Anti-fraud measures and corporate policies to combat financial fraud in the financial institutes of Malaysia

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Abstract. The rising concern about fraud in the financial sector and its impact on the economy requires massive changes and efforts that provide an avenue to fight against fraud. The primary goal of this study is to examine the effectiveness of Anti-fraud measures and corporate policies to combat financial fraud in financial institutes in Malaysia. In this study, three variables that affect combating financial fraud have been identified to be evaluated, including digital forensic tools, regulations, and corporate policies. This study used questionnaires to obtain data from workers of financial institutions as a primary data source. The findings indicated that all variables have a significant relationship with combating financial fraud. Thus, this study raises awareness about the need for anti-fraud measures in financial institutions to combat fraud. Keywords: Fraud; Corporate Policies; Digital Forensic Tools; Anti-fraud measures; Regulations

1 Introduction

Fraud is referred to as intentionally deceiving a person through unethical methods to gain unauthorized benefits. Fraudulent activities have become widespread between organizations and financial institutions, where financial frauds have become the most incurring fraud in recent years. Financial frauds involving investment fraud, identity thefts, and mortgage fraud result in major losses to companies and individuals (Apoorva, 2021). While the financial sector faces the most impact of fraud as the circulation of cash throughout the economy comes through the financial institutions, the increase of financial frauds in this sector is concerning.

The financial frauds occurring through financial institutions have major impacts on the other sectors, which creates a ripple effect of losses and financial instability throughout the economy. According to the Global Economic Crime Survey conducted by PwC in 2020, financial fraud is considered a major threat to development, while more than 47% of companies have been faced with fraudulent activities within a 12-month period and incurred total losses of $42bn during the year. This being said, the losses due to fraudulent activities globally have gone above $5 trillion, which stifles the development of the global economy.

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The Global Economic Crime and Fraud Survey carried out by PwC in 2020 in Malaysia revealed that 43% of Malaysian companies have faced fraud activities compared with the 41% in 2018. The fraudulent activities, especially financial frauds, are interrelated and encourage other white-collar crimes like corruption and bribery, which Malaysian corporations have faced at 49% and 25%, respectively, in 2020. The deputy home minister had shared the concern of a higher number of frauds occurring in Malaysia through online methods, which totaled 2,590 cases from 2013 to 2017, during which more than 1.73 million individuals have faced losses due to these criminal activities (Willy, 2017).

The losses of fraudulent activities are more than RM769 million in Malaysia, making this issue a priority for financial institutions and companies alike (Lokman, 2019). The institutional damages and economic losses had been addressed by Bank Negara to Money Services Business (MSB) licensees in order to implement and execute the policies for customer due diligence (CDD), improving capabilities of transaction monitoring, regular information updates on Financial Fraud Alert, and increasing awareness between staffs on AML/CFT requirements (Bank Negara Malaysia, 2017).

2 Literature review

Financial institutions have been the country's highest regulated sector due to the sector's significance in economic development. The possibility of risk occurrence may not be completely diminished; however, Hussaini et al. (2018) suggested that fraud risk management positively affects the banks' performance. Financial institutions are not only exposed to external fraud crimes but have reported increasing internal fraudulent activities like corruption and unauthorized cash withdrawals from customer accounts (Said et al. 2017). According to the research of Awang and Ismail (2018), financial reporting also plays a major role in how fraudulent activities become identified, as unethical reporting practices like Enron identify the risks involved in financial reporting.

The white-collar crime of financial fraud has been spread within the global financial system, and therefore, anti-fraud measures have become significant to mitigate these criminal activities. Hashim et al. (2020) have addressed the increasing underlying issue of financial fraud to be caused due to the lack of initiative by senior management to implement the necessary internal control measures, including creating staff awareness, increasing supervision, and monitoring internal control processes. Hashim et al. (2020) stated that implementing standard operating procedures and regulatory requirements would not be enough, especially for the financial sector, which has a major influence on the Malaysian economy.

2.1 Digital Forensic Tools

Financial fraud detection through cybersecurity has become an important element in financial institutions as the current digitalization related to online financial services has major risks of financial crimes occurring. The research by Mhlanga (2020), through prior studies, had identified that digital security methods through artificial intelligence (AI) had become a significant part of financial institutions' internal operations as fraud risks are detected through the algorithm generated within the internal system. As with technological advancement, crime is no longer limited to traditional offenses but has expanded into computer crime in the modern sense. Digital forensics is an approach to using scientific methodologies and procedures to investigate crimes using digital evidence. Thus, a variety of digital tools are utilized in fraud investigation by analyzing digital information (Kamble et al., 2015).

The research carried out by Widuri and Gautama (2020) focused on one of the major digital forensic tools, Computer Assisted Audit Techniques (CAAT), which is an essential
tool for forensic accountants and auditors to identify fraudulent activities within the organization. The research had also referred to the survey conducted by ACFE that revealed that only 8% of financial frauds are detected when digitalized forensic tools like CAAT is not utilized; while using this tool, more accurate audit evidence related to frauds is collected. In addition, Widuri and Gautama (2020) also discussed that in Malaysian Islamic banks, the utilization of digital techniques is comparatively lower compared with commercial banks, where data mining, digital analysis, and fraud software are utilized for detecting financial fraud.

For this reason, the Bank Negara published a report on technology risk management in 2020, which outlines that Malaysian banks are required to have Security Operations Centre (SOC) where internal frauds would be detected through cybersecurity measures. To have robust technology risk management, the Digital Investigation Manager (DIM) is commonly used, ensuring that the digital evidence relating to internal fraudulent activities is collected (Qureshi and Tazilah, 2015). This tool also becomes essential in forensic investigations to detect internal fraud by ensuring the ‘backup options’ are available through the investigation process outlining all the historical transactions within the systems. Qureshi and Tazilah (2015) also stated that fraud detection through computer-aided tools is essential in investigating potential fraudulent transactions.

Therefore, this research proposes the first hypothesis:

H1: There is a relationship between digital forensic tools and combating financial fraud.

2.2 Regulations

The regulations also play a major role as anti-fraud measures, and in Malaysia, several federal laws have been implemented regarding different fraudulent activities. One of the major regulations is the Malaysian Anti-Corruption Commission Act 2009 (MACC Act), which is targeted to combat corruption and fraudulent activities in the public sector. Under the MACC Act 2009, financial institutions must ensure that due diligence and adequate procedures are implemented as anti-fraud measures under Section 17A (Tan, 2020). Through the survey of PwC, Tan (2020) identified that since the fraudulent activities internally related to corruption and bribery are comparatively high in the Malaysian financial sector, about 49% had implemented programs in compliance with the S17A of MACC Act 2009. As this regulatory change had been implemented on 1st June 2020, Tan (2020) stated that this legal development would serve as a critical factor in anti-fraud measures.

The AMLA also is supported by regulations, including Financial Services Act 2013, Islamic Financial Services Act 2013, Money Services Business Act 2011, and Development Financial Institutions Act 2002, which are specifically required to be followed by financial institutions (Bank Negara Malaysia, 2014). These regulations act as barriers to assess risks and mitigate financial frauds in the banking sector while being improvised to meet up with current economic situations. Furthermore, as Canamero et al. (2020) discussed, the changes in regulatory measures were also implemented in the banking sector due to the pandemic situation, which has given major consideration to online banking and financial services being mostly utilized. Therefore, the banking sector has also implemented strict changes in measures including the Personal Data Protection Act 2010, which targets minimizing financial fraud related to personal banking information.

In addition, Malaysian financial institutions have also imposed several international standards related to financial fraud. The ISA 315, which is based on the internal risks for possible fraud situations, was revised in 2020 which included clarifying significant risks, inherent risk factors, transaction classes, control risk assessments, and use of IT (Deloitte, 2021). This standard that ensures the professional skepticism and independence of auditors becomes necessary, especially for the financial sector, where many cases related to regulatory
non-compliance have recently emerged. The ISA ensures that financial institutions maintain compliance in reporting and internal management, which is necessary for combatting financial fraud.

Therefore, this research proposes the second hypothesis:

H2: There is a relationship between regulations and combating financial fraud.

2.3 Corporate Policies

Corporate policies are developed within the financial institutions that act as the guideline of how internal processes would be operated. In financial institutions, corporate policies may directly impact the opportunities for committing fraud and create a culture for mitigating fraud. Ismail (2017) highlighted that corporate policies are created in line with the regulatory measures implemented by law enforcement agencies and corporate governance to improve the transparency of the financial operations within these institutions. According to Bank Negara, corporate governance plays a critical role in senior management to fulfill fiduciary duties and maintain independent opinions when dealing with fraudulent activities.

Likewise, the study involving 64 samples from fraud and non-fraud firms between 2002 to 2014 had also given a similar insight that the Malaysian Code on Corporate Governance (MCCG) had played a major role in reducing the number of fraudulent activities (Marzuki et al. 2019). Furthermore, this research had been able to pinpoint that financial pressure is the major reason for financial frauds to occur while stating that governance through corporate policies may not be effective with independent directors being involved in the process but rather would depend on how policies are being implemented throughout the financial institution. Therefore, as per the Fraud Triangle Theory, corporate governance, as part of corporate policies, reduces the opportunities available for internal fraud.

Furthermore, the banking sector has also implemented additional control measures with some changes in the banking regulations. One of the major internal controls considered most effective is the internal audit, which as Ahmed and Rahim (2018) explained, is part of the operational risk management that detects and prevents fraudulent activities. The internal audits ensure the compliance and effectiveness of the implemented controls and provide an overview of how the emerging risks of fraud and money laundering threats are combatted through the internal control procedures (Bank Negara Malaysia, 2019). Additional measures implemented currently due to the increase in digital transactions during a pandemic are the upgrades and improvements in the IT infrastructure and system, performance reviewing, enforcing standard operating procedures, and whistle-blowing policy implementation.

Therefore, this research proposes the third hypothesis:

H3: There is a relationship between corporate policies and combating financial fraud.

3 Methodology

The questionnaire survey enabled the collection of primary information and identified the issues within the scope of the study; therefore, the primary data can be compared with the secondary data to understand the existing research gaps. This quantitative research analyzed the relationship between anti-fraud measures and the prevention of financial fraud in Malaysia’s financial sector. Therefore, the audience targeted for this study was the employees in financial institutions, which included banks, insurance companies, and money exchange centers.

The framework of the research had been developed as a way of analyzing the relationship between the dependent and independent variables. The independent variables discussed in this research are digital forensic tools, regulations, and corporate policies, which impact the dependent variable of combating financial fraud.
For the sampling purpose, a limited number of participants were included as the financial sector as a whole is a large area to cover for this research. Therefore, the sample size from the total population included in this research was 72 from the financial sector. The questionnaires had been developed as a Google Document which was distributed amongst the respondents through online means. The data collected and the hypothesis was tested using the Statistical Package for the Social Sciences (SPSS). In addition, the responses were numerically coded and categorized for data analysis using SPSS, which can present reliable results.

4 Results and Findings

4.1 Descriptive Analysis of Respondents

Table 1. Descriptive analysis of respondents.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
<td>73.3</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>26.7</td>
</tr>
<tr>
<td>POSITION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior management</td>
<td>7</td>
<td>9.3</td>
</tr>
<tr>
<td>Internal auditor/accountant</td>
<td>38</td>
<td>50.7</td>
</tr>
</tbody>
</table>
There was a total of 55 males and 20 females in the sample of this study, and they constituted 73.33% and 26.7% of the respondents, respectively, as can be depicted in Table 1 above. The findings from the survey revealed that financial institutions in Malaysia are predominantly male, but in the last few decades, more and more women have been entering the sector, thereby steadily increasing the female presence in financial institutions. Most respondents revealed that they are internal auditors/accountants, who comprise 50.7% of those surveyed. Besides, 77.33% of the respondents highlighted that they have less than 5 years of work experience. Still, 22.7% of the respondents indicated that they have 5 years or more of work experience in financial institutions in Malaysia. The sample indicated that the financial institutions in Malaysia have a strong young workforce.

As depicted in Exhibit 2 below, it can be noted that statement 1 under Section B of the questionnaire on the dependent variable of the study, Combating Financial Fraud, had the highest mean score of 4.53, and S3 had the lowest mean score of 4.12. Overall, the respondents mainly responded positively as all the means for all six statements in this section had a mean of higher than 4. S1 asked respondents if financial fraud weakens the role of financial institutions, and this is the statement that had the highest mean score showing that most employees in financial institutions in Malaysia are indeed concerned that financial fraud does weaken the role of financial institutions.
As can be shown in Exhibit 3 above, it can be seen that S1 on the first independent variable of the study, Digital Forensic Tools, had the highest mean score of 4.53, and S5 had the lowest mean score of 4.16. Overall, the respondents mainly responded positively as all the means for all six statements in this section had a mean of higher than 4.

As illustrated in Exhibit 4 below, it can be observed that S3 and S5 on the second independent variable of the study, Regulation, had the highest mean score of 4.45, while S2 had the lowest mean score of 4.11. The majority of the respondents agreed that the role of the government has a significant impact on combating financial fraud. Generally, the respondents responded mainly positively as all the means for all six statements in this section had a mean of higher than 4.
As shown in Exhibit 5 above, it can be seen that statement 5 under Section C of the questionnaire on the final independent variable of the study, Corporate Policies, had the highest mean score of 4.57, and S2 had the lowest mean score of 4.28. The respondents agreed that banking institutions should have internal reporting mechanisms on suspicious activities and transactions. Yet the results show that applicant review, continuous training, adequate supervision, and awareness play a significant role in combating financial fraud.

4.2 Reliability Test

As shown in Exhibit 5 above, it can be seen that statement 5 under Section C of the questionnaire on the final independent variable of the study, Corporate Policies, had the highest mean score of 4.57, and S2 had the lowest mean score of 4.28. The respondents agreed that banking institutions should have internal reporting mechanisms on suspicious activities and transactions. Yet the results show that applicant review, continuous training, adequate supervision, and awareness play a significant role in combating financial fraud.

Table 2. Reliability test results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combating Financial Fraud</td>
<td>6</td>
<td>0.828</td>
</tr>
<tr>
<td>Digital Forensic Tools</td>
<td>6</td>
<td>0.845</td>
</tr>
<tr>
<td>Regulation</td>
<td>6</td>
<td>0.908</td>
</tr>
<tr>
<td>Corporate Policies</td>
<td>6</td>
<td>0.870</td>
</tr>
<tr>
<td><strong>Overall Reliability</strong></td>
<td><strong>6</strong></td>
<td><strong>0.926</strong></td>
</tr>
</tbody>
</table>

According to George and Mallery (2003), reliability test scores, known as Cronbach’s Alpha, higher than 0.7 makes the data reliable, and those between 0.6 and 0.7 makes the reliability of the data questionable while anything less than 0.6 is unreliable data which cannot be used for further analysis such as multiple linear regression and correlation analysis to assess the relationships between the dependent variable and the independent variables. As seen from the results, all the variables had Cronbach’s Alpha scores of more than 0.7; thus, all the data on the variables of this study were deemed reliable.
### 4.3 Correlation Test

#### Table 3. Correlation results.

<table>
<thead>
<tr>
<th>Combating Financial Fraud</th>
<th>Digital Forensic Tools</th>
<th>Regulation</th>
<th>Corporate Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>.731**</td>
<td>.758**</td>
<td>.711**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>.801**</td>
<td>.761**</td>
<td></td>
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<tr>
<td></td>
<td>.000</td>
<td>.000</td>
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</tr>
<tr>
<td></td>
<td>75</td>
<td>75</td>
<td>75</td>
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<td></td>
<td>.821**</td>
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</tr>
<tr>
<td></td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation between combating financial fraud and digital forensic tools, regulations, and corporate policies at 0.731, 0.758, and 0.711, respectively. This indicates that all variables explain 73.1%, 75.8%, and 71.1% towards combating financial fraud. The p-value is also known as sig in SPSS, and it needs to be less than 0.05 for the result to be statistically significant. As can be depicted from the table above, all the independent variables had p-values of 0.00 (less than 0.05). Hence, the results are significant, and strong positive relationships exist between the dependent and independent variables.

### 4.4 Multiple Linear Regression

The R square is known as the coefficient of determination. For this study, the R square value is 0.627, which means that 62.7% of changes in combating financial fraud can be explained by changes in digital forensic tools, regulation, and corporate policies. Therefore, it is reasonable to state a significant correlation between combating financial fraud and the independent variables. At the same time, 37.2% of changes in Combating Financial Fraud can be attributed to other factors not investigated in this study.

#### Table 4. Model Summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change F</td>
</tr>
<tr>
<td>1</td>
<td>.792a</td>
<td>.627</td>
<td>.611</td>
<td>.33983</td>
<td>.627</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Corporate Policies, Digital Forensic Tools, Regulation

The model was tested for its significance in explaining the target variable, as seen in the table below. Since the p-value = 0.000, which is less than 0.05, the model is statistically significant at a 5% level. In other words, the model is indeed adequate. Yet, the null hypothesis should be rejected.

#### Table 5. Analysis Of Variables (Anova)a.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>13.772</td>
<td>3</td>
<td>4.591</td>
<td>39.753</td>
</tr>
</tbody>
</table>
4.5 Discussion

Based on the Pearson moment correlation coefficient and the regression analysis, the null hypothesis, $H_{01}$, is rejected, and the alternative hypothesis $H_{A1}$ is accepted for the relationship between Digital Forensic Tools and Combating Financial Fraud. These findings are consistent with findings from previous literature. The research carried out by Widuri and Gautama (2020) focused on one of the major digital forensic tools, Computer Assisted Audit Techniques (CAAT), which is an essential tool for forensic accountants and auditors to identify fraudulent activities within the organization. Also, a prior study by Mhlanga (2020) found that digital security approaches using AI have become a substantial element of the internal operations of financial institutions because of the algorithm produced inside the internal system that detects potential fraud.

Besides, the finding that regulation has a relationship with combating financial fraud in the financial institutions of Malaysia can be supported by the claim made by Tan (2020) that legislative change will be a crucial aspect in anti-fraud efforts. In the banking industry, these laws operate as a barrier to analyzing risks and minimizing financial crimes while adapting to current economic conditions. Likewise, this research shows that corporate policies have a relationship with combating financial fraud. Findings from prior studies are in line with this research. For example, it was shown that implementing the Malaysian Code on Corporate Governance (MCCG) significantly lowered the frequency of fraudulent operations in Malaysian companies (Marzuki et al. 2019). Yet, according to Ahmed and Rahim (2018), one of the most successful internal controls is the internal audit, a component of operational risk management that discovers and eliminates fraudulent actions.

5. Conclusion, Limitation, and Recommendation

5.1 Conclusion

In conclusion, the objectives of this study have been met. Statistically significant relationships were established between the independent variables and the dependent variable. Data were collected among employees in financial institutions in Malaysia through a questionnaire survey, and SPSS software was employed to analyze the data. A strong positive relationship was found between all the variables and combating financial fraud. The meaning of this relationship is that when there is an increase in the use of digital forensic tools, regulation, and corporate policies in the financial institution in Malaysia, the ability of the financial institutions to combat financial fraud will also increase, resulting in possible fraud being easily detected and fraud occurrences decreasing overall. On the other hand, the relationship between these variables also entails that when there is a decrease in digital forensic tools, regulations, and corporate policies being used in financial institutions, there is a decrease in the institution’s ability to combat financial fraud. Yet, this research’s findings are consistent with previous literature findings.
5.2 Limitation

The information obtained had been limited since most of the information was not published by the banking sector or the Malaysian government due to the confidentiality and sensitivity of the information. Even though this study only had 75 participants who provided input, it is still insufficient to produce a more impressive outcome. As a result, future studies should expand the sample size of responders and broaden the population. Equally, this study looked at Malaysian financial institutions, which could be inadequate as financial fraud is a global issue. Because the study's limited knowledge appears to have prevailed, future research should include the remaining industry to obtain additional criteria for anti-fraud measures and corporate policies to combat financial fraud.

5.3 Recommendation

As more than 50% of the questionnaire respondents agreed that government has to create enough awareness about financial fraud and that fraud damages the institution's reputation. Also, the primary data has demonstrated that the government's role greatly impacts combating financial fraud. Yet, some laws were never amended since they were enacted despite the technological advancement, which brings the need for strict regulation to protect firms and the country's reputation. The board of directors and companies’ managers are strongly recommended to spot any potential fraud in their organizations before it occurs by implementing strong internal control to avoid bankruptcy and other legal or financial challenges. In addition, tools like autonomous monitoring, artificial intelligence, and analytical tools will help the bank prevent and mitigate fraud and minimize any damages that might result from fraud, as 57.3% of the survey strongly agreed with that.

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