-jacobson-marsha-derbyshire-1486676>

II. CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE

Introduction

The purpose of the case is to highlight the broader importance of internal control, beyond financial statement fraud and associated SOX requirements. Internal control is a critical component of organizational success and has a broad and important purpose. According to the COSO *Internal Control—Integrated Framework*, or “COSO Framework” as we refer to it going forward, executive summary page three ([Committee of Sponsoring Organizations of the Treadway Commission \(COSO\) 2013](#)), internal control is defined as “a process, effected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance.” There are three different categories of objectives that the COSO Framework provides for with “operations objectives” being most relevant to our case reported. In particular, we focus on “safeguarding assets against loss.” Although “directors, management, and other personnel” are identified as those effecting internal control, the design, implementation, operationalization, and review of such control are regarded as core expertise of the accounting profession and reflects the five sponsoring organizations of COSO, which include the American Accounting Association.

A substantial proportion of teaching cases relating to internal control focus on the manipulation of financial records and the associated misappropriation of organizational assets (for example, see [Borthick, Schneider, and Vance 2012](#); [Elder and Yebba 2017](#); [Caplan, Dutta, and Marcinko 2019](#)). Such a focus is not surprising given high-profile accounting and corporate scandals, including those involving Arthur Andersen, Enron, Lehman Brothers, and WorldCom, and the passing of the SOX. The case we present does not involve the manipulation of financial records of any of the organizations involved in the McDonald’s Monopoly game operation or the application of SOX requirements. Instead, our motivation in developing this case is to help students understand how internal control relates more broadly to mitigating the manipulation and misappropriation of assets. It is important to recognize that many students (regardless of whether they are accounting majors) will use their accounting knowledge in senior organizational positions to oversee operations generally, and therefore, need to be aware of the broader implications of internal control as they permutate throughout various operations. Such knowledge is critical as 86 percent of fraud cases fall into the manipulation and misappropriation of assets category, compared with nine percent relating to financial statement fraud ([Association of Certified Fraud Examiners 2022](#)).

The case contributes to the literature by providing an example of comprehensive internal control failure, which relates to all three components of the fraud triangle and five components of the COSO Framework. It is critically important that students understand such failure, as nearly half of fraud cases occur due to a lack of internal controls ([Association of Certified Fraud Examiners 2022](#)). The fallout from the McDonald’s case was substantial and had detrimental implications for both outsourcing partner firms. Such a comprehensive example of real-life internal control failure can be explained in the context of all components of the fraud triangle and relate to all five components of the COSO Framework, with substantial implications of such failure, which is currently not available in *Issues in Accounting Education* and more broadly. This is consistent with the imbalance in literature focusing on financial statement fraud and far less on the manipulation and misappropriation of assets. In sum, instructors may choose this case as the basis of detailed coverage of internal control failure relating to manipulation and misappropriation of assets. Such a comprehensive case example in considering the fraud triangle and applying all five components of the COSO Framework contributes to the development of critical thinking skills, consistent with calls in literature ([Bolt-Lee and Foster 2003](#); [Holtzman 2004](#); [Gazzaway, Kim, Malinconico, and Newport 2010](#)).

The intended audience of this case is students studying accounting at any level, undergraduate to postgraduate, from introductory to final year studies. Although postgraduate students are expected to adopt a more critical lens and suggest more rigorous approaches to internal control, it is never too early to direct students to think about internal control. This enables students to apply more effective business acumen whatever the workplace or level of responsibility. Although the fraud in the case was committed some time ago, the case is very relevant in the current context due to alignment with key issues indicated in *Occupational Fraud 2022: A Report to the Nations*, written by the [Association of Certified Fraud Examiners \(2022\)](#). This includes half of fraud cases occurring due to a lack of internal control and the majority relating to asset misappropriation (as detailed above), lengthy fraud causing far higher fraud costs, lack of fraud reporting mechanisms, absence of some of the most effective mechanisms (job rotation and compulsory vacations), and potential fraudster indicator red flags (including living beyond their means and personal problems).

Students’ interest and connection with case materials is always an important consideration, relating to some extent on how students engage with case materials. There is a number of reasons why students may have an interest and connection with case materials. McDonald’s operates in 114 countries, with the McDonald’s Monopoly game promotion

run in the United States, Canada, United Kingdom, Australia, Germany, Hong Kong, France, Spain, The Netherlands, Singapore, Austria, Poland, and Switzerland since 1987, with Brazil and Argentina added in 2013 (Fandom 2024). Accordingly, the brand and product are widely recognized, and many students will have some understanding of McDonald's Monopoly. Such global presence appears to show no signs of diminishing, with the 2022 McDonald's annual report indicating global sales increased 10.9 percent over the financial year. Further to such presence and recognition, one in eight people in the United States have worked for McDonald's (McDonald's 2024), indicating that many students either have themselves or know someone who understands the inner workings of a McDonald's restaurant. A substantial proportion, 57 percent, of those aged 18–29 years eat at McDonald's (Singer 2024), aligning with those of student age who would engage with this case. Interestingly, 18–34 year olds make up the majority of Amazon Prime users, where the *McMillions* documentary relating to the case described is available in the United States. This suggests that the case would be of interest to such users (Woodward 2024). In sum, although McDonald's might not be the trendiest brand and product at present, it is widely recognized and understood by the target student audience, and we identify a number of sources suggesting that case would be of interest to students.

The three learning objectives of this case are to:

1. Explain the guidance provided by the COSO Framework and the fraud triangle (or other appropriate fraud framework).
2. Critique and determine control weaknesses within an existing set of internal control mechanisms.
3. Propose and justify appropriate internal control mechanisms.

The questions at the end of the case are mapped to the learning objectives in Table 1.

Teaching Approach and Plan

In this section, we present a teaching plan, summarized in Table 2, which can be adapted to the time available and the student cohort (undergraduate and postgraduate). It is important to recognize that students' experience can vary widely depending on their stage of education. Postgraduate students may have more practical experience than undergraduates, however, it is the responsibility of the instructor to evaluate this and facilitate the class accordingly.

The first component of the teaching plan focuses on pre-work. In Item 1, we suggest that students complete readings related to internal control and its importance before commencing the case readings. This can be achieved by referring students to relevant internal control chapters in accounting textbooks. For example, some introductory accounting textbooks contain a chapter on internal control and its components. However, caution should be exercised in relying on such chapters as some focus narrowly on internal control tools such as the bank reconciliation and the petty cash fund, so students should be directed to consider the broader principles of internal control for the purpose of this case. More advanced textbooks relating to management control systems typically contain broader detail concerning the importance of internal control and principles to consider, which are more informative for students completing this case. In the absence of sufficiently detailed textbook readings or other content already prescribed in the course, we recommend that students read the following. These materials, particularly the second, are valuable reference resources for students.

TABLE 1
Case Questions Mapped to Learning Objectives

No.	Question	Objective
1	Explain the role of internal control and what it is intended to prevent.	1
2	Explain how the fraud triangle, or a similar framework, provides insight into why the fraud occurred.	1
3	Critique and determine the deficiencies in internal control relating to the McDonald's Monopoly promotion before the fraud was uncovered. Make sure to read the COSO <i>Internal Control—Integrated Framework</i> before answering this question.	2
4	Propose and justify a set of internal controls to mitigate fraud in the McDonald's Monopoly promotion. Make sure to justify the proposed set in the context of balancing the costs and benefits of internal controls.	3
5	Explain a real-life example of internal control that you are aware of in a context where there is a high risk of fraud in the absence of control. Critique the internal control. Propose and justify any modifications that are appropriate.	1, 2, 3

TABLE 2
Class Teaching Plan

Item	Activity	Description	Undergrad		Postgrad	
			Suggested Time	% Time	Suggested Time	% Time
Pre-work (prior to class)						
1	Readings	<p>a. The Fraud Triangle—available at: https://www.agacfm.org/Resources/intergov/FraudPrevention/FraudMitigation/FraudTriangle.aspx (or equivalent in existing course readings)</p> <p>b. COSO (2013), Internal Control—Integrated Framework (or equivalent in existing course readings)</p> <p>c. Stopping hamburglars: Applying more effective internal control</p>	2 hours	50%	1.5 hours	50%
2	Homework	<p>a. Students to complete Case Questions 1–5.</p> <p>b. Remind students that they should participate in the class by sharing their answers where relevant.</p>	2 hours	50%	1.5 hours	50%
In class						
1.5 hours allocated						
3	Introduction	Briefly review the case: <i>Stopping hamburglars: Applying more effective internal control</i> case.	10 minutes	11%	5 minutes	6%
4	Case facilitation (Part 1)	Facilitate class discussion in reference to students' responses and consideration of Case Questions 1 and 2, with a focus on: <ul style="list-style-type: none"> a. Whether students understand what internal control is compared to management control systems more generally. b. The fraud triangle, or similar framework referred to in your course, and how it could explain the conduct of Jerome Jacobson and his associates. 	15 minutes	17%	10 minutes	11%
Case questions:						
<ol style="list-style-type: none"> 1. Explain the role of internal control and what it is intended to prevent. 2. Explain how the fraud triangle, or a similar framework, provides insight into why the fraud occurred. 						
5	Case facilitation (Part 2)	Students form small groups (3–4 students in each group) and discuss their responses to Case Question 3 for 15 minutes. Groups to agree on the deficiencies in the internal control prior to the fraud being uncovered. After groups have agreed on the deficiencies in the internal control, the instructor asks selected groups to share the main deficiencies they have identified.	25 minutes	28%	30 minutes	33%

(continued on next page)

TABLE 2 (continued)

Item	Activity	Description	Undergrad		Postgrad	
			Suggested Time	% Time	Suggested Time	% Time
6	Case facilitation (Part 3)	<p>Case question:</p> <p>3. Critique and determine the deficiencies in internal control relating to the McDonald's Monopoly promotion before the fraud was uncovered. Make sure to read the COSO Internal Control—Integrated Framework before answering this question.</p>	30 minutes	33%	35 minutes	39%
		<p>In the small groups as Item 5 above, students to discuss their responses to Case Question 4 for 20 minutes. Groups to agree on a proposed set or package of internal controls to prevent the fraud with associated justification, considering the cost-benefit tradeoffs.</p> <p>Groups to then present and justify their proposal to the class. Instructor to use their discretion as to whether to allow all groups to present (5 minutes each) based on available time. Class discussion can be furthered by asking students' views on the presenting group's package.</p>				
7	Final class discussion	<p>Case question:</p> <p>4. Propose and justify a set of internal controls to mitigate fraud in the McDonald's Monopoly promotion. Make sure to justify the proposed set in the context of balancing the costs and benefits of internal controls.</p>	10 minutes	11%	10 minutes	11%
		<p>Facilitate final discussion, focusing on the value relevance of internal control more broadly. Student responses to Case Question 5 can be used to highlight the broader relevance of internal control outside the focal case.</p>				
		<p>Case questions:</p> <p>5. Explain a real-life example of internal control that you are aware of in a context where there is a high risk of fraud in the absence of control. Critique the internal control. Propose and justify any modifications that are appropriate.</p>				

1. The Fraud Triangle—available at: <https://www.agacgfm.org/Resources/intergov/FraudPrevention/FraudMitigation/FraudTriangle.aspx>³
2. COSO (2013), Internal Control—Integrated Framework, Executive Summary

Further to the above two references, students may also be advised to read Occupational Fraud 2022: A Report to the Nations (Association of Certified Fraud Examiners 2022).⁴ This report aligns with a range of issues reported in the case and demonstrates its relevance in the current fraud environment. Although the report is 96 pages, it is structured in a very engaging and easy to read manner.

Further to reading the case, students could also watch the *McMillions* documentary, produced by HBO, which provides a series of perspectives of individuals involved in the fraud and the associated investigation. This includes FBI investigators, McDonald's corporate employees, former staff of Dittler Brothers printing, legal representatives, and Jacobson's accomplices, but not Jacobson himself. The *McMillions* documentary is available on different streaming services and consists of six episodes that are approximately one hour long. Accordingly, it is a lengthy watch and, in the authors' opinion, does not materially contribute to students' understanding of what occurred beyond the information provided in this case. However, given the variation in students' learning preferences, watching the documentary may be informative for some students. It should be noted that the information provided in this case provides further and specific details relevant to the teaching of internal control to mitigate fraud beyond that conveyed in the *McMillions* documentary. Therefore, watching the documentary is not a substitute for reading the case.

See Table 2 for the class teaching plan. In addition to the readings (Table 2, Item 1 of the teaching plan), we suggest students attempt Case Questions 1–5 (Table 2, Item 2) before class. There is considerable detail and information to consider in the case and associated readings, so completing the questions will ensure that students are more thoroughly prepared to engage in a collaborative class experience.

We suggest that the case be reviewed at the start of the class, focusing on the key facts (Table 2, Item 3). Depending on the students' background and prior experience relating to internal control, either the instructor or the students can take the lead in reviewing the case. We suggest this review is kept brief so class time can be spent discussing students' answers to the case questions, which can justifiably vary widely.

For case facilitation (Table 2, Item 4), we suggest the instructor facilitate a whole-class discussion addressing Case Questions 1 and 2. Promoting a whole class discussion is important for two reasons. First, it ensures that students clearly understand internal control to have the correct focus when moving on to the next part of the class (Table 2, Item 5). Some students will mistake internal control with management control systems. Although some may argue they are conceptually similar, it is important to emphasize the focus on safeguarding assets and the organization from loss in contrast to a management control system that focuses more generally on mechanisms directing and influencing employee behavior consistent with organizational objectives (for example, performance targets and bonuses). Second, it is also important that all students understand what fraud occurred and why. This can be discussed with reference to the fraud triangle or similar/related frameworks covered in the course, which can include the Fraud Scale (Albrecht, Howe, and Romney 1984), M.I.C.E. (Money, Ideology, Coercion and Ego) (Kranacher and Riley 2023), and the Fraud Diamond (Wolfe and Hermanson 2004).

It is recommended that for Table 2, Item 5, instructors ask students to form small groups of three to four students to discuss the main deficiencies in the internal control relating to the McDonald's Monopoly promotion. It is important to make students aware, before group discussions, that a range of potential deficiencies can be determined. Therefore, they should take the time in their groups to discuss different answers and opinions rather than assume there is a narrow and correct list of deficiencies to answer Case Question 3. The instructor may want to direct students to determine deficiencies in relation to all five components of the COSO Framework or in the context of the three organizations involved (McDonald's, Simon Marketing, and Dittler Brothers) to ensure thorough discussion of the deficiencies. Guidance on deficiencies in relation to the five COSO Framework components and three organizations is available in the Teaching Notes associated with this case. Once students have spent time consolidating their ideas in their groups, they can present their main observations to the whole class.

After students have presented their group's observed control deficiencies and the instructor has addressed any noticeable gaps, Table 2, Item 6, requires student groups to agree on a more appropriate approach to internal control over the printing and distribution of the McDonald's Monopoly game pieces, aligned with Case Question 4. Before

³ For a more detailed reading on the fraud triangle, instructors can consider asking students to read Homer (2020). For a more detailed reading of the fraud triangle and related frameworks, consider asking students to read Dorminey, Fleming, Kranacher, and Riley (2012). The Dorminey et al. (2012) reading is highly recommended where instructors would like students to understand the implications of the fraud triangle and associated implications in considerable detail. These reading are journal articles and therefore although more detailed, are possibly more challenging.

⁴ An updated version of this report is generally released once every two years.

students start their conversation, the instructor is to emphasize that the internal controls suggested should be considered in the context of costs and benefits. Students can be allowed 20–25 minutes for discussion and five minutes to present their group's answer. The short five-minute presentation is consistent with the importance of proposing an integrated and cohesive set of internal control mechanisms rather than an extensive and costly list of potential mechanisms that are unlikely to be implemented in practice.

The final class discussion, [Table 2](#), Item 7, opens for class dialogue and students to share their own experiences, highlighting the broader relevance of internal control, aligned with Case Question 5.

Instructors may also wish to use the case material as the basis of assessments and/or activities requiring students to present the views and recommendations relating to internal control in the form of a report to a senior decision maker or a video-based presentation. This reinforces the importance of communication in the accounting profession and would provide the opportunity for instructors to assess internal control content and communication skills through using the case material.

Case Efficacy

The case was trailed in small core undergraduate accounting classes on-campus, held as part of an Oxbridge tutorial model in the United Kingdom, and in larger seminar/tutorial style postgraduate classes at a large Australian metropolitan university. To examine the efficacy of the case in each context, students were surveyed before and after participating in the case study.⁵ The authors believe that initially trialing the case with a small group of students using the Oxbridge tutorial model was ideal, as these students are generally expected to be very participative and are quite open in providing feedback. Students in the first postgraduate class where the case was trialed were completing a management control systems focused class as part of the Master of Professional Accounting (M.P.A.). They were largely international students from teacher-centered cultural backgrounds, and generally, open conversation among them was more challenging, particularly given that the class was held online synchronously. When placed into breakout rooms via Zoom consisting of three to five students, these students were generally more participative. As we detail below, few students from the online M.P.A. class completed the optional anonymous feedback survey. Thus, we subsequently trialed the case in a core accounting class all students in the Master of Business Administration (M.B.A.) program complete at the same university. There were approximately 100 students in this class. The students in the M.B.A. program are much more diverse in terms of prior experience, are a mix of local and international students, largely have substantial industry experience and are generally far more participative in class relative to the M.P.A. students. The M.B.A. class was held in hybrid mode, however, most students attended in the physical on-campus classroom.

Before discussing the survey feedback below, we detail students' discussion-based feedback in the first Oxbridge undergraduate class, which led to case revision before using it in the postgraduate classes. In general, students in the undergraduate tutorial indicated they found the case straightforward to understand, interesting, and relevant. We include an "epilogue" section to give students a better understanding of the case's details so they can focus on the main learning objectives rather than what happens post-discovery of the fraud. We previously included a journal article explaining the fraud triangle and fraud more generally as a background reading. In the "[Teaching Approach and Plan](#)" subsection, we footnote this as an additional reading so instructors can consider [Homer \(2020\)](#). Students found this journal article challenging to read, and therefore, we substituted it with a more straightforward web link reference on this topic. Finally, students with limited work experience found it more difficult to comprehend and discuss the case. This was particularly so in the discussion of Case Question 5, which relates to examples of internal control elsewhere. This emphasizes the importance of the instructor guiding the class discussion and not letting students with more experience dominate the class discussion.

[Appendix A](#) of this case learning objectives and implementation guidance section provides the survey questions and the mapping to the learning objectives. Although a more comprehensive set of questions across the learning objectives would have been desirable, the anonymous and voluntary survey was kept short to maximize response rates. An extensive exam style survey was deemed inconsistent with maximizing the response rate. In the before and after surveys, students were asked to indicate their perceived knowledge of internal control, consistent with the case learning objectives, and answer a series of multiple-choice questions to test whether there was any change in their knowledge of internal control. Students were also asked about their perceptions of the case based on a five-point Likert scale (strongly disagree–strongly agree) in the post-survey. We received pre- and post-survey responses from all students in the undergraduate classes, 16 students. Only seven of the 25 students who attended the M.P.A. class provided pre- and post-survey responses, whereas 48 of the 86 students in the M.B.A. class completed the surveys.

⁵ Ethics approval was granted for the purpose of administering the anonymous survey.

See Table 3 for the change in students' perceived understanding of the topic and their perceptions of the case. Due to the small sample sizes, we used the Wilcoxon signed-rank test to compare the pre- and post-survey responses. The pre- and post-survey responses for the undergraduate and M.B.A. students (Table 3, Panels A and C, respectively) indicate significantly higher perceived understanding of the internal control across all four questions. Such an increase is particularly encouraging in the context of M.B.A. students who largely have substantial levels of prior industry experience. For the smaller number of responses associated with the M.P.A. classes, these students show marginal increases in perceived understanding of the purpose of internal control (Item 1) and proposing internal control (Item 4), however, there are significant increases for specific aspects, the COSO Framework and internal control weakness. When comparing increases in perceived understanding across undergraduate and postgraduate students, postgraduate students, particularly M.P.A. students, start with higher confidence in their perceived knowledge, so it is encouraging that these students also show significant increases in perceived understanding.

Students also indicated (based on Items 5 to 10) that they found the case interesting, realistic, and relevant, and it was a valuable learning experience. When asked in Item 8 whether they thought the case and associated questions were too difficult, on average, undergraduate and M.B.A. students did not think the case was difficult. In contrast, M.P.A. students did think it was too difficult. The M.P.A. class comprised a substantial proportion of students of international and non-English speaking backgrounds, which may have contributed to this view. Although these students need to meet minimum English language benchmarks, anecdotal evidence suggests, relative to local students, that they struggle with

TABLE 3
Pre- and Post-Case Completion Data (Perceived Learning)

Panel A: Undergraduate Class (n = 16)

Item	Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	Z-statistic
1a	I understand the purpose of internal control (pre-case)	6.25%	6.25%	37.50%	43.75%	6.25%	3.38	3.108***
1b	I understand the purpose of internal control (post-case)	0.00%	0.00%	0.00%	25.00%	75.00%	4.75	
2a	I understand the purpose of the COSO Framework (pre-case)	43.75%	37.50%	12.50%	0.00%	6.25%	1.88	3.475***
2b	I understand the purpose of the COSO Framework (post-case)	0.00%	0.00%	0.00%	75.00%	25.00%	4.25	
3a	I can identify and evaluate internal control weakness (pre-case)	6.25%	43.75%	37.50%	6.25%	6.25%	2.63	3.373***
3b	I can identify and evaluate internal control weakness (post-case)	0.00%	0.00%	0.00%	62.50%	37.50%	4.38	
4a	I can propose internal controls, taking into consideration cost and benefits of these controls (pre-case)	6.25%	56.25%	31.25%	0.00%	6.25%	2.44	3.501***
4b	I can propose internal controls, taking into consideration cost and benefits of these controls (post-case)	0.00%	0.00%	6.25%	62.50%	31.25%	4.25	
5	The case was interesting (post-case)	0.00%	0.00%	0.00%	37.50%	62.50%	4.63	
6	The case was realistic (post-case)	0.00%	0.00%	6.25%	25.00%	68.75%	4.63	
7	The case was relevant to my course (post-case)	0.00%	0.00%	12.50%	43.75%	43.75%	4.31	
8	The case and related questions were too difficult (post-case)	31.25%	56.25%	0.00%	6.25%	6.25%	2.00	
9	I recommend using this case as part of the course in the future (post-case)	0.00%	0.00%	12.50%	37.50%	50.00%	4.38	
10	Overall the case was a valuable learning experience (post-case)	0.00%	0.00%	6.25%	37.50%	56.25%	4.50	

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed).

(continued on next page)

TABLE 3 (continued)

Panel B: Postgraduate M.P.A. Class (n = 7)

Item	Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	Z-statistic
1a	I understand the purpose of internal control (pre-case)	0.00%	0.00%	0.00%	85.71%	14.29%	4.14	1.732*
1b	I understand the purpose of internal control (post-case)	0.00%	0.00%	0.00%	42.86%	57.14%	4.57	
2a	I understand the purpose of the COSO Framework (pre-case)	0.00%	14.29%	57.14%	14.29%	14.29%	3.29	2.232**
2b	I understand the purpose of the COSO Framework (post-case)	0.00%	0.00%	0.00%	28.57%	71.43%	4.71	
3a	I can identify and evaluate internal control weakness (pre-case)	0.00%	0.00%	42.86%	42.86%	14.29%	3.71	2.070**
3b	I can identify and evaluate internal control weakness (post-case)	0.00%	0.00%	0.00%	28.57%	71.43%	4.71	
4a	I can propose internal controls, taking into consideration cost and benefits of these controls (pre-case)	0.00%	0.00%	42.86%	42.86%	14.29%	3.71	1.890*
4b	I can propose internal controls, taking into consideration cost and benefits of these controls (post-case)	0.00%	0.00%	0.00%	57.14%	42.86%	4.43	
5	The case was interesting (post-case)	0.00%	0.00%	0.00%	42.86%	57.14%	4.57	
6	The case was realistic (post-case)	0.00%	0.00%	0.00%	42.86%	57.14%	4.57	
7	The case was relevant to my course (post-case)	0.00%	0.00%	0.00%	42.86%	57.14%	4.57	
8	The case and related questions were too difficult (post-case)		14.29%	14.29%	28.57%	42.86%	4.00	
9	I recommend using this case as part of the course in the future (post-case)	0.00%	14.29%	0.00%	42.86%	42.86%	4.14	
10	Overall the case was a valuable learning experience (post-case)	0.00%	0.00%	0.00%	42.86%	57.14%	4.57	

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed).

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English-based communication and materials. This has been exacerbated by studying online in their home countries and a lack of immersion in an English language culture during the pandemic.

For questions testing if students’ actual knowledge of the topic increased, there is largely a noticeable increase comparing pre- and post-responses, as shown in Table 4 for pre- and post-quiz comparisons using Wilcoxon signed-rank tests. For undergraduate students, we observe significant increases in answer correctness for Items 2 and 3, relating to specific aspect of internal control. Interestingly undergraduate students had very high levels of pre-case quiz correctness relating to Items 1 and 4, indicating they may have had some general exposure to internal control prior to the case. The small number of responses for M.P.A. students works against finding significant increases in answer correctness, which there is to a limited degree in Panel B. There are highly significant increases (1 percent level) for the M.B.A. class for Items 1 to 3. This indicates that M.B.A. students’ understanding of the purpose of internal control, COSO Framework components, and elements of the fraud triangle increased significantly.

It should be noted that no change in correctness was noted for Item 4, relating to the most important consideration when designing the overall internal control package. Although on average 56 percent of students in the M.B.A. class indicated the correct answer pre- and post-survey, a considerable proportion indicated otherwise. As indicated in Table 4, Panel D, few M.B.A. students indicated minimizing the cost of internal control is the most important factor, which is encouraging, given the importance of internal control conveyed in the case. In contrast, 29 percent of students indicated that ensuring internal cost at any cost was the most important consideration. The case did convey the substantial cost of control failure, coupled with examples students may have observed in industry, and thus students may have

TABLE 3 (continued)

Panel C: Postgraduate M.B.A. Class (n = 48)

Item	Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	Z-statistic
1a	I understand the purpose of internal control (pre-case)	8.33%	14.58%	10.42%	47.92%	18.75%	3.542	5.062***
1b	I understand the purpose of internal control (post-case)				27.08%	72.92%	4.729	
2a	I understand the purpose of the COSO Framework (pre-case)	25.00%	25.00%	29.17%	16.67%	4.17%	2.500	5.386***
2b	I understand the purpose of the COSO Framework (post-case)			10.42%	37.50%	52.08%	4.417	
3a	I can identify and evaluate internal control weakness (pre-case)	14.58%	22.92%	22.92%	37.50%	2.08%	2.896	5.450***
3b	I can identify and evaluate internal control weakness (post-case)			6.25%	43.75%	50.00%	4.437	
4a	I can propose internal controls, taking into consideration cost and benefits of these controls (pre-case)	16.67%	27.08%	22.92%	33.33%	0.00%	2.729	5.426***
4b	I can propose internal controls, taking into consideration cost and benefits of these controls (post-case)	0.00%	4.17%	6.25%	45.83%	43.75%	4.292	
5	The case was interesting (post-case)	0.00%	0.00%	2.22%	24.44%	73.33%	4.711	
6	The case was realistic (post-case)	2.22%	0.00%	2.22%	35.56%	60.00%	4.511	
7	The case was relevant to my course (post-case)	0.00%	2.22%	11.11%	48.89%	37.78%	4.222	
8	The case and related questions were too difficult (post-case)	13.33%	44.44%	24.44%	11.11%	6.67%	2.533	
9	I recommend using this case as part of the course in the future (post-case)	0.00%	4.44%	11.11%	37.78%	46.67%	4.267	
10	Overall the case was a valuable learning experience (post-case)	0.00%	0.00%	6.67%	33.33%	60.00%	4.533	

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed).

perceived strong internal control as “any cost” is still far less than the cost of control failure. Interestingly, 11 percent of M.B.A. students indicated that finding an insurance policy is the most important consideration when designing an overall internal control package, which may align with industry practices to some extent. Overall, M.B.A. student responses to question four indicate there are a range of important considerations when designing an internal control package, which to some extent could be driven by students’ prior experience and practices.

Instructor feedback was requested by email and received via email reply and post-case discussions. The feedback from the four instructors delivering the case was very positive, and their experience using the case demonstrated that the case and the associated resources were comprehensive relative to other cases. The comprehensive nature of the resources reduced the preparation time necessary. After the case was first used in the undergraduate course, it was identified that a fraud triangle reading that is easier for students to comprehend was warranted. Accordingly, this was addressed before the case was used in the postgraduate courses. Feedback from one instructor with extensive experience in case-based teaching of accounting courses was very positive: “I think you are on to something here. This was a prominent fraud that provides some good internal control lessons. I think it makes for a good case. You have described the facts well, and the case is of the right length.”

Most students have some knowledge of the McDonald’s Monopoly game, regardless of their geographical location. Therefore, this made it easier for them to understand the case, although the case was written so that students could understand what the Monopoly game involved if they did not have first-hand experience. Post-class feedback, based on discussions with instructors, indicated that students enjoyed reading the case and found it quite interesting relative to other cases used during the teaching session. It also appears that students found McDonald’s an interesting context,

TABLE 4
Pre- and Post-Case Quiz Comparisons Using Wilcoxon Signed-Rank Test (Actual Learning)

Panel A: Undergraduate Class (n = 16)

Item	Question	Correct Answer	% Pre-Case Quiz Correctness	% Post-Case Quiz Correctness	Z-statistic
1	Which of the following most closely relates to internal control?	Protecting the assets from misappropriation and the organization from risk	81.25%	93.75%	1.414
2	The sequence of the components in the COSO Framework is summarized by which of the following?	Control environment, risk assessment, control activities, information and communication, monitoring	50.00%	87.50%	2.121**
3	The 3 elements of the fraud triangle are	Opportunity, incentive, rationalization	56.25%	100.00%	2.646***
4	Which of the following is the most important consideration when designing the overall internal control package?	Balancing the costs of controls with the benefits	81.25%	87.50%	1.000

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

Panel B: Postgraduate M.P.A. Class (n = 7)

Item	Question	Correct Answer	% Pre-Case Quiz Correctness	% Post-Case Quiz Correctness	Z-statistic
1	Which of the following most closely relates to internal control?	Protecting the assets from misappropriation and the organization from risk	14.29%	71.43%	2.000**
2	The sequence of the components in the COSO Framework is summarized by which of the following?	Control environment, risk assessment, control activities, information and communication, monitoring	57.14%	85.71%	1.414
3	The 3 elements of the fraud triangle are	Opportunity, incentive, rationalization	42.86%	85.71%	1.732*
4	Which of the following is the most important consideration when designing the overall internal control package?	Balancing the costs of controls with the benefits	71.43%	85.71%	0.577

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

Panel C: Postgraduate M.B.A. Class (n = 45)^a

Item	Question	Correct Answer	% Pre-Case Quiz Correctness	% Post-Case Quiz Correctness	Z-statistic
1	Which of the following most closely relates to internal control?	Protecting the assets from misappropriation and the organization from risk	62.50%	91.67%	3.500***
2	The sequence of the components in the COSO Framework is summarized by which of the following?	Control environment, risk assessment, control activities, information and communication, monitoring	32.61%	73.91%	3.657***
3	The 3 elements of the fraud triangle are	Opportunity, incentive, rationalization	36.96%	93.48%	5.099***
4	Which of the following is the most important consideration when designing the overall internal control package?	Balancing the costs of controls with the benefits	55.56%	55.56%	0.000

***, **, * Indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.

^a Three students did not provide post-case quiz responses, thus n = 45 compared to the perceptual data where n = 48.

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TABLE 4 (continued)

Panel D: Question 4 Responses: M.B.A. Students

Item	Response	% Pre-Case Quiz	% Post-Case Quiz
1	Balancing the costs of controls with the benefits ^a	55.56%	55.56%
2	Ensuring strong internal control at any cost	22.22%	28.90%
3	Finding an insurance policy to mitigate risk	4.44%	11.11%
4	Minimizing the cost of internal control systems	17.78%	4.44%

^a Correct answer.

with some students having had experience in the fast-food industry at some point. It seems that students' interest in the case was not the result of the *McMillions* HBO documentary series, as almost all students appeared to have not watched the series based on in-class case discussions. It is clear that many students find fraud cases and associated controls to mitigate fraud particularly captivating. This is similar to the interest students typically exhibit when discussing teaching cases relating to controls in casinos previously used by the instructors. In general, the instructors found that students were more participative and appeared more engaged relative to other cases used during the session, allowing for more detailed and participative conversations in class.

TEACHING NOTES

Teaching Notes are available only to full-member subscribers to the *Issues in Accounting Education* through the American Accounting Association's electronic publications system at <https://publications.aaahq.org>. Full-member subscribers can use their usernames and passwords for entry into the system where the Teaching Notes can be reviewed and printed. Please do not make the Teaching Notes available to students or post them on websites.

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REFERENCES

- Albrecht, W. S., K. R. Howe, and M. B. Romney. 1984. Deterring fraud: The internal auditor's perspective, Institute of Internal Auditors Research Foundation. <https://search.worldcat.org/title/Deterring-fraud--the-internal-auditor's-perspective/oclc/11460101>
- Association of Certified Fraud Examiners. 2022. Occupational fraud 2022: A report to the Nations. <https://legacy.acfe.com/report-to-the-nations/2022/>
- Bolt-Lee, C., and S. Foster. 2003. The core competency framework: A new element in the continuing call for accounting education change in the United States. *Accounting Education* 12 (1): 33–47. <https://doi.org/10.1080/0963928031000074486>
- Borthick, A. F., G. P. Schneider, and A. Vance. 2012. Using graphical representations of business processes in evaluating internal control. *Issues in Accounting Education* 27 (1): 123–140. <https://doi.org/10.2308/iace-50078>
- Caplan, D. H., S. K. Dutta, and D. J. Marcinko. 2019. Unmasking the fraud at Toshiba. *Issues in Accounting Education* 34 (3): 41–57. <https://doi.org/10.2308/iace-52429>
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). 2013. Internal control—Integrated framework. <https://www.coso.org/>
- Dorminey, J., A. S. Fleming, M.-J. Kranacher, and R. A. Riley, Jr. 2012. The evolution of fraud theory. *Issues in Accounting Education* 27 (2): 555–579. <https://doi.org/10.2308/iace-50131>
- Elder, R. J., and A. A. Yebba. 2017. The Roslyn school district fraud: Improving school district internal control and financial oversight. *Issues in Accounting Education* 32 (4): 25–39. <https://doi.org/10.2308/iace-51753>
- Fandom. 2024. McDonald's Monopoly. https://monopoly.fandom.com/wiki/McDonald%27s_Monopoly
- Gazzaway, T., G. Kim, K. Malinconico, and L. Newport. 2010. The evolving accounting talent profile: CFO strategies for attracting, training and retaining accounting professionals. Public Policy and External Affairs, Grant Thornton.
- Holtzman, Y. 2004. The transformation of the accounting profession in the United States: From information processing to strategic business advising. *Journal of Management Development* 23 (10): 949–961. <https://doi.org/10.1108/02621710410566856>
- Homer, E. M. 2020. Testing the fraud triangle: A systematic review. *Journal of Financial Crime* 27 (1): 172–187. <https://doi.org/10.1108/JFC-12-2018-0136>

- Kranacher, M.-J., and R. Riley. 2023. *Forensic Accounting and Fraud Examination*, 3rd edition. Hoboken, NJ: John Wiley & Sons. <https://www.wiley.com/en-br/Forensic+Accounting+and+Fraud+Examination%2C+3rd+Edition-p-9781394200924>
- McDonald's. 2024. Now serving. <https://www.mcdonalds.com/us/en-us/now-serving.html#:~:text=Believe%20it%20or%20not%20%201,or%20keep%20from%20here.%20and%20estimate%20in%20the%20book%20%22Fast%20Food%20Nation.%22>
- Singer, M. 2024. McDonald's statistics 2024 by demographic, locations, revenue and consumers <https://www.enterpriseappstoday.com/stats/mcdonalds-statistics.html>
- Wolfe, D. T., and D. R. Hermanson. 2004. The fraud diamond: Considering the four elements of fraud. <https://digitalcommons.kennesaw.edu/facpubs/1537/>
- Woodward, M. 2024. Amazon Prime statistics: Subscribers, usage & revenue 2024. *Search Logistics*. <https://www.searchlogistics.com/learn/statistics/amazon-prime-statistics/#:~:text=Demographics%20of%20United%20States%20Prime%20Subscribers,-Who%20are%20Amazon&text=Young%20Adults%20make%20up%20the,a%20paid%20Amazon%20Prime%20membership.&text=For%20internet%20users%20aged%2035,68%25%20have%20a%20Prime%20subscription>

APPENDIX A

Case Learning Objectives and Implementation Guidance

Survey Questions (*Learning Objective (LO) Each Question Relates To Is Provided in Italics*)

Pre- and post-survey questions:

1. I understand the purpose of internal control (*LO 1*)
2. I understand the purpose of the COSO Framework (*LO 1*)
3. I can identify and evaluate internal control weakness (*LO 2*)
4. I can propose internal controls, taking into consideration cost and benefits of these controls (*LO 3*)

Post-case questions:

1. The case was interesting
2. The case was realistic
3. The case was relevant to my course
4. The case and related questions were too difficult
5. I recommend using this case as part of the course in the future
6. Overall, the case was a valuable learning experience

Pre- and post-quiz questions (correct answers indicated with asterisks):

1. Which of the following most closely relates to internal control: (*LOs 2 and 3*)
 - a. Maximizing profitability and return on assets
 - b. Protecting the assets from misappropriation and the organization from risk*
 - c. Controlling the behavior and direction of employees so they achieve goals
 - d. Ensuring customer satisfaction is managed and maximized
2. The sequence of the components in the COSO Framework is summarized by which of the following: (*LOs 1, 2, and 3*)
 - a. Monitoring, information and communication, control activities, risk assessment, control environment
 - b. Control activities, information and communication, risk assessment, monitoring, control environment
 - c. Control environment, risk assessment, control activities, information and communication, monitoring*
 - d. Information and communication, monitoring, control environment, risk assessment, control activities
3. The three elements of the fraud triangle are: (*LO 1*)
 - a. Opportunity, threat, incentive
 - b. Theft, cover, escape
 - c. Threat, incentive, maximization
 - d. Opportunity, incentive, rationalization*
4. Which of the following is the most important consideration when designing the overall internal control package: (*LOs 2 and 3*)
 - a. Balancing the costs of controls with the benefits*
 - b. Ensuring strong internal control at any cost
 - c. Minimizing the cost of internal control systems
 - d. Finding an insurance policy to mitigate risk