

Fraud Triangle Theory: Calling for New Factors

Naqiah Awang¹, Nur Syafiqah Hussin², Fatin Adilah Razali³ and Shafinaz Lyana Abu Talib⁴

^{1,2}Faculty of Accountancy, Universiti Teknologi MARA Pahang
Raub, Pahang, Malaysia

^{3,4}Faculty of Accountancy, Universiti Teknologi MARA Sarawak
Mukah, Sarawak, Malaysia

Email: ¹naqiah0026@uitm.edu.my, ²syafiqah89@uitm.edu.my, ³fatin9998@uitm.edu.my,
⁴shafinaz0039@uitm.edu.my

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ABSTRACT

The famous financial scandal of Enron, WorldCom and 1 Malaysia Development Berhad has harmed the auditor's reputation as the protector of shareholders' rights. Auditors have done their part by conducting systematic audit procedures and "What Could Go Wrong" analysis in assessing the possible risk area to assist fraud detection in the client's financial matters. However, fraud cases never seem to decline. Regardless of any safeguarding measures established, fraud incidents can just occur and be worsened by economic downturn and prolonged inflation especially after the pandemic ends. Additionally, the characteristic of the modern business environment, technology sophistication and new generation traits had challenged Cressey Fraud Triangle Theory on its validity and relevancy. Therefore, associating all these possible challenges into consideration, this study aims to review prior literature related to the evolution of Cressey fraud theory to propose a new insight in considering relevant motivation factors that drive fraud penetrations. From the review, the study discovered the need for a detailed evaluation and research on the essential fraud element in constructing an all-rounded fraud prevention mechanism.

Keywords: Cressey Fraud Triangle Theory, factor, fraud and fraud penetration

1. INTRODUCTION

Fraud is a silent killer but causes a loud effect when it is detected. It causes great pain to the nation as the effect is so significant, not just in monetary form but emotional impairment to the parties involved. Based on a survey conducted by the Association of Certified Fraud Examiner (ACFE) on occupational fraud, it was discovered that there were 2,504 cases of occupational fraud that occur in 125 countries around the world for the period from January 2018 to September 2019. The number of cases resulted in huge total losses of around 3.6 billion dollars. Fraud has tremendously affected people's life; some have lost their jobs, investors were led to deceptive decision making and risk the business' solvency (Mackevičius & Giriūnas, 2013). Apart from monetary losses, fraud also affects people emotionally and mentally. Victims might experience constant anger, feeling helpless and loss of trust in others while doers feel ashamed, embarrassed and guilty. It can be worsened if they suffer depression over fraud or have suicidal thoughts (deBlanc, 2015).

Realizing the seriousness of this issue, researchers are finding ways to prevent fraud by investigating the motivation factors that drive the perpetrators to commit fraud. If these motivations disappear, the effort to prevent fraud could be way easier as it is the root problem of this worrying issue. The most popular fraud motivation factor theory is the Fraud Triangle Theory introduced by Cressey (1953). He concluded three elements of fraud that must be presented simultaneously for the fraud to happen. They are pressure, opportunity and rationalization. Since its debut, this theory has become famous in empirical studies on any field including criminal (Huber, Mui, & Mailley, 2015), financial (Cieslewicz, 2012; Tugas, 2012; Yusof, Khair, & Simon, 2016) and academic fraud (Djajadikerta & Susan, 2020; Meiseberg, Ehrmann, & Prinz, 2017).

In this changing world, fraud design and structure are following the trend. Technology advancement makes everyone visible to fraud penetration (ACFE). On the other hand, the changes in the modern business environment, especially in the case of large multinational organization and complex organizational matrix (Mackevičius & Giriūnas, 2013) makes fraud prevention measures more challenging. On top of that, new generation traits should also be concerning the business as they are the future faces of the nation. In preparing for an up-to-date, solid and comprehensive fraud prevention measure, this study aims to explore the evolution of Cressey Fraud Triangle Theory. It is compulsory to determine whether Cressey Fraud Triangle Theory is still valid to the current sophisticated business environment, societal changes and the world without boundaries.

2. LITERATURE REVIEW

2.1 Fraud Conception

In general, fraud can be defined as the crime of getting money by deceiving people (Cambridge Advanced Learner's Dictionary & Thesaurus, 2020). According to The Institute of Internal Auditors (2016), fraud is an unlawful act described by cheating, concealment and breach of trust. It is not limited to physical violation to take advantage of money, services, property, business and personal gain. Fraud in the accounting and auditing field can be regarded as an intentional act that results in a material misstatement in financial statements that subject to audit either related to misstatement arising from fraudulent financial reporting or misappropriation of assets (Public Company Accounting Oversight Board, 2018). The conception of fraud may change depending on on the study setting but one thing for sure, fraudsters always try to conceal their act by vanishing all possible traces that make fraud uncovered (Vousinas, 2019)

In 1953, Cressey developed a three-factors fraud theory that caused people to commit fraud which is called the Fraud Triangle Theory. The framework was developed by gathering information from interview sessions with the fraud convicts in the United States. The elements of pressure, opportunity and rationalization were concluded to be the essential ingredients for fraud. He defined pressure as an individual financial difficulty that leads to fraud in a way to ease the financial burden that has been kept a secret to themselves. Another key element of fraud is opportunity. Opportunity refers to the ability to commit fraud without being caught by holding a position. Penetrators must possess certain skills and knowledge about the current operating procedure to allow fraud to happen by exploiting all discovered weaknesses. The third key element of fraud is rationalization. It is an individual own justification guided by personal manner. A wrong rationalization will make the penetrators think it is fine to conceal something or deceive others. Cressey suggested that all three factors must present concurrently for a fraud to happen.



Figure 1: Fraud Triangle Theory by Cressey (1953)

Late in 1984, Albrecht, Albrecht et al. modified Cressey theory and introduced Fraud Scale Theory by replacing the rationalization element with personal integrity as their study focuses on financial statement fraud. They discovered that people with high integrity are less likely to commit financial fraud. The other two elements of pressure and opportunity remain unchanged. Then, a study by Wolfe and Hermanson (2004) added the fourth essence to Fraud Triangle Theory and named it as the Fraud Diamond Theory. They suggested that capability is compulsory to be accessed simultaneously with pressure, rationalization and opportunity as capability enables penetrators to recognize the opportunity to exploit it.

Dorminey, Fleming, Kranacher, and Riley Jr (2010) in *Certified Public Accounting (CPA) Journal* had come out with M.I.C.E (money, ideology, coercion and ego) acronym to explain the motivating factors behind financial fraud commitment. Money motivation needs no introduction as it is the central motive of fraud. Ideology is someone's belief about what is right or wrong. It resembles rationalization in the pioneer theory of the Fraud Triangle. Coercion happens when someone is forced to be involved in a fraud case. The pressure may come from his or her the superior. On the other hand, ego is a form of social pressure to maintain a good reputation in the eyes of colleagues, family and society. MICE model is not so different from the original theory of Fraud Triangle and Fraud Diamond. However, the proposal to include ego as part of fraud central element was proven necessary by various high-profile financial scandals around the world involving top management who abuse their power to escape failure. This includes the most recent case of Wirecard AG (Browne, 2020) and Luckin Coffee (Lucas, 2020) in which their Chief Executive Officer was fired over financial falsification.

The ego element as a fraud motivator was supported by the other studies by Crowe (2011), Yusof et al. (2016) and Vousinas (2019). Crowe (2011) and Yusof et al. (2016) grouped ego as part of arrogance factor that leads people to commit fraud. Arrogance, as the newly identified element of fraud, is the attitude of superiority and entitlement over internal control procedures. It includes bullying, big egos, autocratic management style and status oriented. According to another study by Vousinas (2019), they suggested that when a person has power over others and situations, they might think they have the right to use all possible ways to accomplish something even in an unlawful way. This is supported by the real finding from a few fraud cases that prove ego makes people decline failure by doing something unethical. Incorporation of ego as one of the fraud key motivators is somehow related to the capability's element. This relationship can be seen in reported fraud cases in which most of the fraud penetrators are the most trusted individual in an organization holding an important position and having the power

to cross the line. They are among the last ones to be suspected for committing fraud (deBlanc, 2015).

2.3 Challenges of Fraud in the 21st Century

2.3.1 External regulatory influence

Tugas (2012) reviewed a case study on eight fraud cases around the world and proposed that external regulatory influence should be added as the grounded element to the current Fraud Diamond Theory called Fraud Pentagon Theory. From his investigation, he discovered that laws and regulations should be tightened up to reduce fraud attempts in business dealing activities. Therefore, the key player in the fraud prevention mechanism will have to redesign a more defined measure to suit new laws and regulations to combat fraud occurrence. For instance, regulatory efforts to promote whistle-blowing will make penetrators reconsider the fraud attempt (Free, 2015). This is because external control is important as much as for internal control procedures. When multiple levels of authorization and segregation of duties are used to safeguard internal control of an organization, the external part should also be governed by good governance. By working hand in hand, fraud penetration can be minimized.

2.3.2 Societal influences

Another significant study related to Cressey theory by Cieslewicz (2012), he opined that the Fraud Triangle Theory should be revisited to test its validity in a different setting other than the United States, the place it was first originated. From his observation and interview session with the Chinese national, he concluded that societal influences should not be ignored. Societal influence covers religion, culture, social norms, the country law, political status and philosophical. Different societies will have different fraud conception and the interpretation of the best fraud prevention measure that should be in place might be inconsistent. Societal influences in a way affect the three main elements of fraud. For instance, how religion affects the penetrator's rationalization. A study by Said, Alam, Karim, and Johari (2018) proved that religion has an impact on fraud (misappropriation of assets) in which higher religiosity individuals will reduce the tendency of fraud penetration among Malaysian police officers. Thus, it is not fair to generalize the result internationally due to all these differences. These entire factors will influence individual views and perception about fraud.

2.3.3 New generation morality standard

Apart from country differences, different generations do perceive things differently. It will not be excluded for fraud cases. There are a lot of studies on the characteristics of different generations and how they affect corporate success. One of them was conducted by Bencsik, Horváth-Csikós, and Juhász (2016) on Y and Z Generations at workplaces. Gen- Z is an individual born between 1996 and 2012 that will be joining the workforce and business soon. Bencsik et al. (2016) discovered that Gen-Z are brave, impatient and unaware of the struggling concept. At the same time, they are not scared of uncertainty as they look forward to new challenges and think that they hold more information from the net. As Gen-Zs represent the future of work (Ramirez, 2019), there is a need to be prepared for their perception towards fraud penetration. It would be interesting for future researchers to focus their studies on how the new generation perceive fraud penetration based on their morality standard that is largely shaped through societal influences from family, friends, workplace, religious association and society as a whole (Setiawan, 2018). It can be hypothesized that a person with high morality value has reduced the tendency of fraud occurrence (Swanepoel & Meiring, 2017).

2.3.4 Ignorance

Yusof et al. (2016) provided an all-rounded empirical evidence on the factors influencing financial fraud in Malaysia. He tested all notable fraud theories to see its relevancy in a Malaysian setting. He recommended 'ignorance' and 'greed' as other factors to be considered in Malaysia that made up the Fraud Heptagon Model. Greed forms a part of the pressure element identified by Cressey in 1953. However, ignorance is a newly identified member of the fraud theory. An ignorant person may commit fraud, claiming that he or she is not aware of the established rules and procedures. In other words, the figures in the financial report might be manipulated for personal gains that they think is acceptable and lawful by applying creative accounting.

2.3.5 Collusion

Vousinas (2019) introduced the Fraud Hexagon Theory presented by the S.C.C.O.R.E acronym (stimulus, capability, collusion, opportunity, rationalization, and ego). The additional identified element of fraud under this model is collusion. Expansion of business size, complex business dealing and sophisticated organizational matrix hinder individual work of fraud, therefore, a single fraud penetrator is rarely found in recent years and has been replaced with collusion

(Free, 2015). Collusion is a conspiracy between two or more individuals within the same unit or with related external parties to deceive others. A recent survey by ACFE (2020) on occupational fraud reported about 51 percent of frauds involved cooperation between multiple fraudsters. This number should be concerning anti-fraud professionals and auditors as the increase in the number of fraudsters will increase the economic losses associated with it. When more people are involved in collusion, more opportunities can be explored and the effort for concealment would be much easier (Rechtman, 2019). This central factor of complex fraud cases may develop a corrupt culture if it is uncovered and make it even worse if this group of people undermines the standard operating procedures by placing their people all over the control of segregation of duties. With collusion, segregation of duties is no longer a good internal control (Rechtman, 2019). The summary of the Evolution of the Fraud Triangle Theory is summarized in Table 1.

Table 1: Evolution of Fraud Triangle Theory

Authors (Year) / Fraud Theory	Title	Elements of Fraud
Cressey (1953) / Fraud Triangle	Other People's Money: A Study on the Social Psychology of Embezzlement	1. Pressure 2. Opportunity 3. Rationalization
Albrecht et al. (1984) / Fraud Scale	Deterring Fraud: The Internal Auditor's Perspective.	1. Pressure 2. Opportunity 3. Personal integrity
Wolfe and Hermanson (2004) / Fraud Diamond	The Fraud Diamond: Considering the Four Elements of Fraud	1. Pressure 2. Opportunity 3. Rationalization 4. Capability
Dorminey et al. (2010) / MICE acronym	Beyond the fraud triangle	1. Money 2. Ideology Coercion 3. Ego
Crowe (2011) / Fraud Pentagon	Why the Fraud Triangle is No Longer Enough	1. Pressure 2. Opportunity 3. Rationalization 4. Capability 5. Arrogance 6. Competence (capability)
Tugas (2012) / Fraud Pentagon	Exploring a New Element of Fraud: A Study on Selected Financial Accounting Fraud Cases in the World	1. Pressure 2. Opportunity 3. Rationalization 4. Capability 5. Arrogance 6. Competence 7. External Regulatory Influences
Cieslewicz (2012) / Modified Fraud Triangle	The Fraud Model in International Contexts: A Call to Include Societal-level Influences in the Model	1. Pressure 2. Opportunity 3. Rationalization 4. Societal Influences
Yusof et al. (2016) / Fraud Heptagon	Fraudulent financial reporting: an application of fraud models to Malaysian public listed companies	1. Pressure 2. Opportunity 3. Rationalization 4. Capability 5. Arrogance 6. Ignorance 7. Greed
Vousinas (2019) / Fraud Hexagon (SCCORE acronym)	Advancing theory of fraud: the S.C.O.R.E. model	1. Pressure 2. Capability 3. Collusion 4. Opportunity 5. Rationalization 6. Ego

2.3.6 Technology advancement

In this digital era, most of the businesses are shifting from the traditional way they conduct business to a digitalized platform to take advantage of the efficiency, accessibility and speed. Unfortunately, technology advancement also creates room for fraud to happen internationally, through the net on a larger scale. The use of technology, mainly the internet has provided a new landscape and offers wider opportunities for fraud penetration (Cross, 2019). In most financial fraud cases, the fraudster steals sensitive information like a password to authorize a transaction to divert money (Button & Cross, 2017). This conduct is known as hacking. Besides that, fraudsters may create fraudulent sales to inflate profit figures by generating fictitious invoices in the electronic integrated sales system. As most of business routine activities are now relying on the internet and other electronic devices, fraudsters see it as a vulnerability to be exploited especially for big companies.

In considering the factor that may lead to fraud penetration, the use of technology should be investigated further with the hypothesis that high technology-reliant business is more vulnerable to massive fraud penetration. But as at this date, there is no single study that examines the relevancy of using the Fraud Triangle Theory to prove the validity of opportunity element in cyber fraud environment. However, technology is quite an issue in today's sophisticated business environment that should not be skipped.

3. CONCLUSION

The Cressey Triangle Theory is a pioneer study in investigating fraud motivation factor. Up to this date, there are abundant studies examining its validity in different fields and settings. Regardless of various perceptions, attitudes and critics towards the theory, its essence remains the same for almost seventy years and it has proven that research pertaining to fraud will still be relevant in the future, especially in battling the upward trend of fraud cases worldwide. However, the proposed framework should be tailored to the recent changes in the modern business environment, technology advancement and new generation traits by associating internal and external factors that are crucial for fraud prevention mechanisms. The threat of collusion in a complex business environment, external governance mechanism, new generation morality standard and societal changes as well as technological advancement, should be given careful consideration by fraud examination professionals, authority bodies, management and auditors.

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