

Analysis of the Effectiveness of Internal Controls in the Payroll Process in Construction Companies

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Abstract: This study aimed to explore how Ghanaian construction firms manage payroll, scrutinize existing internal controls, and assess their effectiveness. This inquiry is critical due to the significant and growing role of labour costs, and the need to ensure company growth aligns with its intended objectives. The study employed a descriptive survey research design. Data were collected using questionnaires that were disseminated among construction workers in Ghana. These participants were selected via purposive and convenience sampling techniques. The collected data was then analysed using SPSS version 23. The analysis revealed several key insights. Firstly, it was observed that proper payroll practices were generally in place among the construction companies surveyed. Secondly, the study found that these companies were implementing effective internal control practices. Lastly, the study found a positive correlation between the effectiveness of internal controls and the payroll process in Ghanaian construction companies. The findings of the study underline the crucial role of internal controls in the payroll process within construction companies. Given their proven effectiveness in the surveyed firms, the study recommends that these controls should be more widely adopted. Policymakers should consider implementing regulations to encourage construction companies to integrate internal controls into their payroll processes. This not only ensures correct payroll practices but also boosts the overall growth and development of the organization.

Keywords: Internal Controls, Payroll, Construction Companies, Developing Economy

I. Introduction

In any country, the construction industry is vital to the growth of the economy since it aids in the expansion of the country's physical infrastructure and influences the progress of other industries (Aslam et al., 2020; Gamil & Alhagar, 2020). According to Frimpong et al. (2020), several other sectors of the economy are inextricably intertwined with this sector. This means that whatever happens in the construction industry will either directly or indirectly influence other areas of the economy, and ultimately, the wealth of a nation. According to research conducted by Frimpong et al. (2020), the construction sector in Ghana is the country's second-greatest contributor to GDP and a substantial engine of economic activity. The construction industry is immensely vital to the overall health of Ghana's economy due to the size of the sector as well as its position as a development engine (Boadu et al., 2021; Owusu-Manu et al., 2021). Its importance stems from the fact that the construction industry serves as a development engine (Galea et al., 2022). Given the significance of the construction sector in contributing to the growth of the national economy, it is imperative that effective strategies be developed in order to continue enhancing the industry's overall performance.

When it comes to safeguarding the interests of shareholders and other corporate stakeholders, no system is more important than the internal control system (Abiodun, 2020; Zimon et al., 2021). This line of defence provides protection to create trustworthy financial information and to make proper decisions on investment and credit (Zimon et al., 2021). Internal control refers to the procedures and practises put in place by the company's leadership and management (Almashhadani, 2021; Bimo et al., 2019). The procedure is designed to maximise the likelihood that the organisation will achieve its objectives. While management is doing an examination of all the operational operations of the firm, including the records and processes of the company, it is extremely important for management to have effective internal control (Almashhadani, 2021; Zimon et al., 2021). As a result, it is expected that all actions will proceed in accordance with the criteria that were established in advance by the firm to be carried out by each employee (Anaman, Ahmed, Suleman, et al., 2023; Napitupulu, 2020).

This study aims to evaluate the efficacy of internal controls utilised by construction companies throughout the payroll processing procedure. Payroll accounting according to Rusly et al. (2019), is a subset of general ledger accounting that focuses exclusively on employee-related expenditures such salary and wage payments, payroll taxes, benefit expenses, and accrued holiday time. Due to the fact that it involves the administration of payroll, which is related to the human aspect of the factors of production, it is one of the most significant operations in the organisation. Since it is the only component of the economy that is in action, the labour force, which is sometimes referred to as human resources, is considered the most important part of the economy (Anwar & Abdullah, 2021; Leitão et al., 2019). If an economy does not have enough human resources, it will be unable to continue

producing the commodities and services that are necessary for its functioning. As a result, a company must place equal emphasis on both its ability to manage and monitor the payroll process and its success in meeting its revenue goals (Anwar & Abdullah, 2021; Rusly et al., 2019).

The majority of low-level construction workers in Ghana are either part-time or contract employees, as construction businesses in Ghana operate on a project basis, with just a small percentage of staff (top and middle-level management) being permanent employees (Amissah et al., 2019; Apraku et al., 2020). The size, uniqueness, and complexity of constructed products; lengthy and sophisticated construction processes; fragmented structure with multiple contractual relationships; adversarial culture; and poor professional ethical standards all contribute to an industry's susceptibility to corruption (Amissah et al., 2019; Apraku et al., 2020; Frimpong et al., 2020; Osei-Asibey et al., 2021). According to the findings of a research conducted by Ameyaw et al. (2017), the most significant issue plaguing the construction sector is the prevalence of practises that put line personnel at a disadvantage in terms of their pay. Due to the nature of the workers in the construction industry, it is essential to monitor the payroll process of such organisations in order to ensure that employees are paid the correct amount and in a timely manner (Kuoribo et al., 2021). This indicates that in order to be able to achieve a payroll system that is successful, the department that is responsible for payroll must deal with activities such as the collection and preparation of data, as well as the entry, updates monitoring, and reporting of data. The needs of a business, the expectations of its workers, and the capabilities of its workforce all necessitate a payroll system that can efficiently manage people and payroll-related details, processing in each department, and payroll auditing. Due to shifting priorities, increased expectations from workers, and advancements in technology, many established policies and processes require review (Apraku et al., 2020; Zimon et al., 2021). Therefore, this study seeks to provide an analysis of the effectiveness of internal controls in the payroll process in construction companies. This research aims to (1) learn more about how construction firms in Ghana handle payroll, (2) take a closer look at the internal controls already in place at Ghanaian construction firms, and (3) assess how effective such controls are. The rest of this paper discusses the literature review, which consists of the theoretical, empirical and methodological review, methodology of the study, data analysis and discussion and conclusion as well as policy recommendation.

II. Literature review

This section of the study presents the review of related literature. The section discusses the theoretical, empirical and conceptual review of the topic under study.

Theoretical review

Stewardship theory

Management, in the stewardship principle, acts as trustees for the owners by protecting and growing the company's assets. This notion was developed in the 1970s. Understanding the dynamics of organisational behaviour requires an understanding of both the stewardship theory and the agency theory. Both of these theories play an important role in this understanding. The stewardship theory is primarily concerned with the conditions under which non-economic, trust-based relationships coexist with agency interactions in new entities that may emerge as a result of principal-agent interest convergence (Subramanian, 2018). One way to do this is to examine the differences and similarities between the two types of relationships (Glinkowska & Kaczmarek, 2015). The idea of stewardship attitude according to Abdullah and Valentine (2009), provides the foundation for this congruence of interests, since it entails the trust and commitment to a common set of values exhibited by both principals and agents. Stewardship is an idea that necessitates faith and dedication to a common code of ethics (Subramanian, 2018; Yusoff & Alhaji, 2012). It's worth noting that while a stewardship mindset among an entity's actors might help mitigate some of the issues plaguing the theory of agency, it can also give rise to fresh complications within the frameworks of certain sorts of organisations (Keay, 2017). It is conceivable for the interests of the stewards to take precedence over those of the organization's owners or leaders when the stewards are acting in their position as stewards. This necessitates the implementation of procedures to assure the achievement of predetermined goals, and one such mechanism is the establishment of internal control systems within an organisation to oversee its day-to-day operations and provide the best possible return on investment (Davis et al., 2018). Another method of doing this is by ensuring adherence to stated objectives is ensured by ensuring adherence to stated objectives is ensured.

Agency Theory

According to the agency hypothesis, the primary goal of a commercial enterprise is to increase the total wealth of its investors to the greatest possible extent (Modigliani & Miller, 1958). The theory suggests that businesses are made up of principals, who are the owners of the company's economic resources, and agents, who are in charge of the assets (Mitnick, 2019). Agents, surprisingly, don't always have the same objectives as their clients, and they often prioritise their own interests over that of the company's stockholders (principals). The situation is exacerbated by the fact that ownership and decision-making are seen as distinct concepts, with the latter being outsourced to Agents (Panda & Leepsa, 2017). The term "Agency Problem" refers to the situation in which managers (acting as agents) prioritise their own personal interests over those of the company's investors (Bendickson et al., 2016; Lan & Heracleous, 2010). The shareholders have acted, including the implementation of internal control mechanisms, which has safeguarded the company's assets. Additionally, the stockholders have confirmed and verified the accounting records, and most importantly, they have ensured that the interests of stockholders are pursued (Bendickson et al.,

2016). The establishment of both internal and external audits is another method that investors utilise in an effort to bring their interests into alignment with those of the company's management. The purpose of the internal audit, which is an element of the internal control system, is to provide a feedback loop that identifies and addresses underlying problems before they may have a detrimental effect on the business's operations.

Internal Control

An organization's internal control system is a collection of rules and procedures put in place by upper management to make sure the firm is meeting its most important objectives, such as conducting its operations efficiently, safeguarding its assets, keeping its books in order, reporting accurately and on time, etc. (Feng et al., 2009; Pakurár et al., 2019). Accounting control, management control, and internal monitoring are the three sub-types of internal control goals, (Henk, 2020). Liu et al. (2017) provides the following definition of internal control: "the policies and processes designed to offer reasonable confidence that specific entity objectives will be accomplished, which may incorporate both financial and non-financial considerations." Feng et al. (2009) provides the following definition of internal control: "the entire system of controls, financial and otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets, and secure as far as possible the completeness and accuracy of the records." Control, often known as internal control, is the sum of all the parts that make up an internal control structure. According to Sledgianowski et al. (2017), internal control is made up of the organization's plan and related techniques and procedures taken for the purpose of safeguarding assets, contributing to efficient operations, facilitating the creation of correct accounting data, and encouraging adherence to established management policies. An organisation will use internal control to better protect its assets, improve its operations, ensure reliable financial reporting, and promote management's adherence to established procedures (Chen et al., 2017). Work study, quality control, statistical analysis, variance analysis, and similar practises will all be included into the internal control system as processes and methods.

Purpose of Internal Controls

Internal controls are defined by the American Institute of Certified Public Accountants as those that ensure external financial statements are prepared in a transparent and honest manner in accordance with widely accepted accounting standards (Chan & Vasarhelyi, 2018). These generally accepted accounting principles are covered by the Codification of "Auditing Standards Section 319 or any superseding definition or other material that is issued or adopted by the Public Company Accounting Oversight Board" (Cappiello, 2020; Gelinis et al., 2017). Because they play such an important part, a company simply can't function without them. Reason for this is that they ensure truthfulness on the part of both employees and employers (Duramany-Lakkoh et al., 2022). They keep tabs on what management and staff are doing to make sure the business is moving forward and improving. This is accomplished by preventing either party from carrying out activities in accordance with their own preferences or from stealing from the company (Burt & Libby, 2021). They are established by management, who is responsible for ensuring their dependability and efficiency once they have been implemented. In reality, managers, workers, creditors, suppliers, and shareholders all want to ensure that the firm is working as effectively and efficiently as possible to the complete satisfaction of all parties concerned, which is why internal audit plays such a pivotal role (Burt & Libby, 2021; Chan & Vasarhelyi, 2018). Overall, an internal audit improves efficiency and ensures that management is following the company's policies and best practises.

Types of Internal Control

Control Environment, Control Procedures, Risk Assessment, Information and Communication, and Monitoring are the Five Pillars of Internal Control (Berglund & Sterin, 2021). The first group is the company's internal setting, which is often considered as a key element in determining the effectiveness of internal controls. According to Gao and Zhang (2019), the internal environment is of the utmost importance to an internal control system, since it is the foundation upon which all other forms of controls are constructed. A company's internal environment includes its management's philosophy, operating style, risk appetite, adherence to honesty, ethical beliefs, competency, organisational structure, and techniques of dispersing authority and responsibility (Saedi & Dastgir, 2017; Salehi & Ghasempour, 2021). The second sort of control activity is the organization's rules, regulations, and procedures for assuring the achievement of control objectives and the successful mitigation of risks through the alignment of actual performance with planned outcomes (Gao & Zhang, 2019). An analysis of potential threats makes up the third heading. Within the context of the organization's control environment, it is the responsibility of management to evaluate any and all potential risks to the integrity, dependability, and correctness of financial reporting (Saedi & Dastgir, 2017). In order to determine the effect that risks have on financial reporting and to develop a foundation on which to build a risk response, risks need to be uncovered and evaluated (Salehi & Ghasempour, 2021). According to Saeidi et al. (2019), the widespread use of information technology has considerably raised the risk exposure in enterprises. This is because of the proliferation of this particular sort of technology. The information and communication category are the fourth kind. This sort of control is defined by Saedi and Dastgir (2017) as all the instruments and mediums that are used to capture, record, and exchange information about an organization's operations. Monitoring is the fifth type of internal control, and it refers to the act of evaluating the effectiveness of internal controls over a period of time (Salehi & Ghasempour, 2021).

Payroll

The total amount spent on labour-related costs is referred to as the payroll (Breza et al., 2020). It includes monetary compensation in the form of salary and earnings, as well as medical costs, retirement benefits, housing benefits, food allowances, and other allowances (Grigsby et al., 2021). As compared to any other type of cost that may be incurred by a company, these components represent the single most essential and relatively big expense item. According to MacDonell (2019), the cost of labour and the payroll taxes that go along with it make up a significant amount of the overall operating costs for the majority of company organisations, and this portion is always growing. Payroll accounting is crucial not just because of the size of the numbers involved, but also because of the myriad of federal and state regulations that insist on detailed records being kept for each employee (Mahajan et al., 2015; Rusly et al., 2019). Keeping accurate payroll records is a crucial duty for every business, and not just because of the massive sums of money at stake (Grigsby et al., 2021; Rusly et al., 2019). Yet, this work is further complicated by the various federal and state regulations that mandate certain details be recorded and kept by employers. Reports submitted on a regular basis detailing the salaries paid, the amount deducted from employees' pay-checks, and the payroll taxes charged on employers (MacDonell, 2019). According to Rusly et al. (2019), it is a fundamental norm in the vast majority of commercial organisations that all employees must be paid on time, and that payments must be accompanied by a full explanation of the computations that were used in establishing the net amount received by the employee.

Procedures for Maintaining Payroll Integrity Within an Organization

There has been payroll fraud for a very long time (Quarm et al., 2020). In times past, before the advent of computers and security records, payroll records were frequently hand written and frequently lacked key details (Bello, 2022; Mahajan et al., 2015). Cash was the most prevalent form of payment for employees, and there was a dearth of documentary documentation. Payroll fraud is made more difficult by some aspects of modern-day accounting practises, which make it more difficult to commit payroll fraud (Yusuf et al., 2020). Employer and employee social security numbers and the need that payroll data be submitted to the government on a regular basis are further factors that contribute to this aid. Yet, the widespread adoption of computers in the payroll processing sector does not mean that fraud of any kind is no longer a concern (Bello, 2022). Payroll processing is a prime candidate for computerization due to the high degree of repetition involved. The division of roles and the assignment of subordinates is still necessary. The following actions are included as part of the payroll process in the majority of organisations:

Having Employees on Staff

The process of screening potential employees or applicants can be where the work of personnel or employment begins. Interviews with the one supervisor for whom the candidates would be working and hiring decisions are made once it has been determined which applicants have the potential to be acceptable (Bello, 2022). When a new worker is brought on board, the personnel department is responsible for compiling documents that detail their employment, including the approved rate of pay and the deductions that can be taken from their pay-check. It is the responsibility of the personnel department to notify the payroll department in writing that a new employee should be added to the payroll (Mahajan et al., 2015; Yusuf et al., 2020). The records of the personnel department will be updated if there is a change in pay rates or an employee's employment is terminated. When an employee's position is eliminated, the Human Resources division is responsible for conducting a departure interview and notifying the Accounting division so that the employee's name may be removed from the payroll (Rusly et al., 2019).

Time Keeping

If an employee is paid by the hour, they should clock in and out at the appropriate times on their time cards. A new time card must be put into the slot on the wall next to the time clock at the start of each new week or other pay period (Yusuf et al., 2020). Every employee must be responsible for purchasing his or her own time card, and no other employee's card should be accepted. Rusly et al. (2019) suggests that the function of keeping track of time should be housed in a separate department, which would be responsible for controlling the time cards and sending these source documents to the payroll department.

Precautions to make sure the payroll system is well-controlled

When we talk about an organisation having "internal control over payroll," we mean that all of the internal control features we discussed above are applied to the wages and salaries paid or payable by the organisation to its employees, as well as any other costs related to payroll that are owed to the government or other parties (Turner et al., 2022). Its implementation is made feasible by delegating tasks in the payroll department and the personnel department to workers who are not directly reliant on one another, and by having those individuals report to managers who are not directly dependent on one another (Ali & Anwar, 2021). Management must ensure the following for an efficient and effective internal control over payroll to be in place: (1) proper authorization of the payroll; (2) efficient communication between the payroll, such as variation in pay, dismissal, and death; (3) proper control over the recruitment and payment to casual labourers; (4) proper method of identifying employees at the time of payroll out (e.g., employee badges); (5) proper control over the payroll process itself (Mahajan et al., 2015).

Empirical review

According to the conclusions of the study that was carried out by Palladan and Palladan (2018), an increase in employee productivity may be achieved, among other things, by correct reward computation, job enrichment, and fast distribution of

employee benefits. The findings of the research carried out by Palladan and Palladan (2018) have substantially increased our knowledge of productivity and, as a consequence, aid managers in more successfully guiding workers inside an organisation. Vinastri et al. (2019) also presented data that was gathered from the interview of ten different respondents. They concluded that the business that was investigated makes use of a payroll system that is still run manually, and that there has been a distinct separation of responsibilities within the organisation. The findings of their investigation revealed this information. As a result of this, the study reveals that it is extremely important for the organisation to strengthen its internal controls. In addition, Rompas et al. (2018) carried out a research project with the purpose of determining the efficiency of an internal control payroll accounting information system. They made the discovery that the accounting system for payroll that was already in place had a good system that was both effective and satisfied the requirements of the component of internal control that was essential to improve the performance of the firm. This was a crucial step in the process. Boritz et al. (2013) conducted research using interviews, documents, and research in libraries in order to examine the installation of internal control on accounting information system of payroll outsourcing and to identify the barriers of this implementation thereof. According to the findings of the study, the implementation of internal controls on AIS of outsourcing payroll presented a number of difficulties, and accounting procedures were not yet carried out effectively. Moreover, there was a lack of consistency in the way that accounting procedures were carried out. This was because of the utilisation of straightforward software and industry best practises, both of which suggested that judgements about remuneration were not tied to the amount of performance that an employee had attained. Firdaus (2020) performed more research to have a better grasp of the payroll system, payroll procedures, and assessment systems that are utilised inside an organisation. She then compared this information to previously existing theories in order to analyse the findings. According to the findings of the investigation, the company has developed payroll accounting information systems using DOS-based systems with two distinct systems, namely daily wage systems that are paid weekly, and monthly wage systems that are paid at the end of each month. These wages are paid to the employees respectively. Due to the fact that the company employed a very large number of workers and was required to provide them with feedback or recompense for their services in the form of a wage and pay, the company was required to have an effective accounting system. In addition, the company was required to provide feedback or recompense to the workers on a regular basis. Korir et al. (2022) employed a descriptive research strategy to examine the internal controls and financial performance of commercial banks in Kenya. The study's results showed a positive correlation between the five internal controls components and the overall performance of commercial banks. Korir et al. (2022) utilised a comparative study design in their investigation. Therefore, the study yielded a number of intriguing suggestions, such as the fact that banks should ensure they have an appropriate control environment in which internal controls are supported to bring about improved performance and the fact that banks should constantly check their activities and policies in order to be able to deal with threats. Oppong et al. (2016) also investigated the impact of internal controls on seven nongovernmental organisations (NGOs) with a religious focus. While analysing the data, they relied on primary sources and SPSS. According to their research, internal controls helps faith-based Organizations in two ways—economically and efficiently—but this does not necessarily translate to greater effectiveness.

III. Methodology

For the purpose of this study, the descriptive survey design was utilised. This type of research is known as a survey because it asks members of a population their thoughts on a certain topic. This design is appropriate because it possesses the ability to describe events in greater depth than is required, with an emphasis on various elements that are central to a variety of research methods, and to make use of quantitative statistics to organise information in an expressive manner (Boru, 2018). Descriptive study is to provide an accurate and methodical description of a population, situation, or phenomenon (Ahmed et al., 2022; Anaman, Ahmed, Appiah-Oware, et al., 2023; Atmowardoyo, 2018). Construction in Ghana is carried out by a wide variety of professionals, including architects, engineers, quantity surveyors, contractors, and artisans. The Chamber of Construction Industry Ghana is in charge of promoting the many activities associated with the construction industry in Ghana (Appiah et al., 2017). These activities range from lobbying for the sector to assisting in the search for international suppliers. Thus, the population of this study are all construction companies in the Greater Accra Region of Ghana. The Greater Accra region is chosen because it is the capital of the nation and has the most saturated construction companies. In order to pick persons who, work at the construction sites to take part in the study, the purposive sampling approach was utilised. On the other hand, the convenience sampling method was utilised to select individuals who were present and were eager to take part in the study (Anaman et al., 2022). The number of participants in this study comes to 80 total people. To carry out the study, questionnaires with an appropriate level of organisation were utilised. This was employed since the study was a survey, and because well-structured questionnaires are easy to administer and relatively inexpensive to analyse. Both factors contributed to the decision to utilise this method (Anaman & Ahmed, 2021). The study used descriptive statistics which involves measure of central tendency, means and standard deviation by using SPSS to analyse the data. In addition, the correlation analysis was used to investigate the efficiency of internal controls applied to the procedure of calculating payroll in construction enterprises located in Ghana. Before collecting any data, the research made sure to get the managers' and employees' consent beforehand.

IV. Findings and Discussion

This part of the research offers the findings of the study along with a discussion of the data that was collected. The part consists of the demographic information of respondents, the descriptive statistics of the variables that are being studied, and the correlation results between the payroll process in the organisation and the efficiency of internal controls in the payroll processes.

Demographic information of respondents

In the next section, the background information of the respondents who took part in the survey will be presented. This section provides information on the proportion of male and female respondents, as well as the age distribution, educational qualification, and length of employment of the respondents.

Table 1: Background information of respondents

		Freq.	%
Gender	Male	50	63.3
	Female	29	36.7
Age	Below 20 years	10	12.7
	21 – 30 years	24	30.4
	31 – 40 years	35	44.3
	41 years and above	10	12.7
Educational Qualification	HND	9	11.4
	Diploma	20	25.3
	Degree	44	55.7
	Masters	6	7.6
Length of Employment	Less than 2 years	6	7.6
	2 – 5 years	27	34.2
	6 – 10 years	36	45.6
	11 years and above	10	12.7

Source: Field study (2023)

Table 1 shows the information on the demographics of respondents. The data presented shows that there were more males who participated in the research than females. From the Table, the males represented 63.3% whilst females represented 36.7% of the total sampled population. Also, the age distribution of the respondents shows that majority of the respondents were between the ages of 31 to 49 years representing 44.3%, followed by respondents who were between the ages of 21 to 30 years representing 30.4% of the total sampled population. Respondents who were below 20 years and 41 years and above all represented 12.7% each. To the educational qualification of respondents, the study presents that there are more degree holders in the industry representing 55.7%, followed by diploma holders representing 25.3% and HND holders with a representation of 11.4% and finally Masters degree holders representing 7.6%. Finally, the study sought to identify the length of employment of each of the respondents to ascertain if the responses are reliable or not. The study shows that majority of the respondents have been in their various organizations for 6 to 10 years (45.6%), followed by those who have been in the organization for 2 to 5 years (34.2%), followed by individuals who have been in their various organizations for 11 years and above (12.7) and finally respondents who have been in the organization for less than 2 years (7.6%). The data presented from the demographic information shows that the questionnaire was filled by the right individuals and as such the results can be relied on.

Reliability statistics

In this part of the research project, the dependability statistics of the constructs that were investigated are presented. The results will show if the variables in the questionnaire can be reliable to produce the same results or similar results if the study is conducted in another jurisdiction or the same jurisdiction.

Table 2: Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.938	.938	12

Source: Field study (2023)

The reliability statistics shows that the constructs for the study is reliable since the Cronbach Alpha value for the 12-item questionnaire is .938, which is more than the required value of 0.7 (Anaman, 2023; Pavot et al., 1991) . Thus, it can be concluded that the variables under the study are reliable and can be used for further analysis.

Descriptive statistics of variables

This section of the study presents the descriptive statistics of the variables under study (payroll processes in the construction industry and internal control systems).

Table 3: Payroll Processes in the construction industry (Objective 1)

	N	Min	Max	Mean	Std. Deviation
Time spent working and time off are recorded regularly by all workers.	79	1	5	3.44	1.010
The time and attendance records of workers are authorised by their superiors.	79	1	5	3.48	.945
Calculations on paper time sheets and attendance records are double verified.	79	1	5	3.32	1.044
A time clock, if utilised, is put in plain sight of a manager.	79	1	5	3.46	1.035
Management checks attendance records for patterns of excessive absences or lateness.	79	1	5	3.78	1.151
Modifications in the job status is instantly communicated to the payroll processing unit	79	1	5	3.38	1.041
Employees are not allowed to cash a co-worker's cheque during pay period.	79	1	5	3.39	1.091

Source: Field study (2023)

The Table 3 above shows the various payroll practices in the construction industries. Seven (7) assertions were made to identify the payroll processes in the construction industry in Ghana. The data from the descriptive statistics shows that majority of the respondents were in favour with the assertions made as the mean value for all assertions are greater than 3.0. The mean values greater than 3.0 shows that majority of the respondents chose more of strongly agree (5), and agree (4) than strongly disagree (1) and disagree (2). This comparison is shown in the min (minimum) and max (maximum) values in the Table 3 above. This shows that majority of the respondents agreed that time spent working and time off are recorded regularly by all workers (Mean = 3.44, Standard Deviation = 1.010); the time and attendance records of workers are authorised by their superiors (Mean = 3.48, Standard Deviation = 0.945); calculations on paper time sheets and attendance records are double verified (Mean = 3.32, Standard Deviation = 1.044); a time clock, if utilised, is put in plain sight of a manager (Mean = 3.46, Standard Deviation = 1.035); management checks attendance records for patterns of excessive absences or lateness (Mean = 3.78, Standard Deviation = 1.151); modifications in the job status is instantly communicated to the payroll processing unit (Mean = 3.38, Standard Deviation = 1.041); and employees are not allowed to cash a co-worker's cheque during pay period (Mean = 3.39, Standard Deviation = 1.091). The results of this study show that proper payroll practices were being practiced by the construction companies that participated in the study. The findings of the study supports the study of Ali and Anwar (2021) and Firdaus (2020). These studies concluded that the assertions listed in Table 3 above are procurement processes in construction industries.

Table 4: Internal Control Practices in the construction industry (Objective 2)

	N	Min	Max	Mean	Std. Deviation
Someone other than the payroll department checks the accuracy of the salaries and wages.	79	1	5	3.58	1.057
Workers' roles in authorising personnel decisions including hiring, firing, and promotion are separated from those in charge of processing payroll or entering employee information.	79	1	5	3.32	1.161
Time sheet approval is handled separately from payroll transaction processing and data entry.	79	1	5	3.19	1.014
Employees who process payroll data cannot approve their own pay-check.	79	1	5	3.57	.983
Someone other than the person(s) entering the adjustments reviews and/or approves the pay adjustment reports.	79	1	5	3.51	1.197

Source: Field study (2023)

The Table 4 above shows the various payroll practices in the construction industries. Five (5) assertions were made to identify the internal control practices in the construction industry in Ghana. The data from the descriptive statistics shows that majority of the respondents were in favour with the assertions made as the mean value for all assertions are greater than 3.0. The mean values greater than 3.0 shows that majority of the respondents chose more of strongly agree (5), and agree (4) than strongly disagree (1) and disagree (2). This comparison is shown in the min (minimum) and max (maximum) values in the Table 3 above. This shows that majority of the respondents agreed that someone other than the payroll department checks the accuracy of the salaries and wages (Mean = 3.58, Standard Deviation = 1.057); workers' roles in authorising personnel decisions including hiring, firing, and promotion are separated from those in charge of processing payroll or entering employee information (Mean = 3.32, Standard Deviation = 1.161); time sheet approval is handled separately from payroll transaction processing and data entry (Mean = 3.19, Standard Deviation = 1.014); employees who process payroll data cannot approve their own pay-check (Mean = 3.57, Standard Deviation = 0.983); and someone other than the person(s) entering the adjustments reviews and/or approves the pay adjustment reports (Mean = 3.51, Standard Deviation = 1.197). The results of this study show that effective internal control practices were being practiced by construction companies in Ghana. The findings of this study support the study of Oppong et al. (2016) and Palladan and Palladan (2018).

IV. Correlation results

This section of the study presents the correlation results between payroll processes in the construction industry (PP) and internal control systems (IC). The correlation results show the relationship between the various variables under study and also the strength of the results shows the effectiveness of the internal control system in the payroll process in construction companies in Ghana.

Table 5: Correlation (Objective 3)

		PP	IC
PP	Pearson Correlation	1	.910**
	Sig. (2-tailed)		.000
	N	79	79
IC	Pearson Correlation	.910**	1
	Sig. (2-tailed)	.000	
	N	79	79
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Field study (2023)

The correlation results in Table 5 shows that payroll processes in the construction industry (PP) has a strong and positive correlation with the internal control systems (IC) used by the construction industries in Ghana with a correlation coefficient of 0.910. The correlation result is significant at the 1% significance level as the p-value for the relationship between the payroll processes in the construction industry (PP) and the internal control systems (IC) is 0.000. This shows that there is effectiveness of internal controls in the payroll process in construction companies in Ghana. The findings of the study support the study of Oppong et al. (2016), Palladan and Palladan (2018) and Ali and Anwar (2021) who indicate that the effectiveness of internal controls in the payroll process is high and very effective. As such construction organizations must use internal controls to effectively run the payroll process.

V. Conclusion and Recommendation

The cost of labour and the payroll taxes that go along with it make up a considerable percentage of the overall operating costs for the majority of firm organisations, and this portion is continually expanding. This is a problem for businesses since it drives up the cost of doing business. Payroll in construction industries especially for part-time and contract workers have been a subject of topic for sometime now. Thus, accounting for payroll is essential not just because of the scale of the numbers involved, but also due to the plethora of institutional requirements that insist on precise records being kept for each employee. These regulations require that payroll accounting be performed. In the payroll process, internal control mechanisms are also important so as not to engage in fraud and put the industry at risk. Controls inside an organisation monitor the actions taken by management and employees to ensure that the company is always growing and developing as intended. This is achieved by stopping either party from engaging in actions that are in accordance with their personal preferences or from stealing from the firm and other stakeholders such as employees. The study found out that internal controls in organizations have an effective role on the payroll process. Thus, it is recommended to policy makers to provide policy documents that will enable all construction companies to integrate internal controls in their payroll processes. Also, the study recommends to management and shareholders of construction companies in Ghana to integrate internal control mechanisms in their daily processes especially in the payroll processes to have a fair idea of the company's activities regarding payroll. To academia, the study was done as an academic work and as such, there

was little time to collect data. Recommendation is made to academia to expand the population and sample size of this study to get a better understanding of the topic under study. Furthermore, the study recommends to researchers to use the mixed methodology (interviews and questionnaires) in collecting data to reach a more in-depth conclusion.

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