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The Practicability of Traditional Method of Overhead Allocation: A Case of Limited Liability Company in Developing Economy

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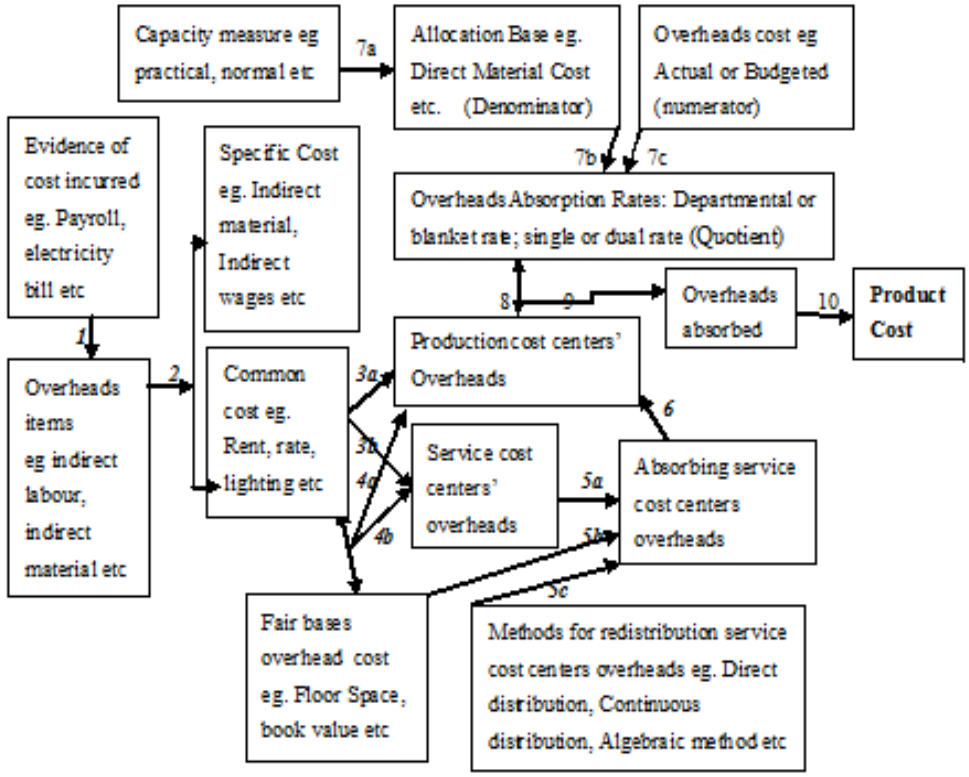
Abstract
Practical capacity method of production overhead allocation is the most accepted and most widely used method of cost accounting in manufacturing concern. However, traditional cost accounting has been criticized for cost distortion and lack of relevance during the last 20 years. Notwithstanding the criticisms, some firms in Ghana are still using the traditional method of overhead allocation. The primary purpose of this descriptive study was to examine how the company applies traditional method to allocate production overhead cost into the cost of its finished product. The study did not find much difference between how the company adopts the practical capacity method of overhead allocation in terms of its concepts and application and what pertains in the existing literature on the phenomenon, except in some few aspects of its practice. It was also found that the company does not at all times meet the requirements of IFRS-IAS 2.

Key words: practical capacity, production overheads, allocation variance, overheads allocation rate (OAR)

1. Introduction

The study of overhead allocation in general is important because of the role it plays in total cost determination, cost accumulation, cost management and in pricing goods or services. The purpose of overhead absorption is to share out overhead costs between the various cost objects on some appropriate bases. In this way we can attempt to establish the full cost of every item produced or service offered. In all such cases, the use of appropriate method for overhead absorption plays a key role. In view of this a number of overheads allocation methods have been developed: traditional methods (absorption, variable, practical capacity methods, etc), contemporary methods such as ABC System (Cooper and Kaplan, 1988), Grenzplankostenrechnung abbreviated as GPK (Georg Plaut, 1953); Throughput method based on the Theory of Constraints (TOC) (Goldratt, 1983) and Resource Consumption Accounting abbreviated as RCA (van der Merwe & Key, 2002), all in the name of improving the accuracy of allocation methodology.

Traditional costing techniques, based on the experiences from manufacturing industries, were used for the purposes of overhead cost allocation during the 20th Century. These are based on simplified procedures using principles of averages (International Online Conference of Business Management (IOCBM), 2008). Using traditional methodology (i.e. practical capacity method), production overhead cost of a manufacturing concern can be allocated to product cost in procedure involving eight-stage process (see Figure 1).



Note: *The numbered arrows respectively indicate the stages in overheads allocation procedure: 1 =collection; 2 = classification; 3a & 3b = direct allocation; 4a & 4b = apportionment with fair base; 5a, 5b & 5c = redistribution of service centers overhead using a fair base and a method of redistribution; 6 = production cost centers absorbing a share of service cost centers' overheads; 7a, 7b & 7c = determining OAR; 8, 9& 10 = applying OARs from individual production departments to product cost.*

Figure 1: synthesized model for practical capacity method of production overhead cost allocation
Source: Adopted from Banker et al., (1995), Coulthurst (2000), Drury, *2001,* and Lucey (2002)

Among the various methods of overhead allocation, practical capacity method is the most accepted and most widely used method of cost accounting in manufacturing concerns (Drury, 2001). In US, for instance, about 80 per cent of the U. S. companies still use the traditional cost allocation methods (Sharman 2003): and also accepted by the Internal Revenue Service (IRS) and Securities Exchange Commission (SEC) for calculation of externally reported financial results (Myers, 2009). However, traditional cost accounting has been criticized for cost distortion and lack of relevance during the last 20 years, generally bears the characteristic of arbitrary allocation due to the varying character of a group's overheads and also tends to be used by small to medium sized enterprises with obsolete and undeveloped systems for cost management (Cooper & Kaplan, 1988; IOCBM, 2008). Besides, the traditional techniques work best in an environment reliant on effective budgeting. The developed economies are less volatile so operating budgets of corporate entity are more likely to be considerably stable. It does not, therefore, give much cause for concern if firms in the advanced economies are still using the traditional method. On the contrary,

developing economies like Ghana is volatile and the macro-economic conditions are unstable; often renders corporate budgeting and financial planning a mere paper work. The crux of the matter is that notwithstanding the criticism against the traditional method and the fact that more accurate alternative methods are now available, some firms in the developing economies are still using the traditional method of overhead allocation, in particular the practical capacity method. This paper therefore seeks to evaluate with empirical evidence the application of traditional method of production overhead absorption by using the practical operations of a manufacturing firm in Ghana (located in Kumasi) for the evaluation exercises. The firm is a private limited liability company which engages in manufacturing and exporting animal feed and supplements with the aim of providing dependable source of the nutrient needs of poultry and live stock on commercial basis in support of industries in Ghana and Africa. The objectives of this paper are: (1) to examine how the company applies traditional method in allocating production overhead cost into the cost of its finished product; and (2) to determine whether or not the method, as applied by the company, meets the external financial reporting requirement as stated in International Financial Reporting Standard (IFRS-IAS2) and Ghana National Accounting Standard (GNAS 8). The study provides more empirical evidence for management accountants, business managers as well as accounting students to gain more improved understanding of the concept of overhead allocation and also appreciate the practical application of the theory behind the traditional methodology of overheads allocation. The management of the company is also afforded the opportunity to reconsider its overhead allocation method in the light of the tenants of the external reporting requirement of GNAS (8) and IFRS-IAS (2).

2.0 Methodology

This section presents the research methodology utilized in the current study. It covers issues such as design of the study, population, sample and sampling technique, source of data and instrument used for data collection. Finally, techniques to analyze data are provided.

2.1 Design of the study

This sub-study of a larger study used descriptive design to examine the practicability of traditional method of overheads allocation in a real life context. A single case study strategy was adopted for this study. The choice of the case study method was also informed by the views of: (1) Yin (1994) who explained that a single case is used where it represents a critical case or, alternatively, an extreme or unique case; and (2) Saunders, Lewis and Thornhill (2007) that case study method becomes particularly useful where one needs to understand some particular problem or situation in great-depth, and where one can identify cases rich in information.

2.2 Population, Sample and Sampling Technique

The population of the study was made up of the staff in Accounting, Production and Production Service Departments of the company. Out of a total of 25 staff members, a sample of five (5) respondents representing 20% were sampled for the study using purposive sampling technique. The company's records on the job responsibilities of the staff were used to select respondents who could provide relevant data for the study. They included the Chief Financial Controller, Cost and Management Accountant, Senior Accounts Clerk and two production managers of the company.

2.3 Source of Data and Instrument Used

Two sets of interview guides were used to obtain primary data on the accounting procedures of the company relating to the allocation of its production overheads. Besides, secondary data on annual and quarterly production data including overhead cost incurred, overhead absorbed and cost drivers of the company's major factory-related activities were obtained from production statements of company spanned over nine years (2000 to 2008): This period was characterized by intermittent outbreaks of bird flu and swine flu and could afford the researcher the opportunity to consider allocation of production overhead cost under different business climates.

2.4 Data Analysis

Statistical devices such as regression analysis and simple tables were used as analytical tool for the study. Firstly, the primary data obtained through interview regarding how production overheads are allocated in the company were analyzed in line with existing literature. Secondly, the data obtained on annual production overhead cost and cost drivers were analyzed by first determining the differences between the overheads absorbed and the overhead incurred. Thereafter, a multiple-regression model (model 1) was formed to find out whether or not the allocation bases used by the company have a strong cause-and-effect relationship with production overhead cost of the company: Model 1: $POC = \alpha + MHH + PPLH + DLH + PPU + SULH + QULH + RECL + MACH + \varepsilon t.$ $t = 1 \ldots 36$. POC = production overhead cost as dependent variable; and the following cost drivers as independent variables Material; Handling Hours (MHH); Pure Production' hours (PPLH); Direct Labor Hours (DLH); physical production units (PPU); Production Setups (SULH); Labor Hours for quality control (QULH); Reclaiming Labor Hours (RECL); and Machine Hours (MACH)

3.0 Results and Discussion

This section provided the results of analyzing data from interview and financial statements of the company in a number of aspects. In this section, the traditional method adopted by the firm and how it applies the method are discussed under the following subheadings: overhead absorption method used by the company, analysis of overheads among cost centers, determining overhead absorption rates (OAR), and applications of OAR. In addition, this section includes report of the results of regression analysis of production overhead cost and the cost drivers. Finally, how the company applies its overheads allocation method was examined in the light of the requirements of Accounting Standards (GNAS (8)/IFRS (IAS 2).

3.1 Overhead Absorption Method Used by the Company

This sub-section discusses the results of the interview on the particular traditional method of overheads allocation and how it is adopted by the firm. In response to the question on the overheads allocation method used, the cost and management accountant said "*The Company uses traditional method, precisely practical capacity method, in allocating its production overheads'*. Although practical capacity method of allocation method has been criticized by many researchers as being ineffective in allocating overheads to unit price of a product or service (Kraal, 2006), other studies have emphasized that no particular method can give absolute accuracy, but carefully complied and used in appropriate circumstances, one or more of these should provide acceptable results; and also by refining what may otherwise be an arbitrary process accountants can provide useful information that will help management in cost

control and profitability analysis as (Coulthurst, 2000; Drury & Tayles, 2000)**.** From this discussion it is obvious that the traditional method of overhead allocation is not only used by companies in developed economies but is also by companies in developing economies like Ghana as well, and may be still useful in its purpose to manufacturing concerns.

According to the Production Manager, the company has three main production departments: mash and concentrates, aqua feeds and custom feed, and also four support departments: the Maintenance, Laboratory, Canteen and the Stores Departments which provide services to the two production departments. On the issue concerning the stages involved in the allocation process, the Senior Accounts Clerk said "*the allocation process starts with gathering overheads items, classifying overheads items, analysis of overhead costs, determining overheads recovery rates and ends with application of overheads recovery rates*. According to Drury and Talyes (1994) and Shah et al (2011) overheads allocation process with respect to the application of practical capacity method involves the analysis of overhead costs among the cost centers, predetermination of overheads recovery rates and finally, the application of OAR to allocate overheads to finished product on the basis of the actual volume of allocation base consumed. It is very clear that the company goes through the same the process of overhead cost allocation in applying this method, as found in the existing literature. However, it differs in how it analyzes the overheads among the cost centers and how it applies the overheads of service cost centers

3.2. Analysis of Overheads among cost centers

This sub-section discusses the results of the interview on analysis of overheads of primary cost centers and the allocation bases for service cost centers. The Senior Accounts Clerk said '*in this company all the production overheads at both the production and the service cost centers are combined and apportioned directly among only the production departments. As a result the company does not maintain separate overhead rates service cost centers.* The study revealed that the company apportions production overheads at the various cost centers directly among the production cost centers without the consideration of the service cost centers. These findings are inconsistent with recommendations in most cost and management books (e.g. Drury, 2001; Lucey 2002) and the findings of similar studies (Coulthurst, 2000) which emphasized the need for separate analysis of production overheads – thus allocating special cost and apportioning common cost using fair bases - among the production and the service cost centers before absorbing the overheads service cost centers into production cost centers. This finding of the study suggests that management may find it difficult to effectively analyze and control cost; identify inefficient manger for the necessary disciplinary action or efficient manger for the necessary recognition and motivation terms of cost management. Further, any efficiencies or inefficiencies of the use of resources in the service department are passed on to the production department; this generally have the effect of making service department less careful about its costs. The study again revealed that the company does not maintain separate absorption rates for its support. This practice is parallel with the findings of other studies which have advocated that a more accurate approach is to establish separate support department overheads rate based on factors that cause the costs of service departments to be incurred. Besides, inaccurate production cost will be reported if service departments' costs are unrelated to the absorption base (Drury & Tayles, 1994; Myers, 2009; Anthony, Hawkins & Merchant, 2011).

3.3.0 Determining Overhead Absorption Rates (OAR)

The respondents were asked to indicate the how the overheads absorption rate (OAR) is determined. The results are presented and discussed as in sub-sections 3.3.1 and 3.3.2

3.3.1 Overheads Absorption Rate (OAR): Overhead cost and Activity Level and the Allocation Base used

According to the Cost and Management Accountant the firm maintains three sets of recovery rates: Monthly After-the-Fact Overheads Rate ($MAOR_1$), Monthly Predetermined Recovery Rates ($MPRR_2$), and Predetermined Annual Fixed Overheads Rate (PAFOR). Basically OAR is determined as the quotient of total overheads (budgeted or actual) as the numerator and the volume of resources consumed or budgeted as the denominator. The company adopts material cost % as the allocation base, and it is determined based on different capacity levels for different purposes: (1) the practical capacity (for actual allocation rates for allocation purposes); (2) budgeted capacity (to calculate predetermined OAR for both allocation and cost analysis and control purposes) and maximum capacity (for resources that use technical capacity eg warehouse). Drury (2001) identified four different denominator activity levels that can be used: theoretical maximum capacity, practical capacity, normal (average, long-run) activity, and budgeted activity. He added that these denominator levels are frequently applied in manufacturing operations where capacity can be technically and very precisely measured. Among the four, Cooper and Kaplan (1988) argued that the denominator volume must always be the practical capacity of the activity being supplied, rather than anticipated volume on the ground that this represents the unit cost of the capacity required to perform the activity. This study revealed that the company shares the same view with Cooper and Kaplan. The company uses the annual budgeted volume and budgeted overheads as the capacity to compute annual overheads rate for control purposes. It does not use it to absorb production overheads to product, instead it uses monthly overhead rate based on the actual activity level and the actual overhead incurred. Nevertheless, this method is rejected in textbooks on the ground that it leads to fluctuating overhead rates from period to period if seasonal variations in activity occur. Due to this fact, the capacity usage of these overhead activities could dramatically fluctuate, and capacity limitations or wastage of these activities may potentially create a problem for management. From the discussions, it very obvious that the firm may have some challenges in applying these capacities in calculating its allocation rates.

On why the firm uses direct material cost percentage as a basis for their overhead absorption, the Financial Controller of the firm said this "*material cost constitutes the largest proportion of production overhead cost and also more predictable and controllable because it can be ascertained with reliability and substantial accuracy given the unique characteristics of each job.".* To confirm this, data on the major elements of product cost for the year ended 31st December, 2008 were gathered, and these are presented diagrammatically in table 1

Table 1 Composition of Product Cost

Major element of product cost	*Amount (GHs)*	*Percentage*
Raw material	935,108.75	46
Direct wages	468,900.87	23
Production overheads	647,659.60	31

Source: Production statement of the company for 2008

However, Drury and Tayles (1994) indicate that material cost % is only appropriate: (1) when it forms the major part

of total cost, and (2) where overheads tend to relate to material cost through material handling. Although material cost forms the major part of total cost of production of the company (see table 1), the same cannot be said of the overheads cost in relation to material handling. The regression analysis indicates that individually the impact of material handling hours on production overhead cost is not statistically significant (see Table 6). On this basis, the choice of material cost % by the company is not fully supported by literature as an appropriate base for absorbing production overheads. Nevertheless the researcher believes that the situational or contingent factors that exist in a particular business environment may dictate to a large extent which method or approach to apply.

3.3.2 Calculation of Overhead Recovery Rate

According to Cost and Management Accountant, $MAOR_1$, $MPRR_2$, PAFOR are calculated as follows: (1) $MORR_1$ is obtained as monthly actual overheads incurred / monthly actual capacity used; (2) $MORR_2$ is obtained as monthly budgeted overheads incurred / monthly budgeted capacity; and (3)

$$\text{PAFOR} = [\sum_{i=1}^{n=48} \left(\frac{POC_{ni}}{DMC_{ni}} \; x \; 100\right)]/N,$$

Where: PAFOR = the estimated production overheads absorption rate, N = represents the total number of time periods (i.e. 48 months), i = 1st month to 48th month, POC = monthly production overhead cost estimated by means of least squared method, and DCM = monthly direct material cost. However, PAFOR is subject to annual review due to changes in macro-economic factors such as inflation, interest rate and foreign exchange rate. According to the Cost and Management Accountant, this approach is adopted for the calculation of predetermined rate so that it will minimize allocation variance that may occur due to seasonal variations or instability in macro-economic conditions. This practice is also in a right direction because many researchers have found that seasonal variations and changes in macro-economic variables such as interest rates, inflation, exchange rates and others often cause variance between actual resources consumed and budgeted resources for business operations (Drury & Tayles, 2000; Tatikonda, 2003).

3.4 Applications of Overhead Absorption Rates (OAR)

The respondents were asked to indicate how the overheads absorption rate (OAR) is applied to allocate overhead to unit cost of the company's products. This question was further divided into a number of sub-questions to cover issues such as the types of absorption Rates used by the company to apply its overhead into unit cost determination, occurrence of over-/ under-allocation of overhead, and how it absorbs both the fixed and variable production overheads. The results are presented and discussed in the sub-sections 3.4.1 and 3.4.2.

3.4.1 Type of Overheads Allocation Rates used by the Firm

According to the cost and management account, the company maintains two sets of departmental rates in allocating production overheads from the two production cost centers: (1) annual overheads rate and (2) the after-the-fact monthly overhead rates. This result is consistent with the view held by Lucy (2002) who states that the far more accurate way of allocating overhead cost is possibly using departmental rates. It was also revealed that the company uses the single rate method of cost allocation. With this method, cost in each cost pool is not classified into a variable-cost pool and a fixed-cost pool, with each pool using a different cost-allocation base but rather allocates costs in each cost pool to cost objects using the same rate per unit of the single allocation base. According Myers

(2009), organizations that do not maintain separate overhead rates (dual rates - one for fixed cost pool and the other for variable cost pool) for the individual departments are more unlikely to use full product cost for decision making instead of marginal cost. This finding therefore suggests that division managers may not be provided with information about cost behavior. However, knowing how fixed costs and variable costs behave differently is useful in decision making.

3.4.2 Overheads allocation variance

The production statement of the company indicates that it experiences over-/under-application of overheads. Thus the difference in amount between overheads incurred and overheads absorbed, especially when they at variance (see Table 2).

Table 2 Comparison between Incurred and Absorbed Production Overheads for 9 years

Year	AOI	AOA	*O/*U	%
2000	134159.38	127098.36	-7061.02	5.6
2001	167308.05	151923.53	-15384.57	9.2
2002	209905.76	209263.03	-642.77	0.31
2003	216149.22	200709.99	-15439.23	7.14
2004	369705.76	385918.98	16213.18	0.42
2005	373357.8	388029.36	14671.564	39
2006	342421.12	340223.8	-2197.360	64
2007	462682.4	404025	-58657.412	15
2008	545278.46	554255.14	8976.681	65

Notes * O = Over-absorbed (positive), * U = Under-absorbed (negative), AOI = Actual Overheads Incurred, AOA = Actual Overheads Absorbed

Source: Production Statement of the company for nine years (2000 - 2008)

As shown in Table 2, production overheads absorbed exceeded the overhead incurred in 2004, 2005 and 2008 resulting in over-absorption of production overhead by ¢16213.18, ¢14671.56 and ¢8976.5 representing 0.42%, 4.39%, and 1.65% of the actual overhead incurred respectively with the highest occurring in 2005. This means that the company overcharged overheads to unit cost of its product, implying that customers were charged with higher selling price in those years. In the remaining six years (2000, 2001, 2002, 2003, 2006, and 2007) the actual overhead absorbed was less than the actual overhead incurred by -¢7061.02, -¢15384.57, ¢642.77, -¢5439.23, -¢197.36 and -¢58657.4 representing 5.62%, 9.20%, 0.31%, 7.14 %, 0.64% and 12.15% of the actual overhead incurred respectively. This means that the company undercharged overheads to unit cost of its product, and again implying that customers were charged with lesser selling price in those years.

The cost and management accountant indicated that at times allocation variance results as a strategy to remain price competitive. He explained that when the company is competing on price, it tends to under absorb overheads especially the fixed component or shift some of the cost to a more cost-conducive period of operation. However, he remarked that the company exercises a great caution such that the amount of the under-applied overhead does not

adversely affect the service to customers or product quality. To this effect the company uses seasonally adjusted data for the determination of their predetermined annual overheads absorption rate so as to reduce the effect of the allocation variance on price competiveness and profitability of the firm. This study therefore reveals that overhead variance does not occur solely because a predetermined OAR is used to absorb cost into work in progress, but also certain strategic policy of a firm can equally cause it

3.5 Regression Analysis of Production Overhead Cost and the Cost Drivers

A multiple-regression analysis was performed by means of Microsoft Excel application software to determine the cause - and - effect relation between production overhead and the cost drivers of the major factory-related activities of the firm in order to identify and select the base(s) that has strong correlation with production overhead cost (see Table 3)

Table 3 Results of Regression of Production Overheads on Cost Drivers

	Parameter estimates				Regression			Strength of equation	
	Coeff.	Std. Error	t Stat	P-value	F	Df	Sig.	R^2	Adj R^2
Intercept	38946	65194	0.60	0.56	5.211	8	0.0005*	0.607	0.491
MHH	21.83	46.34	0.47	0.64					
PPLH	-2.06	1.76	1.17	0.25					
DLH	80.89	56.51	1.43	0.16					
PPU	12.63	11.46	1.10	0.28					
SULH	35.91	9.95	3.61	0.001					
QULH	-347.98	141.3	-2.46	0.02					
RECLH	106.01	54.77	1.94	0.06					
MACH	87.45	39.72	2.20	0.04					

Note: *p<0.05, n=36, *MHH = Material Handling Hours; PPL= Pure Production hours; DLH = Direct Labor Hours; PPU = physical production units; SULH = Production Setups labour hours; QULH = quality control labour hours; RECL = Reclaiming labour Hours; and MACH = Machine Hours*.

Source: production statement for 2008 (Excel output)

From the results of the Excel output, as indicated in Table 3, the overall fit of the model indicates a significant value of 0.000531 implying that all the eight independent variables in the models are collectively significant (F = 5.211116). The overall explanatory power of the model as represented by R^2 (0.99) and adjusted R^2 (0.95) is strong at $\alpha = 0.05$. Collectively, the eight independent variables explain 60.69 % (R^2) and 49% (adjusted R^2) of the variations in dependent variable (production overhead cost). In other words 49% change in the dependent variable (POC) could be collectively caused by the eight explanatory variables (cost drivers). Besides, the model reveals some distinctive results about the individual impact of the cost drivers on POC: individually the impact of five out of the eight cost drivers – thus MHH with $\beta = 21.83$ at $p = 0.641$; PPLH with $\beta = -2.060$ at $p = 0.251$; DLH with $\beta =$

80.89 at p = 0.164; PPU with β = 12.63 at p = 0.280; and RECLH with β = 106.009 at P = 0.06 on POC are not statistically significant; whereas the remaining three cost drivers SULH with β = 35.9 at p = 0.00012; QULH with β = -347.98 at p = 0.0204; and MACH with β = 87.452 at p = 0.036 individually have statically significant impact on the POC. Thus out of the eight independent variables; only three had a significant relationship with production overhead cost. Of these three, set-up labor hours and machine hours had positive relationship with production overhead whilst quality control had an inverse relationship with production overhead. However, these relationships are significantly higher in case of SULH with *p-value 0.0012* followed by QULH with p-*value 0.021* and lastly MACH with *p-value 0.036*. While the coefficients for these variables are significantly different from zero, the coefficients for the remaining four cost drivers PPU, PPLH, RECLH, DLH and MHH, though some are positive but individually are not significantly different from zero at the 5% level.

Consistent with the findings of previous studies, machine hour, especially in automated environment (Drury & Tayles, 1994) and set-up labor hours (Banker et al 1995) have significant relationship with production overhead cost. Conversely, the negative relationship between the quality control hours found in this study is not consistent with the findings of Vergauwen and Kerchhoffs (2003). Of the variables such as direct labor hours, material handling, reclaiming labor hours, and physical production units which showed no significant relationship with the production overhead cost, this study also supports the literature's assertion that for most cost allocation models (i.e. those based on direct labor, direct materials, or machine hours) the driving force behind most overhead costs is not unit output or direct labor.

3.6 The application of Overheads Allocation Method and Accounting Standards (GNAS (8)/IFRS (IAS 2)

International Financial Reporting Standard (IFRS -IAS2) stipulates that for the purpose of inventory valuation and their reporting in the balance sheet, factory overheads must be fully absorbed with prime cost to arrive at the actual cost of the product. However, this study revealed that the firm does not always comply with this standard, especially when strategically it under-applies production overheads to remain price competitive. In the view of Develin (1999), this practice is recommendable. However, he cautioned that managers must take care not to cut cost that adds value to the organization. It was also observed that though the company is not listed and has not yet adopted IFRS for its financial reporting, it complies with the Ghana National Accounting Standards (GNAS 8) which requires that overhead allocation variance be treated as a period cost because it is not part of the product cost. In other words the amount of overhead under-/over-absorbed is charged to the profit and loss account for the period.

4.0 Conclusion and Implications

Based on result of the study the researcher did not find much difference between how the company adopt the method in terms of the concepts and application and what pertains in the existing literature except in some few aspects of its practice. For instance, the production overheads at primary cost centers are not separately analyzed among production and service cost centers. Instead they are combined and apportioned directly among only the production departments. Additionally, material cost adopted by the company does not have strong cause-and-effect relationship with production overheads; and finally the company, when facing price competition, strategically under-applies overheads, and this does not allow full absorption of production overheads as required by IFRS-IAS 2.

Management should therefore ensure that overheads of the service cost centers are analyzed separately before allocating them either directly to product cost using separate OARs or redistributed among the production departments so that respective products from these departments can be fairly priced to allow effective and detailed profit and cost analysis to ensure proper cost control and management and accountability. Furthermore, the company needs more than just one allocation base to effectively allocate production overheads to product. In this regard Activity-Based Cost (ABC) method is the best recommendation if its adoption and application is financially convenient and practically feasible for the company. Better still the company can adopt multiple bases in allocating its production overhead cost if it cannot afford the use of ABC method. Finally, the company can reduce its profit margin so as to enable the accounts department ensure full absorption of production overheads whereas it continues to maintain its loyal customers when the firm is engaged in price competition.

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