

Financial Forensics and the Compliance to Fiscal Policies at the Barangay Level

Florecita A. Cortez, MSAc
Allan Frank B. Silva, MSBA
Saint Louis University, Baguio City
(zac629ers@gmail.com, afbsilva@slu.edu.ph)

Abstract - Financial forensics goes beyond the realm of litigation. Its key components of risk assessment, internal control evaluation and fraud deterrence provides entities with the necessary check points in undertaking their financial processes. The barangay, as the basic political unit in the Philippines acts like any other going concern and encounters the same problems in the conduct of its duties. It is headed by the punong barangay who uniquely has all three powers of government – executive, legislative and judiciary vested upon him. The study attempts to look into the sufficiency of necessary measures that would aid in internal control evaluation, risk assessment, and the deterrence of fraud in the barangays and at the same time look into the importance of financial forensics on the aforementioned aspects in assisting and promoting good governance in the barangay level. A data triangulation of the status of barangays on their compliance with fiscal policies and the importance of incorporating financial forensics in order for the barangay to meet its goal of ensuring accountability and transparency in their transactions was undertaken in this study. The primary source of data for this study is a binary response questionnaire patterned after the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework for internal control for local government units and customized according to the fiscal management of barangays. The Respondents of the study were the punong barangay, barangay treasurer and the barangay constituents for purpose of obtaining a triangulated data and were chosen through random sampling. The Fraud Diamond components of opportunity, pressure, rationalization and capability provides a perspective in viewing the triangulated data on the elements of financial forensics. Results of the study show that barangays are equipped with the necessary fiscal policies set by the Department of Budget and Management and the Commission on Audit. The study was indicative of the barangays being compliant to fiscal policies and are adherent to the elements of financial forensics but in a less structured application. The elements of financial forensics are important because they are checkpoints to determine weaknesses in the flow process of financial transactions in barangays and provide possible solutions to deter fraud and prevent access to the capability of committing fraud. Stringent measures and a strong foundation of controls are necessary in the fiscal managements of barangays. The best way to have a strong and progressive nation that advocates good governance is to start from the bottom. The political processes of barangays emanate from the grass roots level giving them the edge at being the cornerstone of nation building and of being pioneers for change in participatory governance.

Keywords - financial forensics, barangay, risk assessment, risk management, fraud, internal controls, fraud diamond

I. INTRODUCTION

Risk is inevitable in any form of business endeavor or any going-concern for that matter. The Global Risks Report for the past decade has pointed out several persistent economic, social and political factors that have been shaping the worlds risk landscape. In 2016, the world saw a crystallization of political risks that have led to the election of populist leaders. There was a loss of faith in institutions and an increased strain on international cooperation (The Global Risks Report 12th Edition, 2017). Recognition of the various risks that an organization may encounter and finding ways to mitigate their adverse effects remains as the top priority of management for businesses to thrive and survive. According to the Global Risk Report of 2017, fraud has been the most common financial risk of all time. For as long as the perpetrators have malicious intent no business is spared from fraud; even the best internal control that is in place can be vulnerable to such attack. It is along this line that the employment of financial forensics will be very useful. Financial forensics is a specialty field in accounting that combines criminal investigation skills with financial

auditing skills to identify financial criminal activity coming from within or outside an organization (Investopedia: Financial Forensics). Contextually, forensics means using scientific methods to analyze and review legal issues. Thus, financial forensics means applying scientific knowledge in the study and interpretation of accounting evidence for the presentation or possible presentation in a legal forum. Financial forensics, according to Ramamoorti and colleagues, turns analysis of numbers into an art form –it can help uncover and unearth financial fraud. (Ramamoorti, 2013). While it is true that financial forensics' main purpose is to investigate and unearth fraud, financial forensics can also be a means for accountants, auditors and other financial officers and personnel to understand and simplify finances and related transaction in any institution or organization. Financial forensics may also be a means to review and study internal control systems of institutions or organizations and discover if their financial processes comply with generally accepted accounting principles. Being able to deter fraud is as important as investigating it. Fraud cases are

perpetuated mostly by people inside the company, and more often than not, holding key positions in the said company. This are commonly known as white-collar crimes. White collar crimes are also considered occupational fraud crimes. Occupational fraud as defined by the Association of Fraud Examiners is "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets" (Association of Certified Fraud Examiners, Inc., 2014). The three major types of occupational fraud are: corruption, asset misappropriation and financial statement fraud. (Thornhill, 1994). Occupational fraud occurs across a wide range of industries and geographic regions, smaller entities, as compared to larger ones are generally at risk for this type of fraud. Based on the latest statistical report of the Association of Certified Fraud Examiners (ACFE) for the years 2012 to 2016, the following data shows that the most popular method of where occupation fraud is detected which is through tips. Internal audit and management review are second and third methods respectively (Association of Certified Fraud Examiners, 2016). Even the government sector is equally vulnerable to fraudulent acts by its officials and personnel. The Philippine local government units are regulated by the Local Government Code of 1991. This code paved the way towards greater local autonomy. Cities, municipalities and most especially *barangays* were given more attention and recognition through this code. Decentralization also brought about fiscal autonomy among these local governments. Fiscal autonomy refers to the broad latitude given to local government units in terms of their greater roles in providing public services, services that require the ability to access resources, to generate revenues, and to disburse and utilize these funds (Padilla, 2010). It is therefore imperative for local governments to strengthen their mechanisms for transparency and accountability in their budgeting and spending practices. In the Philippines, the smallest administrative division is the *barangay*. Headed by the *barangay* captain, more popularly known as the *Punong Barangay*, by virtue of the Local Government Code of 1991, is the only known public official in the country that exercises all three government powers – executive, legislative and judiciary powers. As *punong barangay*, he exercises executive powers. Being the chairman of the *Sangguniang Barangay*, he is given legislative powers. Finally, as the chairman of the *Lupong Tagapamayapa*, he wields judicial powers. *Barangays* have the power to provide and raise funds through taxation as long as these do not conflict with existing laws, as well ordinances which would aid in promoting agricultural support services, health, general hygiene, sanitation, beautification, solid waste management, and social services. They can even construct and maintain various infrastructure facilities including roads, satellite markets and water supply systems (Abelgas, 2010). In the conduct of their financial transactions, the *barangay*, through its treasurer and *punong barangay* have complete rein on how these are handled. The role of the Local Government's Accounting Office is simply to report the financial status of each *barangay* through their monthly financial statements and annual consolidated financial statements. Financial transactions are only subject to post-audit by the Commission on Audit. Post-audit is usually done on an interim basis during the incumbency of the elected *barangay* officials which, in this case, three years. Should the Commission find some deficiencies, unusual transactions or procedural lapses, these are reported in their audit office memorandum. An Audit Observation Memorandum (AOM) is a written notification to the auditee agency head and concerned officer(s) informing

them of deficiencies noted in the audit of financial statements (COA Circular No. 2009-006). After more than two decades following the promulgation of the 1991 Local Government Code, the *barangays* are becoming more aware of their important role in nation-building and are progressing in terms of participatory governance. *Barangays*, with their vested powers, are the first to plan and implement government programs. Also, having been created from the grassroots level of society, they have become the pulse of the nation and the epitome of direct democracy. *Barangays* have indeed gone far when it comes to being direct assistants to national transformation. However, having such powers can sometimes be disadvantageous. *Barangays* are also vulnerable to acts related to fraud, graft and corruption. Taking for instance the case in Lapu-Lapu City in Cebu where the *punong barangay* and treasurer were charged with one hundred counts of graft and falsification of public documents in 2015. The aforementioned *barangay* officials, in their legal capacity, took advantage of their positions and falsified documents, making it appear that various supplies were delivered to their *barangay* when in fact no supplies reached them. They also facilitated the issuance of checks in favor of the supposed suppliers. In the Audit Observation Memorandum issued by the Commission on Audit in Visayas, it was mentioned that in 21 *barangay* transactions, claims with seemingly falsified supporting documents were processed. These claims resulted to the payment of non-existent suppliers in the total amount of P1,738,355.50. It is only this year (2017) that the *barangay* officials were charged for ninety-two (92) counts of falsification of official documents and 21 counts of violation of section 3 (e) of RA 3019 (Anti-Graft and Corrupt Practices Act) (Braga, 2017) Under the provision of the law, public officials are prohibited from causing undue injury to any party, including the government; they are prohibited from, giving any private party any unwarranted benefits, advantages or preferences in the discharge of their official administrative or judicial functions through manifest partiality, evident bad faith or gross inexcusable negligence (Braga, 2017). In a similar case in Baguio City, a *punong barangay*, treasurer and a certain supplier were also charged and convicted of thirteen (13) counts of malversation of public funds. These officials, as reported in the Audit Observation Memorandum issued by the Commission on Audit, corroborated by the City Accountant were found to have disbursed funds to a certain supplier without the pre-audited vouchers. These occurred in 2003, however, the conviction of the said officials was only handed down in 2007. The *barangay* chairman in her testimony, said that she did not know that disbursement vouchers were needed for the transaction in order for them to disburse the *barangay* funds. She cannot, however, feign ignorance as she was already a two term *punong barangay* when the crime was committed. The failure of the *barangay* officials to abide by the prescribed COA rules and accounting procedures were tantamount to misappropriation of public funds (The People of the Philippines vs. Teresita Gapuz et al: Malversation of Public Funds, 2007). In the above-mentioned cases, it took years before these were successfully resolved. The ease of the perpetrators in repetitively violating the laws is also alarming. Sufficient laws, procedures and circulars in handling *barangay* financial transactions from agencies such as the Commission on Audit (COA), Department of Budget Management (DBM), Department of Interior and Local Government (DILG) have been passed and enacted, however there are still issues and cases of violations noted in these *barangay* financial transactions. The need to assess the risks that the *barangays* are facing and the internal controls that are in place is likely a necessity in order to

deter, if not arrest, fraudulent activities. Fiscal policies and their adequacy need to be looked into as well to be able promote good governance in the *barangays*, mostly to assist these political units in continuing their commitment towards national transformation. With these in mind, this paper aims to look into the level of compliance of Baguio City *barangays* to fiscal policies and has been conceptualized in order to contribute to the initial steps in infusing risk reduction through the elements of financial forensics and eventual good governance.

Statement of the Problem

The study aimed at exploring the adequacy of existing laws to minimize fraud and promote good governance through financial forensics. Specifically, to ascertain the following: (1) The compliance of *barangays* to fiscal policies as provided by Government Accounting and Audit rules and regulations, COA Circulars and other financial pronouncements, and are the *barangays* equipped with the sufficient and necessary measures that would aid in internal control evaluation, risk assessment and the deterrence of fraud? (2) How important is financial forensics in assisting and promoting good governance in *barangays* especially in the areas of risk assessment, internal control evaluation and fraud deterrence?

Theoretical Framework

Fraud Diamond Theory. Situations that are objects of scrutiny under financial forensics can best be explained by the Fraud Diamond. This theory was developed by Wolfe and Hermanson in 2004 and is an offshoot of the Fraud Triangle developed by American sociologist Donald R. Cressey who worked extensively in the fields of criminology and white-collar crime. Traditionally, the fraud triangle has always been the framework for fraud management and fraud deterrence, but the divergent factor of capability, as introduced in the Fraud Diamond Theory, gives a newer perspective on how to manage risk and control fraud in an organization. The Fraud Diamond is a framework designed to explain the existence of risks, the vulnerability of internal controls and more importantly the reasoning behind a person's decision to commit workplace fraud. The four stages, categorized by the effect on the individual, can be summarized as pressure, opportunity, rationalization, and capability.

Pressure. This may be the individual's motivation behind the crime and may be attributed to personal financial pressure, such as debt problems, or workplace debt problems, such as shortfalls in revenue.

Opportunity. The circumstance or opportunity to commit fraud is the means that the individual finds in a situation that gives him a clear course of action to defraud the organization. It is a chance for an individual to abuse his position in order to solve the perceived un-shareable financial problem in a way that is unlikely to be discovered.

Rationalization. The cognitive stage which requires the fraudster to justify the crime in a way that is acceptable to his or her internal moral compass. Most fraudsters are first-time criminals and do not see themselves as criminals, but rather a victim of circumstance. Rationalizations are often based on external factors. The key to understanding why fraud, bribery, and corruption are increasing is to acknowledge that it usually starts off with a pressure or strain. Developing solutions to prevent and manage fraud therefore is important for the long term benefit of organizations in both the public and private setting.

Capability. This encompasses the traits, skills and ability of a person to commit fraud. (Abdullahi, Rabi, et al., 2015). The theory postulates that the occurrence of fraud or the

propensity to commit fraud will not ensue if the fourth key component is not present. A person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through it, not just once, but time and time again. . It takes skill for a person to recognize the fraud opportunity and turn it into a reality. Commitment factors may either emanate from the persons position or function in an organization which gives said person an avenue to exploit the opportunity for fraud not available to others. The person is smart enough to exploit his authorized access and take advantage of the weaknesses of the internal control of the organization. Also, he is bold and confident enough to know that he can get away with his misdeeds and that he can talk himself out of trouble when caught. More importantly, a fraudster has sufficient coercive power to convince others to conceal and commit fraud. Any movement of the components of the fraud diamond increases the vulnerability of an organization to fraud. Financial forensics' key elements of organization, risk assessment, internal control evaluation and fraud deterrence provide checkpoints in identifying the possible red flags that can create or cause a change in any of the components of the fraud diamond. The way an organization is structured: from the choice of personnel, the code of conduct it conforms with, the ethical orientation of a group, and most of all, the way the internal controls of the organization are set, may and can affect factors of the fraud diamond. Weak internal controls provide avenues for perpetrators for perpetrators to scheme and commit fraud in an organization. (Halim, 2017).

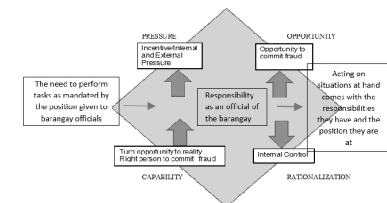


Figure 1. The Fraud Diamond

Conceptual Framework

Barangay as a basic political unit. The *barangay* is the basic political unit of the Philippines. By virtue of the Local Government Code of 1991, the *barangay* was created as the primary planning and implementing unit of government policies, plans and project, and activities in the community. It is a forum wherein the collective views of the people may be expressed, crystallized and considered and where disputes may be amicably settled (Sec 384; Book III, Title One. Local Government Code) (Local Government Code, 1991). It is a political unit that can exercise all three important powers of governance – executive, legislative and judiciary. This makes them a political stronghold. With the emphasis of the present administration on autonomy, the *barangay* has an even greater power and responsibility, including the enforcement of laws, the maintenance of peace and order, the delivery of basic services, and the promotion of the general welfare (Ursal, 2001).

Barangay financial transactions. As an autonomous political unit and in the performance of all its diverse functions, the *barangay* is provided with taxing powers, as well as the

capability to impose service charges for *barangay*-owned facilities and utilities. Moreover, *barangays* are provided with a substantial share of the local government internal revenue allotment. The *barangays* have also the power to disburse funds in the conduct of their daily activities and in the management of their constituents, subject to accounting and audit rules and regulations. Laws that they enact should always be aligned to existing laws and regulations of the Philippines. In the conduct of their financial transactions, the *barangay* through its treasurer and *punong barangay* have complete rein on how these are handled. The *Barangay* Government Accounting Manual (COA, 2006), provides all the necessary procedures, reporting methods and necessary documents that need to be complied with and conformed to by the *barangays* in processing financial transactions. The manual is considered the “bible” of the financial transactions for *barangays* since it contains all the pronouncements, fiscal policies and rules governing the processes in handling financial transactions of the *barangays*. Collections are receipted and reported in the daily collection report and summarized in the cash receipts report. Disbursements, on the other hand, are mostly done through the issuance of checks. Documents supporting the disbursement are submitted to the *barangay* treasurer. The treasurer in turn prepares the check and the *punong barangay's* certificate which contains the list of checks that have been issued and readied for encashment. The *punong barangay's* certificate is notarized before it is given to the depository bank in charge of accepting the checks issued. A copy is likewise provided to the Commission on Audit. All disbursements are summarized in the Journal of Checks Issued. The cash receipts and cash disbursements journals are then submitted every month to the Local Government Accounting Office for the preparation of financial statements. The role of the Local Government's Accounting Office is to report the financial status of each *barangay* through their monthly financial statements. Annual consolidation of these financial statements is likewise done. Each financial transaction is subject to post-audit by the Commission on Audit. Post-audit is usually done on an interim or cyclical basis during the incumbency (three years) of the elected *barangay* officials. Not all *barangays* are always audited within a year. The regional and central offices of the Commission on Audit often give the mandate on what should be audited within a calendar year and what items are subject to their risk-based audit. The Commission on Audit is not limited to such mandate. If they are able to audit all the *barangays* in a given year, they would do so. Should the Commission find some deficiencies, unusual transactions or procedural lapses, these are reported in their audit office memorandum. An Audit Observation Memorandum is a written notification to the auditee agency head and concerned officer(s) informing them of deficiencies noted in the audit of financial statements (COA Circular No. 2009-006). Occasionally, when the transactions are overtly irregular, excessive and unreasonable, a Notice of Disallowance or Notice of Suspension is served to the *barangay*. Deficiencies may vary from *barangay* to *barangay*. The Local Government of Baguio as a highly urbanized city which caters to 128 *barangays*. Handling the post-audit of the multifarious transactions of these *barangays* is an audit team from the Commission on Audit composed of 15 people including the supervising auditor. The 14 members of the audit team are divided into three (3) teams, with two teams catering to fifty-one *barangays* each. The third team handles twenty-four (24) *barangays*, including the various regular transactions of the Local Government of Baguio. Due to the bulk of transactions generated by the 128 *barangays* and the length of time taken by a handful of auditors in auditing all these transactions, cyclical

audit or interim audit is often done by COA. Only after post-audits are undertaken that deficient or anomalous transactions are discovered. By the time anomalies are discovered, rectification is sometimes too late to carry out. Moreover, the persons responsible have long ended their term and have properly secured the necessary clearances for their tenure. Correcting deficiencies in these financial transactions are therefore more challenging. Also, this form of leniency may lead to an increased prevalence and leeway for people to perpetuate unscrupulous acts. According to the Commission on Audit, numerous cases have been docketed in the Ombudsman's office for litigation, but if these cases are not followed-up or given sufficient evidentiary support, more often than not, they are simply docketed. The role of the COA is only that of a recommending agency. It cannot impose on the Ombudsman to litigate cases of fraud and to do so with dispatch. The litigation of these cases is solely in the hands of the Ombudsman (Lazo, 2006). It is a fact that graft and corruption or malversation cases in *barangays* are not detected if not for whistle-blowers or witnesses who would come forward to report fraudulent incidents. Like all other cases of fraud, it is usually those reported by third-parties or insider-witnesses in the organization which are uncovered and later litigated in the courts. Otherwise, without such witnesses and whistle-blowers, most cases of fraud within the private or public sector often remain undiscovered and worse, un-litigated.

Good Governance. It is often said that “public office is a public trust.” This statement admonishes all public officials of the land to be accountable for all their actions and decisions, calling on them to serve the people with utmost responsibility, integrity, loyalty, and efficiency. (The 1987 Constitution of the Republic of the Philippines, 1987). Good governance relates to the processes in making and implementing decisions. In the article, *Governance and Good Governance: A Conceptual Perspective* (Ali, 2015), good governance was defined in the context of assuring transparency through the exercise of economic, political and administrative authority. It basically strives to establish quality relationships between rulers and the ruled. Good governance is a legitimate, accountable and effective way of obtaining and using public power and resources to achieve widely-accepted social goals. Good governance is important because it is the means by which the constituents' faith and confidence in their elected officials' decision-making processes are improved. It also leads to better decisions, it helps local governments meet their legislative responsibilities, and more importantly, it provides an ethical basis for governance. (Municipal Association of Victoria et. al.). The characteristics of good governance are as follows: accountability, transparency, follows the rule of law, responsive, equitable and inclusive, effective and efficient, participatory.

Barangay fiscal policies formulated by taking into consideration the elements of financial forensics and complied with dutifully will ideally result to good governance.

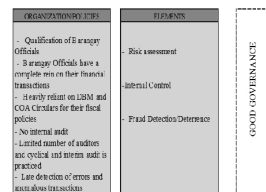


Figure 2. Schematic Representation of Conceptual Framework

II. RESEARCH METHOD

Research Design. An empirical research using a descriptive-normative survey of the importance of financial forensics in the fiscal policies of the *barangays* in Baguio City was made using primary and secondary data. Same set of questionnaires were floated to the different *punong barangays*, treasurers, and constituents of the 128 *barangays* of Baguio City in order to obtain triangulated data from the aforementioned respondents.

Locale of the Study. The study was conducted in the City of Baguio, which is the highly urbanized city and lone congressional district of the Cordillera Administrative Region. The City of Baguio is politically divided into one hundred twenty-eight (128) *barangays*. *Barangays* in the City of Baguio have been grouped into 20 districts. The identified respondents for the study are the *punong barangay*, the *barangay* treasurers, and the constituents of the *barangays* for the purpose of triangulation. Triangulation is a statistical cross-referencing technique for verifying and validating responses in a study (Boslaugh, 2012). The Cochran formula (Cochran, 1977) was used in determining the sample sizes. The results were a paired sample size of 97 respondents for the *punong barangays* and *barangay* treasurers. On the other hand, in the selection of respondents from the constituents of the different *barangays*, the stratified random sampling was utilized. Stratified random sampling involves the division of a population into groups that have common attributes (Walpole, 2005). The 20 districts in which the *barangays* are clustered were considered as the stratum where the samples were taken. The computed sample size using the Cochran's formula was 385.

Instrumentation. A binary response questionnaire was the primary source of data gathering for this study. The questionnaire was patterned after the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework for internal control for local government units (Department of Budget and Management, 2016). Salient items from the COSO internal questionnaire were considered and customized for the *barangays*, with the assistance of the Local Government Unit (LGU) accountants and the Commission on Audit (COA). The questionnaire is divided into four (4) major parts, namely: Organization/ Policies; Risk Assessment; Internal Control; and Fraud Deterrence. These are the key components of financial forensics. Before floating the questionnaires to identified respondents, a validity and reliability test was undertaken.

III. RESULTS AND DISCUSSION

The study provides a triangulated perspective of the structure of *barangays* in relation to their fiscal policies and the elements of financial forensics. Points of view were from the *punong barangays* as heads of their *barangays*, holding all three powers of government (The 1987 Constitution of the Republic of the Philippines, 1987): the *barangay* treasurers, as the individual designated to oversee and execute the financial transactions of the *barangay* and, the *barangay* constituents who are the recipients of the services from the aforementioned officials and the people who provide feedback on services of the official.

Compliance of Barangays to Organization and Policy Structure. Table 1 as presented in the following page shows the perceived compliance of *barangays* with organization and policy structures. It can be gleaned from the data presented that *barangays* are adequately equipped with necessary rules and

regulations in their organization. Although the constitution mandates a very minimum requirement in terms of the qualifications of *barangay* officials, other laws provide measures on how they conduct themselves as public officials. On a triangulated perspective, the constituents gave a relatively higher rate of percentage on most of the items as compared to those of the *punong barangay* and the *barangay* treasurer. These scores reflect the level of confidence and trust accorded by the constituents to their leaders. This is explained by the phenomena of The Public Choice Theory. Developed by James Buchanan and Gordon Tullock, this is a body of theory that explains how public decisions are made. The voting of populist leaders not only affects the nation in general, but it also affects the *barangays* (The Global Risks Report 12th Edition, 2017) Wolfe and Hermanson's Fraud Diamond points out that in the element of capability, positioning may be indicative of a person's ability to exploit and create an opportunity for fraud. Positioning means a person's function, duty or responsibility in the organization (Rudewicz, 2010). Holding three (3) major functions of governance (executive, legislative and judiciary), the *punong barangay* carries a lot of responsibilities. Checks and balances are important aspects of these responsibilities. Low percentages on supervisory oversight are due to the fact that most *barangay* financial transactions are so simple that more often than not, supervisory oversight is not necessary. Second item that has the lowest weighted average is the posting of code of ethics in conspicuous places. *Barangay* members often do not prioritize the posting of their code of ethics. Disclosure of conflicts of interest takes the third lowest rank. To achieve accountability and transparency and to prevent opportunity for fraud, *barangays* should often declare if there are conflicts of interest in the transaction.

Table 1
Perceived Compliance of Barangays to Organization and Policy Structure

ORGANIZATION POLICIES	<i>Punong Barangay</i>	<i>Barangay Treasurer</i>	Constituents	Average Percentage			
1 Adherence to the principle that public office is a public trust	67	76.1	77	87.5	216	97.3	91.26
2 Promulgation of rules and regulations in accordance with the laws of the land and meet the barangay's policies, objectives, programs and projects	67	76.1	78	88.6	214	96.4	90.92
3 Provide service with utmost responsibility, integrity, loyalty and efficiency and act with patriotism and love for the land and its people	66	67.0	77	87.5	212	95.5	88.47
4 Punong Barangay's disciplinary powers over other barangay officials and constituents	66	75.0	73	83.0	209	94.1	88.15
5 Accountability to constituents at all times	66	75.0	73	83.0	195	87.8	84.22
6 Division of responsibility / no overlapping of responsibility especially those of financial transactions	63	71.6	72	81.8	192	86.5	82.59
7 Familiarity with policies and procedures of governance and management of funds	63	71.6	68	77.3	195	87.8	82.48
8 Annual preparation of Statement of Assets Liabilities and Net Worth	59	67.0	76	86.4	185	83.3	81.03
9 Ease of accessibility of procedures of governance and management funds	59	67.0	69	78.4	187	84.2	79.71
10 Awareness of the barangay officials of the code of conduct mandated by the local government code for them to abide by	60	68.2	67	76.1	177	79.7	76.64
11 Initiative of barangay officials to create and promulgate resolutions affecting official matters	56	63.6	70	79.5	176	79.3	76.44
12 Performance evaluations for key personnel in the barangay	53	60.2	62	70.5	170	76.6	72.22
13 Equal opportunities and adequacy of training	51	58.0	51	58.0	160	72.1	66.61
14 Periodic ethics training for barangay officials and key barangay members	51	58.0	50	56.8	154	69.4	64.65
15 Barangay officials acknowledge receipt of code of ethics and that they understood it	50	56.8	51	58.0	139	62.6	60.41
16 Disclosure of conflicts of interest	51	58.0	60	68.2	122	55.0	59.06
17 Posting of a formal code of ethics in conspicuous places such as barangay hall or barangay vehicle	47	53.4	50	56.8	120	54.1	54.57
18 Supervisory oversight for transactions that cannot be segregated	35	39.8	48	54.5	105	47.3	47.34

Risk Assessment. The perceived observance of practices to reduce risk is presented in Table 2. Risk, as referred to in this study means enterprise risk management. This mostly relates to the financial health and life of an entity as a going concern. On the aspects of risk assessment from the different respondents of the *barangays* results show relatively high percentages. *Barangays* are well-aware of the risks they face, and the repercussions of these risks. Repercussions or consequences in lapses can come in the form of Audit Observations Memorandum served by the Commission on Audit or it may come in the form of more grievous consequences, as in suspensions or disallowances. A plethora of rules and regulations that *barangays* are compelled to abide by makes them well-aware of risks involved and the ripple-effect that such failure and risks can bring. Risks are dynamic situations that need contingent planning and analysis. Further studies would help look at whether a system-oriented approach or a restructuring process would work best for the *barangay*. (Rasmussen, 1998). *Barangays* tend to be heavily reliant on what they are used to; as a result, deviations can sometimes disorient them, so much so that they may fail to foresee the bad consequences of their good strategies. Having the capacity to enact and promulgate their own rules and regulations may likely be the reason that the lowest ranked item is their capability of relying on COA rules and regulations on matters related to risk management. While it is true that they are well equipped with adequate fiscal policies and other laws as well as rules and regulations which ably assist them on how to govern their constituents, certain lapses, minor infractions, and the propensity and probability of committing fraud in the *barangay* level, among *barangay* officials is still a major and unavoidable risk. Also, even if the necessary post-audit for the financial transactions of *barangays* are diligently done by the Commission on Audit, their audit is limited to compliance audit only. These compliance audits only require for financial transactions to meet the minimum requirements, to be deemed as legal and executable. (Villar, 2009). Seldom does the commission do transactional audits unless it is mandated by the central office, or when they find it necessary to do so, or more often than not, when a fraud case has been exposed.

deemed to be simple and manageable. This vulnerability however has led to numerous malversation cases going undetected (The People of the Philippines vs. Teresita Gapuz et al: Malversation of Public Funds, 2007). Although the items are essentials of internal control, they are also not the main points of interests of the risk-based audits done by the Commission on Audit. Risk-based audit is a type of audit conducted where line items of the financial statement deemed as red flags are prioritized in the auditing process by the commission. Financial forensics puts these items as priority tasks if red flags are indeed identified. More than risk-based audits, COA should consider adding more stringent rules and policies that would help prevent or discourage the propensity to commit fraud.

Table 2
Perceived Observance of Risk Assessment

RISK ASSESSMENT	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
1 Training of staff for officials whose duties permit or require the possession or custody of government funds	63	71.6	73	83.0	82.86
2 Identification, analysis and evaluation of relevant risks	64	72.7	66	75.0	82.54
3 Funds and properties received in the official capacity of punong barangay and other barangay officials are accounted for as government funds and government property	62	70.5	78	88.6	82.13

RISK ASSESSMENT	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
4 Disbursement of government funds pursuant to an appropriation law or other statutory authority	63	71.6	72	81.8	81.74
5 Assistance from City Budget/Accountant, Department of Interior and Local Government or other agencies in the periodic review of barangay operations, processes and activities	62	70.5	66	75.0	81.03
6 Inclusion of results expected for each budgetary program and project, the nature of the work performed, estimated costs per unit of work measurement, including the various objects of expenditures for each project in the budget estimates.	60	68.2	72	81.8	80.65
7 Establishment of policies and procedures to address risk	59	67.0	67	76.1	79.80
8 Integration of risk assessment in the implementation of goals and objectives	60	68.2	66	75.0	79.19
9 Determination of responsibility for the management of risk	57	64.8	69	78.4	78.57
10 Identification of opportunities and eventualities for risk events	59	67.0	64	72.7	78.55
11 Periodic review of operations, processes and activities to be in compliance with current regulations, policies, procedures and other requirements	59	67.0	64	72.7	78.29
12 Evaluation of risks - significance and likelihood of occurrence	55	62.5	64	72.7	76.46
13 Reliance to policies and procedures on risk management provided by the Commission on Audit, Department of Budget and Management and Department of Interior and Local Government	55	62.5	60	68.2	71.80

Internal Control. The process where organizational objectives are met, laws and regulations are followed. This also refers to instances when: operations are efficiently and effectively done and proper monitoring and reporting has been made. In the study, the aspects of the control environment, information system, monitoring and control activities were considered. Relatively, the triangulated data percentages are closely clustered with each other. Items that ranked high are the budgeting process, standards that ensure transparency and accountability, and participation of the accounting and budget office in the monitoring of the *barangay* budgets. These are all covered by mandates from COA and or DBM (Padilla, 2010). Items that ranked lower in the control environment were mostly in the conduct of exit interviews by the Department of Local Government (DILG). Most officials extend their terms and exit interviews are not conducted compulsorily; moreover, no sanctions are issued if the officials do not go for exit interviews. Next lowest in rank is the review of collections. The lack of review of collections may be attributed to the fact that the collections of the *barangays* are so small, that oversight or supervision by a separate individual becomes unnecessary.

Table 3
Perceived Maintenance of Adequate Internal Control in the Area of Control Environment

INTERNAL CONTROL: CONTROL ENVIRONMENT	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
1 Budget process conforms to the prescribed budget procedures	62	70.5	69	78.4	84.57
2 Guidelines to measure and standards that will ensure transparency public transactions	65	73.9	72	81.8	84.23
3 Active participation of local accounting and budget office in the planning and monitoring of barangay budget	63	71.6	69	78.4	81.38
4 Keypersons actively participating in the budget procedures	59	67.0	67	76.1	80.11
5 Enhancement of work flowchart of barangay procedures posted in conspicuous places	54	61.4	57	64.8	72.46
6 Review of barangay budget by members of the barangay	35	39.8	30	36.8	57.74
7 Review, verification and proof of collections by separate individual that is also tasked to prepare or arrange the deposit of collections	42	47.3	51	58.0	56.96
8 Exit interview conducted by the Department of Interior and Local Government for barangay officials shown to and their own	40	45.5	42	47.3	50.86

Table 4 shows the perceived maintenance of internal control in the area of information. *Barangays* comply with transparency system in their reporting wherein proper reconciliations between the bank and the books are made and financial statements fairly state their financial position and performance and are prepared on a regular basis. It is an obligation for the *punong barangays* to report on the financial status of the *barangay* as often as possible. Sanctions of freeze payments may happen if the *barangay* fails to submit the necessary documents needed for the financial statements. Freeze payment means that *barangays* are temporarily stopped from disbursing any funds until they have complied with the requirement of submitting their reports

Table 4
Perceived Maintenance of Adequate Internal Control in the Area of Information System

INTERNAL CONTROL: INFORMATION SYSTEM	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
1 Information system that informs the public of policies and procedures, performance reports and documents classified as public information	64	72.7	73	83.0	84.39
2 Financial statements fairly present the financial status of the barangay	62	70.5	74	84.1	80.25
3 Frequent receipt of bank reconciliation statements from the accounting office	55	62.5	60	68.2	69.88

Table 5 shows the perceived maintenance of internal control in the area of monitoring is presented on the following page. The table shows that items that ranked low are the preparation of financial statements and financial reports by the local accountant. This is because financial reports as mandated in the Government Accounting Manual is only prepared at the end of the year, and trial balances are the only ones prepared monthly. Checkpoints for monitoring red flags received a low rank as well. Minimal monitoring of fraud red flags is in place since transactions of *barangays* are deemed to be simple and manageable. This vulnerability however has led to numerous malversation cases going undetected (The People of the Philippines vs. Teresita Gapuz et al: Malversation of Public Funds, 2007). Although the items are essentials of internal control, they are also not the main points of interests of the risk-based audits done by the Commission on Audit. Risk-based audit is a type of audit conducted where line items of the financial statement deemed as red flags are prioritized in the auditing process by the commission. Financial forensics puts these items as priority tasks if red flags are indeed identified. More than risk-based audits, COA should consider adding more stringent rules and policies that would help prevent or discourage the propensity to commit fraud.

Table 5
Perceived Maintenance of Adequate Internal Control in the Area of Monitoring

INTERNAL CONTROL: MONITORING	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
12 Reconciliation of cash and receivables by the barangay treasurer and the LGU accountant	63	71.6	72	81.8	84.21
13 Accountability of persons responsible for budget preparation	59	67.0	70	79.5	77.74
14 Bank reconciliations are prepared and received on a timely basis	57	64.8	70	79.5	75.55
15 Frequent evaluation of financial resources	54	61.4	63	71.6	74.03
16 Critical and sensitive activities require two levels of authority	57	64.8	66	75.0	70.01
17 Adequacy of monitoring controls that can effectively identify red flags for fraud	51	58.0	67	76.1	67.90
18 Regular preparation of financial statements and financial reports by the local accountant	50	56.8	63	71.6	67.80

Table 6 presented on the following page shows the perceived maintenance of internal control in the area of control activities. Items on the Control Activities are mostly monitored in the risk-based audit done by the Commission on Audit. Safe keeping of collections for the day is built on trust and confidence. No alarm system is usually set and often these monies are kept in locked drawers and filing cabinets. The rule on depositing collections the following day is sometimes circumvented by a *barangay* resolution wherein deposits can be delayed until a certain amount, for instance, five hundred pesos (P500) is collected by the *barangay*. Inventorial items such as those covered by Inventory Custodian Slips and Fixed Assets are inventoried only once or twice a year and for some only when the need arises. This need is noted when terms of elected officials have ended or certain items have been deemed obsolete. Items covered by custodian slips are materials that have a life longer than a year, but whose costs cannot qualify them as fixed assets.

Table 6
Perceived Maintenance of Adequate Internal Control in the Area of Control Activities

INTERNAL CONTROL: CONTROL ACTIVITIES	Punong Barangay f	Barangay %	Treasurer f	Constituents %	Average Percentage
1 Receipts by pre-numbered receipts (tag and ones) and are according to approved tax ordinance of the barangay	56	63.9	68	77.3	73.85
2 Overnight storage of money not turned over or deposited in maintained in approved and secure locations	52	59.1	61	69.3	73.25
3 Office locations where monies are collected are secure from external risks such as robbery	51	58.0	61	69.3	73.08
4 Proper accounting and reporting of disburse/ deposited or applied items covered by RCS	55	62.2	65	73.9	72.97
5 Cash revenue forms are properly completed and sufficient supporting documents are removed, examined and signed by proper authorities	51	58.0	61	69.3	72.82
6 Seal of barangay officials who regularly handle payments or cash receipts	59	67.0	65	73.9	71.97
7 Reporting of fixed assets that are put their useful lives but are still employed by the barangay	61	69.3	62	70.5	71.90
8 Access and are stored in secure location	51	58.0	62	70.5	71.60
9 Business day with the authorized inventory book as prescribed by rules and regulations	50	56.8	58	65.9	69.89
10 Proper accounting and reporting of disburse/has disallowed fixed assets	47	53.4	58	65.9	64.84
11 Assets	45	51.1	54	61.4	61.26
12 covered by RCS (Inventory Custodian Slips)	43	48.9	54	61.4	60.95
13 Frequent reporting of reconciliation with the local accountants of items covered by RCS	41	46.6	54	61.4	58.42
14 Existence of alarm system or CCTVs where monies are kept	37	42.0	41	46.6	51.47

In viewing respondent results, there is a noted vulnerable internal control for the *barangays*. In the context of the Fraud Diamond Theory, this is a red flag. With weaker internal controls, there is a higher propensity to commit fraud. Opportunity, as one of the aspects of the Fraud Diamond Theory, is high. In circumspect however, there must be other variables that need to be considered and measured. Rationalization or the reasons why people have the propensity to commit fraud is behavioral in nature and cannot be overtly measured. The means of identifying and measuring such rationalization in this study was not tackled and is beyond the scope of the study.

Fraud Deterrence. The succeeding tables show the status of the policies, indicators, and the existing preventive measures practiced by the *barangays*. Table 7 shows the existence of fraud policies in the area of fraud deterrence. Respondents are viewed to have zero-tolerance for fraud issues, however, *barangays* fall short of fraud training awareness. Results show that *barangays* are not equipped with the necessary trainings or the policies that would aid them in fraud prevention. This may be the reasons behind the fact that the fraud indicators show low percentages. This may signify that the *barangays* of Baguio City are not highly susceptible to the perpetration of fraud.

Table 7
Existence of Fraud Policies in the Area of Fraud Deterrence

FRAUD POLICIES: FRAUD DETERRANCE	Punong Barangay		Barangay Treasurer		Constituents		Average Percentage
	f	%	f	%	f	%	
1 Zero tolerance approach on fraud issues through the assistance of the local	48	54.5	52	59.1	150	67.6	63.32
2 Conflicts of interest statements are required for all barangay	41	46.6	43	48.9	131	59.0	54.62
3 Educating constituents on the long-term benefits of exposing possible fraud activities	35	39.8	39	44.3	130	58.6	52.64
4 Fraud policy that details the ramifications and penalties for	37	42.0	40	45.5	128	57.7	52.49
5 Adoption of fraud policy that defines ways to detect suspicious or fraudulent activities	37	42.0	40	45.5	120	54.1	50.08
6 Fraud awareness training	32	36.4	36	40.9	116	52.3	47.30

Table 8 shows the existence of fraud policies in the area of fraud indicators. The ranks of each item are almost half of the average percentages or even lower. In terms of policy, percentages fall around the middle or lower rank, with majority of the barangays still not equipped with the necessary policies for fraud prevention and deterrence.

Table 8
Existence of Fraud Policies in the Area of Fraud Indicators

FRAUD POLICIES: INDICATORS	Punong Barangay		Barangay Treasurer		Constituents		Average Percentage
	f	%	f	%	f	%	
1 Spoiled/cancelled or stale checks and cancelled	49	55.7	66	75.0	157	70.7	69.04
2 Barangay officials in key* trust areas* show signs that may suggest change in	44	50	49	55.7	118	53.2	53.11
3 Availability of counselling for key officials with financial substance abuse	36	40.9	48	54.5	116	52.3	50.78
4 Recent detection of unusual trends and discrepancies in financial transactions	29	33.0	40	45.5	82	36.9	38.43
5 Assets are not adequately protected against theft or	32	36.4	37	42.0	82	36.9	38.04
6 Important reconciliations are not frequently done	29	33.0	37	42.0	82	36.9	37.41
7 Missing numbers in accountable forms that need to be reported	27	30.7	30	34.1	73	32.9	32.72

Table 9 shows the existence of fraud policies in the area of preventive measures. The results of lower percentages are further carried over in the preventive measures. Barangays need to adopt policies and rules for the protection of whistle-blowers or witnesses to fraud. The low percentages and indices may be attributed to the low incidences of fraud or the non-existence of fraud. It is high time, however, that barangay's take into consideration their policies on fraud and fraud deterrence for purposes of prevention. It may be possible to conclude that the low percentages in policies for fraud are the offshoot of low indices or percentages of fraud indicators. In risk management however, prevention is still better than cure. Steps to secure better fraud preventive measures must be taken into consideration by the barangays. Resolutions and laws should be passed to address this. Third parties, usually whistle-blowers are the reasons that fraudulent activities are detected as discussed early on in the study. The apathy for these people remains strong. Policies for protecting them are seldom enacted or promulgated in the barangay level. Exposing fraud is still taboo and persons who are brave enough to do so may be or are usually are treated as pariahs of society.

Table 9
Existence of Fraud Policies in the Area of Fraud Preventive Measures

FRAUD POLICIES: PREVENTIVE MEASURES	Punong Barangay		Barangay Treasurer		Constituents		Average Percentage
	f	%	f	%	f	%	
1 Properly report a suspected incidence of fraud	46	52.3	59	67.0	149	67.1	64.40

2 Willingness to allow certain discrepancies and unusual trends to be used as evidentiary support when fraud is discovered	49	55.7	63	71.6	142	64.0	64.28
3 A list of addresses of hotlines or avenues where anomalous transactions, infractions or fraud can be reported	50	56.8	54	61.4	149	67.1	63.85
4 Existence of signs in common areas requesting that fraud be reported	50	56.8	57	64.8	119	53.6	57.13
5 Hotlines numbers are posted in conspicuous places	45	51.1	47	53.4	122	55.0	53.83
6 Provision of hotlines by LGU if barangays do not have one	40	45.5	41	46.6	124	55.9	52.01
7 Adequate protection for whistle-blowers	39	44.3	41	46.6	107	48.2	47.04
8 Existence of policy that prohibits retaliation against whistle blowers	29	33.0	33	37.5	83	37.4	36.54
9 Whistle blower hotlines have been established	29	33.0	35	39.8	79	35.6	36.10

The heart of financial forensics is ultimately risk management. Risk management entails planning, organizing, directing and controlling risks factors that barangays may encounter in their activities and transactions. This likewise entails looking into the key components such as the organization, policy structure, risk assessment of the barangay's vulnerability to risks, internal control evaluation and actions taken for fraud deterrence. Such components are meant to safeguard the assets of an organization as well as to prevent fraud and corruption. Capability is an all-important element in the perpetuation of fraud since this element in the fraud diamond theory is the trigger that can lead a person to commit fraud in the presence of all other elements of pressure, opportunity and realization. According to Martin, opportunity opens the door, pressure leads the person to the door, rationalization coaxes the person toward the door, and capability enables the person to walk through the door. (Martin, 2015). Any movement in the elements of the fraud diamond increases the likelihood of fraud, more so, with the element of capability. The elements of financial forensics build controls that help deter access or incentive to commit fraud. Financial forensics, therefore is a system that identifies and helps manage potential red flags that may exist in the conduct of the barangay's financial transaction. Fraud is systemic in nature. Systemic because it affects other systems of an organization as a whole and is often intrinsically interwoven in the organizations process itself. (Bayou, 2001). Bayou's study on systemic fraud which was based on the Rhizome Principle, a concept developed by Gilles Deleuze and Félix Guattar (1972-1980) (Oliver, 2015). The concept says a process of existence and growth that does not come from a single central point of origin. To be able to detect and deter fraud there is a need to understand the barangay's systems, nature and components including its environment.

IV. CONCLUSION

The barangays, by way of Government Accounting and Audit rules and regulations, COA circulars and other pronouncements are, equipped with sufficient and necessary measures that would aid in internal control evaluation, risks assessment and the deterrence of fraud. Control activities are defined as the actions established through rules, policies, and procedures that indicate an assurance that management has mandates to lower risks and prevent fraud. These control measures may be preventive or detective in nature. (Uwadac, 2014). Common goals of control activities includes the achievement of an organization's goal, the protection of its assets, and the measurement of its performance. The study shows that while barangays are equipped with the necessary

rules and regulations for efficient risk controls, the need to fine tune such is still imperative and can be done through the incorporation of the components of financial forensics. Integrating its components in the barangays compliance to fiscal policies supplements the process of promoting good governance in the barangays through their accountability. In this way, public resources are effectively managed, government funds are accounted for, and transparency is upheld (Caparas, 2017).

Targeting a systemic problem such as fraud requires a systemic solution that can be had through financial forensics. Problems of many counts of malversation that have occurred in the barangays were mainly because there have been no sufficient financial forensic components concretely in place in the compliance to fiscal policies. Stringent measures would have been done had the importance of these components placed to the fore. Jimenez in his article, "All Barangays Should be Audited by COA" expresses his staunch support in including the barangays in audit. Small as the barangays may be but they can be the seat of corruption and taken advantage of by higher officials. (Jimenez, 2015). The process of pre-audit may have given a solution to this. Pre-audit's intention is to make it more difficult for corrupt public officials to steal government funds. (Punongbayan, 2011). Aside from fraud deterrence, internal control factors are utilized through pre-audit. The process of pre-audit has been abolished though because its strength has become its weakness as well. The then COA Commissioner of Ma. Gracia Pulido-Tan under the Aquino administration explained that the removal of the process is in line with the graft and corruption campaign of the present administration and although the intentions of pre-audit are laudable, abolishing such would cause the removal of what she called "secret agreements" and also remove the delay caused by the meticulous auditors that handle these. (Punongbayan, 2011).

The barangays as the basic political unit of government are no different from larger entities or organizations. They are slowly finding their niche in nation building, and as such, they must emulate the characteristics of good governance in their day-to-day business. Good governance means that the barangays maintain and uphold accountability and transparency in their transactions. In the Philippine setting, the battle cry of the present administration is "change is coming." Talks and initiatives of collaborative economy and open government policies are slowly being adopted and taking place. In the grand scheme of things, while barangays may seem small and insignificant government units, they are at the grassroots level of governance and therefore should be staunch supporters of change. Creating a solid foundation for any structure and system is necessary for it to remain steadfast and strong amid any vicissitudes it may encounter. The study aims to pave the way for the review of the necessary controls that currently exist in the financial reporting of barangays providing avenues for revisions. These revisions would highly aid in ensuring the accountability of the barangays and the fair presentation and transparency of the barangay financial reports.

V. RECOMMENDATIONS

Financial forensics is relatively new in the Philippine setting. This study will create an awareness of the significance of financial forensics in the different organizations, be it in the public or the private sector, so that adequate measures to combat fraud may be formulated and adopted. Through the study, it is expected that a workable concept of financial forensics would be brought about, benefitting accountants, forensic accountants, auditors, fraud examiners and anti-fraud bodies,

other financial practitioners, as well as managers and key responsibility holders in any organization. By giving these individuals a circumspect view of their financial practices and in making them understand the importance of financial forensics, better audit and internal control measures can be implemented in both the private and public sector. The study aims to give a perspective of the theoretical framework that would shed light on how to improve accounting and audit practices mostly in terms of preventing fraud and deterring fraudsters.

Results and recommendations of the study may be taken into consideration by the administration in order to come up with policies and laws, possible pertinent measures in maintaining adequate controls, and adapting financial forensic practices as part of their policy in maintaining transparency in their financial reporting. The possibility of incorporating financial forensics in the management and accountability of the barangays in Baguio City is important especially in determining the level of vulnerability of barangay officials to defraud. Knowing and being informed of the means of curbing fraud would be significantly helpful in creating financial and accounting policies in the future

Academically, the paper will provide a perspective of the importance of financial forensics in the public sector. It will also provide details on and how financial forensics can ably assist in good governance through risk assessment of a government unit, the evaluation of its internal controls, and possibly the detection and deterrence of fraud. Studies on financial forensics and forensic accounting hopes to open doors to fields of specialization for the academe and accounting profession. Issues and problems encountered by going concerns need to be addressed by experts. These issues can only be addressed if people in the said profession are given the adequate training in their university formation, more particularly, those seeking a career in the field of accountancy.

Barangays are slowly being recognized as being at the front and center of nation building. Coming from the grassroots level and possessing the all three important powers of government (executive, legislative and judiciary) makes them a stronghold of political governance. Good governance means recognizing the capacity of even the smallest unit to create the laws that would aid in improving the rendering of government service. Services, processes, and transactions emanating from the barangays should be studied fully validated. Imbibing financial forensics in the conduct of their financial transactions is one method of doing so.

Financial forensics was studied on the basis of the process flow of financial transactions of the barangays of Baguio City. The behavioral aspect was not dealt with, however, one cannot do away with the behavioral aspect of financial forensics. The roles of the local accountant and auditor are worth looking into, as well so that the delineation, delegation, and division of work for the implementation of financial forensics can be thoroughly discussed.

Limitations .The study was conducted among the barangays of the Local Government of Baguio City hence results of the study are solely indicative of the processes and management of the aforementioned local government unit only. In the study of fraud and fraud prevention, the behavioral aspect cannot always be discarded. The study concentrated more on the effect of financial forensics in the process flow of financial transactions in the barangays and any mentions of behavioral implications were done simply to supplement the argument at hand.

Furthermore, the perception of the Commission on Audit and other related government agencies was not taken into

account.

Procurement processes and infrastructure processes were not discussed in the study. The points of view on financial forensics for these areas are equally worth looking into as well.

ABOUT THE RESEARCHERS

Florencia A. Cortez is a graduate of Saint Louis University (SLU) in Baguio City with the degree of Master of Science in Accountancy magna cum laude in December 2017. She works with the Accounting Office of the Local Government of Baguio as section chief of the General Accounting Division (Bookkeeping Division). Allan Frank B. Silva is also a graduate of SLU with the degrees BS in Accountancy in 1998 and MS in Business Administration in 2008. He is a full-time faculty of member of SLU where he served as its Accountancy Department Head from 2016 to 2019.

REFERENCES

- Abdullahi, Rabi, et al. (2015). Fraud Triangle Theory and Fraud Diamond Theory: Understanding the Convergent and Divergent for Future. *European Journal of Business and Management*, 7(28). doi:ISSN 2222-1905
- Abelgas, V. G. (2010, December 02). Barangays Can Lead National Transformation. Retrieved from Global Balita.
- Aiken, L. R. (1985). Three Coefficients for Analyzing the Reliability and Validity of Ratings, Educational and Psychological Measurement.
- Akkeren, J. (2015). AYB115 Governance, Fraud & Investigation: Week 7 Resources. Retrieved From [https://blackboard.content.listContent.jsp?](https://blackboard.content.listContent.jsp?blackboard/content/listContent.jsp)
- Ali, M. (2015). Governance and Good Governance: A Conceptual Perspective. *The Dialogue*, 77.
- Anderson, D. R., Sweeney, D. J., & Williams, T. A. (2003). *Modern Business Statistics with Microsoft Excel*. Cincinnati, Ohio: South Western.
- Aquino, G. V. (1971). *Essentials of Research and Thesis Writing*. Quezon City: Phoenix Press, Inc. Association of Certified Fraud Examiners. (2016). 2016 Global Fraud Study. Retrieved from Report to the Nations on Occupational Fraud and Abuse: <http://www.acfe.com/rtn2016/detection.aspx>
- Association of Certified Fraud Examiners, Inc. (2014). Report to the Nations on Occupational Fraud and Abuse.
- Bayou, M. E. (2001). A Systemic view of fraud explaining its strategies, anatomy and process. *Critical Perspectives on Accounting*.
- Boslaugh, S. (2012, November 16). Statistics in a Nutshell.
- Braga, M. V. (2017, February 17). The Freeman: Two barangay officials to face 100 counts of falsification, graft. Retrieved from The Philippine Star: <http://www.philstar.com/cebu-news>
- Caparas, M. V. (2017). Ethics and Good Governance. COA. (2006). COA Circular 2006-002. Prescribing the use of Systems and Procedures Manual on the Management of Barangay Funds and Accounting System Manual for Barangays under the New Government Accounting System.
- Cochran, W. G. (1977). *Sampling Techniques*. USA: John Wiley & Sons, Inc.
- Department of Budget and Management. (2016). *Internal Audit Manual for Local Government Units*. DILG-CAR. (2016, February 26). Website for the Department of Interior and Local Government -CAR. Retrieved from Department of Interior and Local Government: <http://www.dilgcar.com>
- Duffield, G. a. (2001). Red Flags of Fraud.
- Halim, D. P. (2017). Corporate Governance and Fraudulent Financial Statements in Indonesia's Local Government. *The Journal of Scientific Social Studies*, 63-73. Investopedia: Financial Forensics. (n.d.). Retrieved from Investopedia: www.investopedia.com
- Jimenez, J. B. (2015). All barangays should also be audited by COA. PhiStar: What Matters Most.
- Lazo, R. S. (2006). *Philippine Governance and the 1987 Constitution*. Manila: Rex Bookstore. Local Government Code. (1991).
- Martin, A. G. (2015). Fraud Risk and Control. Weaver CPAs. Municipal Association of Victoria et. al. (n.d.). Good Governance: Helping Local Governments Govern Better. Retrieved 2017, from Good Governance Guide: <http://www.goodgovernance.org.au>
- Oliver, B. (2015). What is a "rhizome" in Deleuze and Guattari's Thinking. Retrieved from Thought Leader: <http://thoughtleader.co.za/bertolivier/2015/06/15/what-is-a-rhizome-in-deleuze-and-guattaris-thinking/>
- Padilla, A. (2010). Understanding Incomes and Expenditures of Local Government Units. Retrieved from Philippine Public Transparency Reporting Project: <http://peranatinito.net>
- Padilla, A. (2010, May 24). Understanding Incomes and Expenditures of Local Government Units. Retrieved from Philippine Public Transparency Reporting Project: <http://peranatinito.net>
- Punongbayan, M. (2011). COA stops pre-auditing of gov't transactions. PhiStar Global.
- Ramamoorti, i. D. (2013). *A.B.C.'s of Behavioral Forensics: Applying Psychology to Financial Fraud Prevention and Detection*. Hoboken, New Jersey: John Wiley & Sons, Inc.,
- Rasmussen, J. (1998). Risk management in a Dynamic Society: A modelling problem. *Safety Science*.
- Rudewicz, F. (2010). The Fraud Diamond: Use of Investigative Due Diligence to Identify the "Capability Element of Fraud". *Forensic Files*.
- The 1987 Constitution of the Republic of the Philippines. (1987).
- The Global Risks Report 12th Edition. (2017). World Economic Forum: Committed to Improving the State of the World (pp. 22-35). Geneva: World Economic Forum. doi: ISBN: 978-1-944835-07-1 REF: 050117 The People of the Philippines vs. Teresita Gapuz et al: Malversation of Public Funds, Criminal Case Nos. 25112-R to 25124-R (Regional Trial Court First Judicial Region Branch 3 Baguio City February 8, 2007).
- Thornhill, W. T. (1994). *Forensic Accounting: How to Investigate Financial Fraud*. Malaysia: Synergy Books International.
- Trochim, W. M. (2006, October 20). Retrieved from Web Center for Social Research Methods: <http://www.socialresearchmethods.net/kb/reliable.php>
- Ursal, S. B. (2001). *How to Manage Barangay Finances*. Quezon City: Good Governance Books.
- Uwadiae, O. (2014). *COSO – Control Activities*. Financial Reporting.
- Villar, R. A. (2009). *The 2009 Revised Rules of Procedure of the Commission on Audit*. Retrieved from http://www.lawphil.net/administ/coa/rules_of_procedure_2009.html
- <http://www.lawphil.net>
- Walpole, R. e. (2005). *Probability & Statistics for Engineers & Scientists* 7th edition. Upper Saddle River, New Jersey: Prentice Hall Inc.
- What does cronbach's alpha mean? (n.d.). Retrieved from <https://stats.idre.ucla.edu/spss/faq/what-does-cronbachs-alpha-mean/>
- Wolfe, D. T. (2004). *The Fraud Diamond: Considering the Four Elements of Fraud*. The CPA Journal.