

# ANALYSING COST ACCOUNTING STANDARDS, PRACTICES AND IMPLEMENTATIONS: A STUDY ON SOME SELECTIVE MANUFACTURING COMPANIES OF BANGLADESH

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## ABSTRACT

**Research aim:** This report aims to illustrate a true picture of cost accounting standard practices in different manufacturing organisations in Bangladesh. This article tries to analyse the views of diversified personnel engaged with the cost accounting standards directly or indirectly.

**Design/Methodology/Approach:** The researchers use different statistical tests for this study. It is a quantitative study with a structured questionnaire used to conduct the survey. For analysing the statistical tests, the authors use Microsoft Excel and SPSS 26 along with a three-point Likert scale.

**Research finding:** The results of this study show that most manufacturing organisations operating in Bangladesh practise the Bangladesh Cost Accounting Standards (BCAS). Most of the employees working in manufacturing organisations are familiar with BCAS. This study also finds that BCAS helps in determining costs more accurately and appropriately. This paper further identifies the factors responsible for not implementing BCAS in manufacturing organisations, and lists these firms' future plans regarding BCAS. The role of Institute of Cost and Management Accountants of Bangladesh (ICMAB) in implementing the standards is also identified here.

**Theoretical contribution/Originality:** This paper will assist researchers and policymakers as well as concerned authorities in getting an overview on the practice and implementation of BCAS in relevant manufacturing organisations.

**Practitioner/Policy implication:** This paper will help manufacturing organisations recognise the significance of practising and implementing BCAS.

**Research limitation:** The small sample size is a substantial limitation of this study. However, future research can be done with a larger data set from different sources.

**Keywords:** Cost Accounting, Standards, Manufacturing Concern, Practices, Implementation

**Type of article:** Research paper

**JEL Classification:** M00, M40, M41

## 1. Introduction

In the competitive world of business, managing costs is one of the most crucial concerns of any organisation. As businesses grow, identifying and allocating different costs became vital for managers and owners to improve product pricing, product development and decision-making. This led to the initiation of contemporary cost accounting. Businesses always look for the best deal to increase their productivity with minimal cost. Cost accounting standards help achieve

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uniformity and consistency in cost accounting practices (Banerjee & Das, 2017). Standards are the principle or guidelines for a particular phenomenon. Cost accounting standards are the rules developed by the Cost Accounting Standards Board to assure the regularity and uniformity in measurement, assignment, and allocation of costs (Schildbach, 1997). As a developing country, Bangladesh is also a part of the global economy. There are several manufacturing industries in Bangladesh where cost accounting standards are applicable. There is authority to finalise, modify or edit the standards according to requirements. The authority for setting the cost accounting standards in Bangladesh is the Institute of Cost and Management Accountants of Bangladesh (ICMAB).

It can be seen in Bangladesh that people are generally aware of International Financial Reporting Standards (IFRS) and Bangladesh Financial Reporting Standards (BFRS). However, there is a lack of interest and a dearth of past studies on BCAS, which increases the inquisition of authors to conduct the study and identify whether people know of these standards. Apart from that, the significance of cost accounting standards in the context of manufacturing concerns also necessitated this study.

Manufacturing industries play an important role in improving per capita income and employment opportunities in developing countries. Moreover, a positive relationship exists between industrialisation and per capita income in developing countries (Attiah, 2019). The manufacturing industry plays a key role in the Bangladeshi economy and works as a tool for GDP growth. The Bangladeshi manufacturing industry contributes a significant portion of GDP. According to the Bangladesh Bureau of Statistics (BBS), the manufacturing industry contributed BDT4,534.92 billion to the GDP in the 2018-2019 fiscal year. Small and medium manufacturing companies create a strong backward linkage with other sectors of the economy, which ultimately improves the economic condition of Bangladesh.

Practising cost accounting in a manufacturing company can increase profitability. Increasing direct cost, indirect cost, domestic or global competition and economic crises are the prime factors for increased interest in cost accounting (Ali, 2010). Although a well-installed and accepted cost accounting system helps a manufacturing company's cost accounting, practices at the manufacturing industry level face resistance from different perspectives. The industry faces a shortage of trained staff, and intransigence from existing and management staff to the introduction of a costing system at the manufacturing level (Basu & Das, 2007). On the other hand, the implementation of a costing system is expensive in the early stages. A company needs to maintain detailed records for controlling purposes under a costing system (Labro, 2019). There are some prerequisites for a good costing system which require significant financing, so in the case of small manufacturing concerns, cost accounting practices are not economical.

Cost accounting standards are primarily applicable in manufacturing industries. These standards help maintain their cost accounts by the Cost Accounting Records Rules and Cost Audit Report Rules. Bangladesh is heading towards greater industrialisation day by day. As a result, there are many domestic and foreign companies operating in this country. Cost accounting plays an essential role for enhancing business development. With an effective cost control system, an organisation can increase profit generation. The practice and

implementation of cost accounting standards are essential to ensure effective business operation (Khan, Parvin & Sayeeda, 2019). It gives an idea of the overall costs incurred by the organisation, which will help reshape future performance. Studies on accounting standards in Bangladesh have been conducted by several researchers, such as Mir & Rahaman (2005); Ghosh, Bairagi, and Mondal (2020); Ullah, Khanam, and Tasnim (2018); and Nurunnabi (2017). Moreover, most researchers focus on cost accounting and the different techniques used in relation to manufacturing concerns. This builds interest to know about the BCAS. Moreover, this will enhance the willingness of organisations to practise and implement these standards in manufacturing. The implementation of cost accounting standards in diverse manufacturing organisations is a challenging task. Yet there remains a lack of studies on the issue. Furthermore, the realm of cost accounting standards in manufacturing companies is vast. There is still a vacuum in the practice of cost accounting standards due to organisational constraints. However, with advancement in standard-setting process, there is a positive change in allocating cost. With limited resources, generating profit is more complicated. Thus, cost accounting can be an effective tool for development and innovation.

Cost accounting standards were adopted by developed countries before developing countries (Ali, 2010). Over time, growing manufacturing industries enhanced the need for diversified cost accounting standards (Nagirikandalage & Binsardi, 2017). In December 2014, ICMAB issued 10 cost accounting standards, and 13 in November 2016. In October 2019, ICMAB issued another eight standards. In Bangladesh currently, there are 31 standards for cost accounting, which are known as the Bangladesh Cost Accounting Standards (BCAS). These standards are mainly set for manufacturing organisations. There is a cost audit programme available in Bangladesh which ensures the accuracy and adherence of cost accounting standards. Nowadays, manufacturing companies have a cost accounting system that keeps records of all costs related to production and selling diverse product lines (Wouters & Morales, 2014). This cost accounting information is noteworthy and shows the success of different business organisations clearly.

The main purpose of this study is to indicate whether manufacturing companies follow BCAS or not. Simultaneously, it tries to find out the trend of practising these standards in manufacturing organisations. The overall objectives of this study are: 1) to provide a background of BCAS; 2) to give insight into the responsiveness of manufacturing organisations to cost accounting standard practices; 3) to analyse the role of ICMAB in implementing standards for manufacturing companies; 4) to provide some policy recommendations on increasing the practise rate of cost accounting standards. The present study can be helpful to future researchers in terms of getting an idea of cost accounting standards, practices, and implementation in manufacturing companies. Admittedly, however, this study has certain limitations. Firstly, only limited numbers of samples were collected. Because of this small sample size, the study is limited to a descriptive analysis. Additionally, because of Covid-19 restrictions and the countrywide lockdown, the researchers could not visit the companies physically.

This paper is organised chronologically. Section 1 contains the introduction and the overview of BCAS. Section 2 contains the literature review. Section 3

describes the data and methodology of the study. Section 4 contains the results and discussion, while Section 5 lists the limitations, recommendations and further study scope in the concluding remarks.

### **1.1 Brief overview of Bangladesh Cost Accounting Standards (BCAS)**

Previously, there were no cost accounting standards in Bangladesh. There was an absence of uniformity in preparing and presenting the cost statements. To ensure worthy products and service costs, the government issued Cost Accounting Record Rules and Cost Audit Report Rules. This facilitated the practice of cost and management accounting. After issuing these cost accounting standards, the practice moved forward a step. The cost accounting standards applicable in Bangladesh are briefly discussed here. The names of the individual standards and effective dates are presented in the Appendix (Table AI).

BCAS 01, Cost concepts and classification: This standard illustrates that the cost should be assigned in a way so that the cause and effect relationship between the cost and cost object is properly acknowledged. There should be an appropriate costing system. The direct and indirect costs should be based on allocation. Also there are guidelines on direct and indirect cost allocation (BCAS, Volume I, 2014).

BCAS 02, Cost estimation: There can be many alternative tools to estimate the behaviour of recorded costs. This standard also states that the application of judgment should be reflected in the chosen method. Errors will arise for the inaccurate cost recording practice and it will cause biased cost estimation. Thus, the organisation should ensure a reasonable cost period to ensure the accuracy of cost records (BCAS, Volume I, 2014).

BCAS 03, Cost allocation bases: Organisation should add indirect costs to the cost pool and then allocate the cost to the final cost object. Changes are needed in allocation bases if cost accounting principle and cost and management standards change. The cause and effect relationship between use of resources and cost of resources should be reflected on the cost allocation base (BCAS, Volume I, 2014).

BCAS 04, Indirect costs: Identification of cost object, indirect costs, indirect cost allocation, indirect cost proportion, and indirect cost absorption are the items of indirect cost policy. If it is possible, indirect costs can be allocated separately. Indirect costs can be classified as variable, semi-variable and fixed costs (BCAS, Volume I, 2014).

BCAS 05, Indirect cost rates: Budgeted or standard cost should be considered in the allocation rate equation rather than the actual cost. Therefore, the equation for allocation rate will be, total capacity related indirect cost/cost driver activity label (BCAS, Volume I, 2014).

BCAS 06, Support department cost: This standard provides the costing system, cost assignment, and measurement principles. The classification of cost can be either flexible or committed. The cost drivers should be selected based on the cost classification (BCAS, Volume I, 2014).

BCAS 07, Job order costing: This standard emphasised that, in the costing system, direct costs should be attributed properly. A reasonable basis of allocation has to be promoted in indirect cost allocation and accumulation. It is the primary issue related to indirect cost. The secondary issue is, there should be segregation of flexible and committed costs in the allocation process (BCAS, Volume I, 2014).

BCAS 08, Process costing: In the cost of production report, information should be given regarding physical units processed in a department and also the associated manufacturing costs (BCAS, Volume I, 2014).

BCAS 09, Joint cost: Based on reasonableness, joint costs should be allocated. Consistency and good decision making are the two initial conditions in joint cost. The evaluation should be based on consistent economic reasoning (BCAS, Volume I, 2014).

BCAS 10, Target costing: This standard signifies the six key principles of target costing such as price-led costing, customer focus, design focus, cross-functional involvement, value chain environment, and life cycle orientation (BCAS, Volume I, 2014).

BCAS 11 Life cycle costing: The cause and effect principle should be considered while estimating the product life cycle cost. Product life cycle cost components should not be estimated (BCAS, Volume II, 2016).

BCAS 12, Kaizen costing: To reduce the costs by making improvements and waste minimisation, kaizen costing is used. It is a continuous improvement process of the organisation. It occurs after the production design is complete and now in the manufacturing process. Kaizen costs include supply chain costs, production redesign cost, legal cost, manufacturing cost, waste, recruitment cost, marketing sales and distribution and lastly the product disposal (BCAS, Volume II, 2016).

BCAS 13, Standard costing: Organisations should choose the cost standard to reflect its objectives. There are some prerequisites of setting the standards such as defining bills of material parameters, cost centre, resources, assigning the resources to cost centre, defining overhead, cost, marketing sales and distribution and lastly the product disposal (BCAS, Volume II, 2016).

BCAS 14, Activity-based costing: Activities are identified in activity-based costing (ABC). Costs are accumulated with each identified activity. Some factors need to be considered for implementing the ABC costing system, such as commitment of top-level management, competition level, verities of product and stock-keeping units, etc. (BCAS, Volume II, 2016).

BCAS 15, Product mix decision: The capacity planning phase and management phase should be identified by the management. Moreover, there should be a proper alignment of long-run and short-run decisions so that organisations can utilise the capacity and get maximum benefit (BCAS, Volume II, 2016).

BCAS 16, Transfer pricing: The ethical interest of all parties should be practised when applying transfer pricing. Moreover, the transfer pricing methods should be used according to the organisations' objectives and particular situation. There are four approaches used in transfer prices: market price, cost-based price, administered price, and negotiated price (BCAS, Volume II, 2016).

BCAS 17, Performance measurement: A performance measurement system should be used by organisations to improve efficiency. However, having too much performance measurement may cause the organisation to lose its strategic objectives. It should be at a moderate level to enhance the quality of work (BCAS, Volume II, 2016).

BCAS 18, Cash flow: There are two parts to cash flow information: internal and external. In internal information, cash flow provides a basis for planning and

project evaluation. External part provides information summary to the shareholders. Choosing the appropriate format, i.e., financial statement approach and traditional approach is a significant aspect of cash flow (BCAS, Volume II, 2016).

BCAS 19, Budget and pro forma financial statement: Considering the policy of the budget setting unit, it can be prepared in an autocratic or participative way. This standard does not provide any choice regarding the way of preparing the budget. Pro-forma financial statements should be included in the budget package along with different separate budgets (BCAS, Volume II, 2016).

BCAS 20, Activity-based management: Activity-based management is considered as a useful tool to continuously increase the value addition to customers and improve the organisation's overall strategic performance. Activity-based management works under process will be evaluated by considering the objective of the process. Furthermore, value-added and non-value-added works should be classified with a thorough analysis (BCAS, Volume II, 2016).

BCAS 21, Capital budgeting: A systematic appraisal of long-term investments in the form of estimated cash flow, rate of returns, risk profile and sources of financing are required in capital budgeting analysis. The approaches used in capital budgeting can be divided into two groups: one that considers the time value of money and the other that does not (BCAS, Volume II, 2016).

BCAS 22, Enterprise resource planning: While installing ERP software in business, an organisation should consider some elements in their budget software license fees, maintenance fees, hardware, implementation services, and integration cost. Updating the system is necessary to maintain contemporary technology capabilities. However, frequent updating of software may be more expensive than installing the system (BCAS, Volume II, 2016).

BCAS 23, Strategic cost management: It applies cost management techniques that will improve the strategic position and reduce cost. It can be applied to manufacturing and service organisations. There are three important pillars: cost driver analysis, strategic positioning, and value chain analysis (BCAS, Volume II, 2016).

BCAS 24, Material costs: This standard emphasises the classification, measurement and assignment of material cost. There are principles for material receipt, the principle for valuation of issues of material, assignment for both direct and indirect material cost (BCAS, Volume III, 2019).

BCAS 25, Employee cost: Employee cost is measured on the gross amount paid or payable to the employees. It will include any addition to gross salary, all allowances, bonuses, benefits. Non-executive director's remuneration will be considered as administrative costs. The executive director's remuneration will be considered employee costs (BCAS, Volume III, 2019).

BCAS 26, Cost of utilities: This standard contains the principle of measurement and assignment of costs. Under the principles, there are rules on how the utility cost will be allocated and recorded. Costs assignment deals with how the utility costs should be assigned (BCAS, Volume III, 2019).

BCAS 27, Cost of production for captive consumption: This standard pertains to the components of the cost of production. Under the cost of production for captive consumption, there are cost and adjustment items. These are material

consumed, direct wages and salaries, other direct expenses, manufacturing overhead, quality control cost, research and development cost, administrative overhead etc. (BCAS, Volume III, 2019).

BCAS 28, Capacity determination: This standard emphasises that better utilisation of resources will reduce costs. There are specific definitions of different capacities under this standard, such as installed capacity, practical capacity, normal capacity, actual capacity, idle capacity, excess capacity utilisation etc. (BCAS, Volume III, 2019).

BCAS 29, Cost of quality: Identification of quality cost should be based on traceability in a possible economic manner. The quality cost will be determined based on the amount incurred. The self-generated or procured resource finance cost should not be included in the quality cost and any penalty or imputed costs are not considered as quality costs (BCAS, Volume III, 2019).

BCAS 30, Service costing: The service provided by the organisation to the particular customer is treated as uniform. It is possible to compute the cost per unit of services. The cost can be classified into variable and fixed costs regardless of the nature of the services, i.e., the service cost is not related to accounting for inventories and there are no finished services for inventories (BCAS, Volume III, 2019).

BCAS 31, Construction contract costing: Guidelines related to cost contract are given in this standard. In the specific cost contracts, few aspects are related like site, labour costs, supply of material and goods costs, depreciation of plant and equipment, rental costs of plant and equipment, etc. There are two separate contracts: specific contracts and general contracts. General contracts include insurance, cost of design and technical assistance, and construction overheads (BCAS, Volume III, 2019).

## **2. Literature Review**

The UK Institute of Cost and Management Accountants prescribes the term 'cost accounting' or 'cost accountancy' as the method of costing. Cost accounting standards are practised for cost control and to ascertain the profitability of a business. There is a common belief that cost accounting was derived from financial accounting during the last 50 years and developed in England after the industrial revolution in the 18th century, but the application of these standards have been found as early as the 14th century. On the other hand, modern tactics of cost accounting were developed before the end of the 19th century as per some respective cost accounting authorities. The application of a standard costing system in manufacturing operations and cost efficiency is the result of the scientific management movement (Basu & Das, 2007). Cost accounting provides cost data, as well as strengths and weaknesses of the costing system to the management. As a result, the manufacturing company can make better strategic decisions to maximise profit (Rani & Kidance, 2012).

Providing a better guideline for cost accounting systems is the prime objective of cost accounting standards. The Cost Accounting Standard Board (CASB), a US federal government body, played an influential factor in the development of cost accounting standards. CASB was established in 1970 and thereafter formulated 20 cost accounting standards to ensure the systematic and uniform treatment of cost

(Cherrington, Hubbard & Luthy, 1988). The CASB's cost accounting standards (with title and effective date) are presented in the Appendix (Table AII). The Council of the Institute of Cost and Works Accountants of India (ICWAI) set up its own Cost Accounting Standard Board for standardising cost accounting. India's CASB prepares an annual cost accounting working report for the council of the ICWAI (Basu & Das, 2007). The Institute of Cost Accountants of India issued 24 cost accounting standards (CAS), generally accepted cost accounting principles (GACAP) and nine guidance notes on CAS.

With proper knowledge of cost accounting standards, a business can achieve competitive advantages against rival companies (Beheshti, 2004). In Bangladesh, the literature on cost accounting standards is incomprehensive. Relevant studies were reviewed to find the research gap, if any, in the context of the practices and implementation of cost accounting standards in different manufacturing concerns. It is observed that very few studies have been conducted in this field, making the researcher interested in initiating a study in this arena.

According to Mazumdar (2016), the BCAS provide guidelines for maintaining cost accounting records and preparing cost audit reports. It is effective for sectors where cost audit is mandatory as per BCAS Volume 1. The standards would help ensure compliance requirements of the company's act, as well as the Bangladesh Securities and Exchange Commission and other regulatory bodies. On the other hand, however, Deb and Jahan's (2018) study on the prospects and challenges of cost auditing in the Bangladeshi context, finds that 95% of respondents viewed application or adaptation of cost accounting standards as a major challenge. They also conclude that the prospect of cost auditing is promising in Bangladesh. Though cost auditing is a noteworthy part of cost accounting standards, the study did not include any issues of such standards.

To analyse cost accounting practices in Bangladesh, Khan, Parvin, & Sayeeda (2019) conducted a study on five pharmaceutical companies using a case study method. The study shows that managers are not acquainted with entire cost accounting practices. The companies studied followed traditional costing systems rather than activity-based costing systems to allocate overhead costs. Das and Ghosh (2014), meanwhile, studied six companies where cost auditing was mandatory, with data collected from 2007 to 2008 and from 2012 to 2013. To measure cost competitiveness, they find that high net worth companies adhered to cost accounting standards to manage the cost control mechanism. The requirement of applying and adapting cost accounting standards remains a challenge in Bangladesh.

Japan's economy experienced the evolution of cost accounting standards as a part of the pre- and post-war War revival. The Accounting Deliberation Committee of Japan issued cost accounting standards in 1962. In a study on the nature of Japanese cost accounting standards and cost accounting systems, Yoshikawa (2001) notes that cost accounting standards work as a foundation for every company. He also says Japanese culture plays an important role in developing cost accounting standards settings and practices. The ultimate costing tool is used for tax optimisation in the context of a transitional economy (Albu, Guinea & Tsamenyi, 2020).



To minimise waste reduction and continuous improvement in product development in advanced US manufacturing firms, Fullerton and McWatters (2004) conducted a survey on 121 executives and checked the relationship between various forms of traditional and non-traditional cost accounting practices. Their study shows that leading manufacturing firms adhere to traditional cost accounting practices. Still, significant advanced manufacturing concerns used internal cost accounting practices and non-traditional cost management systems. Cohen and Kaimenaki (2011) conducted a study on cost structure and quality based on 119 Greek manufacturing companies. They find that the cost accounting systems structure has a positive influence on dimensions of cost information quality. Al-Omiri and Drury (2007) also support the influence of cost accounting systems structure on cost information quality.

Studies on cost accounting have also been conducted in Bangladesh (Shil, Alam & Naznin, 2010). Survey-based studies focusing on the practices of different techniques of cost and management accounting in various Bangladeshi organisations have also been carried out (Fowzia & Nasrin, 2010; Shil & Pramanik, 2013; Yeshmin, 2015, etc.). However, few issues pertaining to cost accounting standards were discussed. In this paper, however, the researchers specifically consider BCAS practice and implementation in Bangladeshi manufacturing industries. To fill the existing literature gap, this study supports understanding the orientation and implementation of BCAS provided by the ICMAB among academicians, researchers, corporations and policymakers. However, due to on-the-ground confidentiality, managers were not willing to share some internal company information, which is a significant restraint of this study.

### **3. Methodology**

The target population for this study is selected manufacturing companies in Bangladesh. The companies are segregated into five categories: pharmaceuticals, ready-made garments, fast-moving consumer goods (FMCG), steel/re-rolling and others (petroleum and gas, foods manufacturing, electronics and furniture). Manufacturing organisations are increasing nowadays and both domestic and foreign companies are doing business in Bangladesh. So, from the large population size of this study, data was collected on a sample basis. A purposive sampling technique, an iterative approach of determining study samples rather than prearranged sampling frame (Robinson, 2014), was used to gather the data in this study. Though the researcher intended for a minimum sample size, a limited survey was conducted in 30 manufacturing companies due to the pandemic situation. We sent the questionnaire to many respondents, but due to company restrictions, the respondents were not willing to share the requested information. The survey respondents from different manufacturing companies in Bangladesh were mainly involved with the production process and adapted and implemented cost accounting standards.

Primary data as collected through a structured questionnaire survey using a Google form. The data collection period was from May 01, 2021, to May 31, 2021, during strict restrictions due to Covid-19 pandemic. A strict lockdown was imposed all over the country, meaning that the researchers could not physically meet or visit the company and the responsible persons. A structured questionnaire

along with a three-point Likert scale (agree, neutral, and disagree) was used for this study. A self-administered questionnaire survey method was used to collect data through a Google form to minimise costs and time and to maintain social distancing due to the pandemic situation. The researchers contacted the respondents over the phone, explained the objectives of the study, and took their consent. After that, the researchers shared the Google questionnaire form link through their email address and personal WhatsApp numbers. The researchers maintained the secrecy and confidentiality of the respondents and the companies. Researchers also gathered data from secondary sources such as websites, annual reports, etc.

There were two parts in the questionnaire. The first was on the background of the respondents and their organisation, i.e., the demographic features of the respondents. The second was about research objective-related questions, which highlighted the familiarity, source of knowledge, factors, future prospects, benefits and challenges associated with BCAS. Several important aspects were excluded from the questionnaire after the pilot survey due to sensitivity concerns.

Microsoft Excel and Statistical Package for the Social Sciences 26 (SPSS) software was used to analyse the primary data. A normality test was used to determine whether the data was a disseminated population. To check the normalcy of the data set, researchers used the Shapiro-Wilk test (Royston, 1983) and the skewness and kurtosis test (D'Agostino, Belanger & D'Agostino Jr, 1990). The researchers employed the Shapiro-Wilk test because it is a widely used method with a sample size of  $n < 50$ . A frequency test was used to analyse the demographic information and identify the percentage of company fundamentals. Multiple response analysis was used to identify the percentage of cases for the multiple response questions. The highest rank category using the mean was also used to identify factors regarding the implementation of BCAS.

## **4. Results and Discussion**

### ***4.1. Respondent profiles***

Table 1 shows that all respondents are male. The maximum number of respondents' age is between 36 to 40 years (26.7%) and above 40 years (26.7%). Many of the respondents were junior executive and officers (finance and accounts) (23.3%), followed by CFOs (13.3%), and senior executives of finance, tax and accounts (13.3%). There were also a few respondents working in different designation of finance and accounts departments, such as head of finance, general manager, deputy manager, manager, and factory manager, etc.

**Table 1. Respondent Profiles**

Variable	Group	n	%
Gender	Male	30	100.0
Age	Below 30 years	7	23.3
	30-35 years	7	23.3
	36 -40 years	8	26.7
	Above 40 years	8	26.7
Designation	Zonal head and assistant general manager (finance and accounts)	3	10.0
	Assistant manager (costing and finance)	2	6.7
	Chief financial officer	4	13.3
	Company secretary	1	3.3
	Deputy manager (finance and accounts)	1	3.3
	Deputy general manager (finance and accounts)	1	3.3
	Factory manager (accounts)	1	3.3
	Financial analyst	1	3.3
	General manager (finance and accounts)	2	6.7
	Head of finance	1	3.3
	Manager (finance and accounts)	2	6.7
	Junior executive and officer (finance and accounts)	7	23.3
	Senior executive (finance, tax and accounts)	4	13.3

#### 4.2. Fundamentals of companies

Figure 1 shows the nature of the business. 36.7% of respondents worked in petroleum and gas, foods manufacturing, electronics and furniture companies, which are indicated as others in the figure. 33.3% worked in ready-made garments companies.

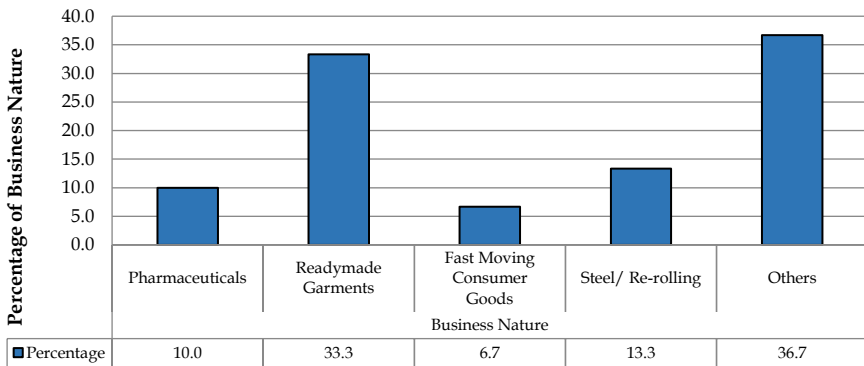
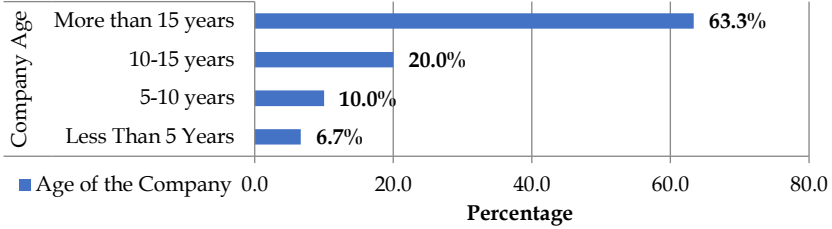
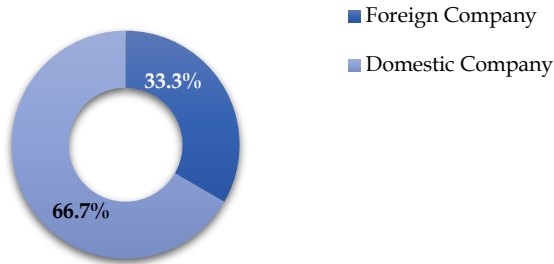
**Figure 1. Nature of Business**

Figure 2 shows the ages of the companies. 63.3% of companies were more than 15 years old, while 20% were aged between 10-15 years.



**Figure 2. Age of the Company**

Figure 3 shows the company type. 66.7% of the companies are domestic, while the rest were foreign.



**Figure 3. Company Type**

To analyse the practice of BCAS, there was a question in the questionnaire: “Does the company follow the Bangladesh Cost Accounting Standards?” In response to the question (Figure 4) about 57% respondents said that they follow the BCAS, while 27% said that they did not.

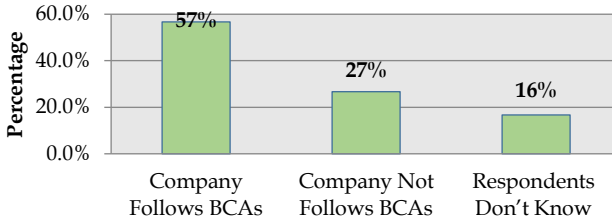


Figure 4. BCAS Followed by Companies

### 4.3 Familiarity with BCAS

Table 2 shows the respondent’s familiarity with BCAS. Most of respondents (70%) were acquainted with BCAS. About 17% respondents expressed that they may be familiar, which expresses that they are not fully aware of the standards. The remaining 13.3% respondents did not have enough knowledge about BCAS.

Table 2. Respondents’ familiarity with BCAS

Statement	Familiar		May be familiar		Not familiar	
	n	%	n	%	n	%
Are you familiar with Bangladesh Cost Accounting Standards?	21	70	5	16.7	4	13.3

Table 3 shows the sources of learning about the BCAS. Articles, journals, and books are the main sources (36.7%), along with other sources, like advertisements and brochures (33.3%). Colleagues, newspaper and social media are significant sources. Only 13.3% out of the total respondents were not familiar with the BCAS. It must be noted that the majority of respondents were familiar with the BCAS or had some knowledge about the standards.

Table 3. Respondents’ Source of Learning About the BCAS

		%
Where did you hear about the Bangladesh Cost Accounting standards?*	Newspaper	20.0
	Articles/ journals/books	36.7
	Social media	20.0
	Colleagues	26.7
	Other sources	33.3
	Not familiar with standards	13.3

\* Dichotomy group tabulated at value 1

#### **4.4 Reasons for not implementing the BCAS**

There can be several reasons for not adhering to the BCAS. With multiple response questions in Table 4, the authors tried to figure out the causes of not implementing the standards in the organisation.

As many as 20% respondents cite lack of knowledge resources persons as the main reason for not implementing the standards, whereas around 13% identified the lack of professional assistance. More than 50% of the respondents said that their company follows the standards.

**Table 4. Reasons for not implementing the BCAS**

		%
If the company does not have any plan to implement the standards, what are the reasons?*	Lack of professional assistance	13.3
	Lack of knowledgeable resource person(s)	20.0
	Other problems	33.3
	The company already follows the standards	56.7

\* Dichotomy group tabulated at value 1

#### **4.5 Benefits and challenges associated with BCAS**

Table 5 discusses both the benefits of using BCAS, and the challenges or obstacles in its implementation. In these multiple responses questions, the majority of respondents (66.7%) agreed that by using the BCAS, costs can be calculated more accurately and appropriately. Among other benefits, effective identification of the cost elements, elimination of unnecessary costs, and assistance with estimating costing budget were cited by 56.7% of respondents. As the respondents agreed with the benefits of using BCAS, we can say that it will provide all manufacturing organisations with an advantage in terms of their costing systems.

The second part of Table 5 lists challenges or obstacles of implementing the BCAS. The majority (73.3%) say that lack of proper training in this field is the main challenge. Lack of professional support (56.7%) and lack of cooperation and coordination from respective authorities (36.7%) are also significant obstacles. According to a few respondents, infrastructural issues, unwillingness of owners, complex processes, and non-assistance of stakeholders also seem to be the hindrances.

**Table 5. Benefits of Using and Challenges for Implementing BCAS**

		%
How can the BCAS help the organisation?*	The production process is/will be less complex	23.3
	Each element of cost can be identified	56.7
	Minimise the production cost	46.7
	Costs can be calculated more accurately and appropriately	66.7
	Maximum output from a process can be ensured	26.7
	Unnecessary costs can be eliminated	56.7
	Help to estimate costing budget	56.7
	No idea	6.7
		%
What are the challenges or obstacles in using or implementing these BCAS?*	Lack of professional support	56.7
	Infrastructural problem	20.0
	Lack of proper training in this field	73.3
	Non-assistance from stakeholders	10.0
	Lack of co-operation and coordination	36.7
	The owner (s) is not interested	13.3
	The procedure is complex	13.3
	No idea	3.3

\* Dichotomy group tabulated at value 1

#### **4.6 Practice and implementation of BCAS**

Table 6 demonstrates the influential factors in relation to the practices and implementations of BCAS. 83.3% respondents think that organisations should arrange training on implementing cost accounting standards. This has the highest mean value of 1.17. Moreover, the assistance of a skilled resource person from ICMAB (73.3%) and the necessity of a separate costing department (66.7%) are both considered as significant issues. Both factors have the same mean value of 1.33.

It is clear from the analysis that almost everyone recognises the benefits of BCAS in their organisation (90%). However, they also state that ICMAB should weigh in on any changes or modifications of those standards (80%). Both factors have an equal mean of 1.2.

**Table 6. Practice and Implementation of BCAS**

Statements	Agree		Neutral		Disagree		Mean
	n	%	n	%	n	%	
Organisations should arrange training on the implementation of BCAS	25	83.3	5	16.7	0	0	1.17
An expert from ICMAB should assist (if needed) in implementing the BCAS for the first time	22	73.3	6	20	2	6.7	1.33
Manufacturing organisations need a separate cost accounting department	20	66.7	10	33.3	0	0	1.33
Cost accounting standards are beneficial for the organisation	27	90	3	10	0	0	1.2
ICMAB should take opinions from manufacturing organisations before modifying the standards (if needed)	24	80	6	20	0	0	1.2

#### **4.7 Company's future prospects to implement the BCAS**

Table 7 shows the responses to companies' future plans in relation to BCAS. In the first part of the table, 23% respondents were not sure whether their company had any plans to implement the BCAS, whereas 20% of respondents said the opposite. Among this 20%, whose companies do have future plans to implement BCAS, 13% wants to do so within one to two years, and 7% of them will do the same within one year. The mean and median values are almost similar here.

**Table 7. Company's Future Prospects to Implement the BCAS**

The company has a plan to implement the BCAS*					
	n	%	Mean	Median	SD
Yes	6	20			
Not sure	7	23	3.17	4	1.177
No	0	0			
Company already follows the BCAS	17	57			
<b>Total</b>	<b>30</b>	<b>100</b>			
When should the company implement the BCAS?*					
	n	%	Mean	Median	SD
Within one year	2	7			
Within 1-2 years	4	13	3.3	4	0.952
No specific time	7	23			
Company already follows the BCAS	17	57			
<b>Total</b>	<b>30</b>	<b>100</b>			

\* Company those not follows BCAS

\*\* Company that wants to implement BCAS with immediate effect



## **5. Conclusion**

Cost standards were designed to improve the efficiency and product pricing in the late 19th century. The philosophy behind cost accounting standards is that anything can be controlled if it can be measured appropriately. Through the proper application of cost accounting standards, different elements of cost can be accurately measured and recorded. With reliable cost accounting, along with the help of cost accounting standards, a business can achieve a competitive edge against its competitors (Das & Ghosh, 2014). Currently, manufacturers of all sizes have a cost accounting system that keeps records of all costs incurred in producing and selling diverse product lines. The success of several business organisations clearly shows that cost accounting information is noteworthy. However, there is a need to raise awareness for better use of cost information and make it a better decision support system to meet the organisation's goals and objectives (Berk, 2020).

With the changes of business needs, standards are also changing. However, it is not possible to discuss every aspect in one study. As a developing country, Bangladesh is a potential zone for investing in manufacturing industry for multinational corporations. Hence, we cannot ignore the significance of implementing the standards. Furthermore, businesses look for a cost-effective operation to achieve their goal. Thus, cost accounting standards can provide manufacturing organisations with a great deal to control costs. In this study, the authors have tried to provide an overview of practising the standards in Bangladesh and how the responsible authorities are assisting organisations in implementing those standards.

This study emphasises the practice of cost accounting standards in Bangladesh. An overview of available cost accounting standards for manufacturing organisations in Bangladesh is demonstrated here, as well as the role of ICMAB in implementing the standards. Analysing with large data set from manufacturing organisations can be a future research scope. Further research studies can be on evaluating the cost accounting standards adopted by the manufacturing industry. Moreover, the practices and implementation of cost standards can be explored in line with manufacturing cost performance.

Firms always look forward to reducing the cost of production and other relevant costs. Cost accounting standards (CAS) can provide an overall guideline to control costs and help an organisation to remain ahead in the competition. Practising these standards in business will enhance performance. The present study reveals that lack of proper training is a significant obstacle for implementing BCAS. In this regard, the role of standard creating authority, ICMAB, is essential in enhancing the practice of the standards. Before and after issuing cost accounting standards, ICMAB arranged several meetings, seminars and workshops with various related parties. However, there is always room for arranging more sessions to make these standards more recognised, as about 13% of respondents state that they are not familiar with BCAS. Moreover, this study reveals that it will be helpful for the organisation if they receive assistance from ICMAB when implementing the standards for the first time. Apart from that, 80% of respondents agree on taking opinions from concerned firms before making modification or changes to those standards.

In Bangladesh, most of cost accounting studies focus on cost accounting practices and techniques, but do not concentrate on the country's cost accounting standards. The present study on BCAS is limited in Bangladesh, particularly to manufacturing concerns within the country. Hence, the prime theoretical contribution of this study is that it provides an overview of practices and implementations of BCAS in manufacturing, and more specifically, industries located in Chittagong, the commercial capital of Bangladesh. Moreover, companies which do not follow the cost accounting standards and the respondents who are not familiar with the BCAS also realise the real value and significance of applying these standards in the manufacturing process. In short, even those not from accounting or business backgrounds also comprehend the standards of cost accounting.

The outcomes of this study have substantial practical or policy implications. This survey can enhance a firm's performance and minimise the obstacles of implementing cost accounting standards. By using primary data from an online survey, the study tried to investigate the benefits and challenges associated with BCAS. Furthermore, the influencing factors identified in this study regarding BCAS will assist relevant authorities to understand the reason for practising and implementing cost standards in manufacturing. The findings of this study will support regulatory and other bodies when they want to establish new rules and regulations on cost standards. The overall study can be used as a teaching and learning tool for academics and students respectively.

While conducting the research, there was dearth of related information regarding the practice of cost accounting standards in secondary sources. The small sample size was also a substantial obstacle in determining the significance of the relationships between different variables. There were limited studies on cost accounting standards, especially in the context of Bangladesh. Data collection was conducted during the Covid-19 lockdowns. Hence, the researchers could not conduct face-to-face interviews, nor visit sites due to restrictions imposed by the Bangladeshi government in response to the pandemic.

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## Appendix

Table AI- Snapshot Regarding the Names of BCAS and Effective Dates

Number	Name	Effective date
BCAS 1	Cost concepts and classification	January 1, 2015
BCAS 2	Cost estimation	January 1, 2015
BCAS 3	Cost allocation bases	January 1, 2015
BCAS 4	Indirect costs	January 1, 2015
BCAS 5	Indirect cost rates	January 1, 2015
BCAS 6	Support department cost	January 1, 2015
BCAS 7	Job order costing	January 1, 2015
BCAS 8	Process costing	January 1, 2015
BCAS 9	Joint cost	January 1, 2015
BCAS 10	Target costing	January 1, 2015
BCAS 11	Life cycle costing	January 1, 2017
BCAS 12	Kaizen costing	January 1, 2017
BCAS 13	Standard costing	January 1, 2017
BCAS 14	Activity-based costing	January 1, 2017
BCAS 15	Product mix decision	January 1, 2017
BCAS 16	Transfer pricing	January 1, 2017
BCAS 17	Performance measurement	January 1, 2017
BCAS 18	Cash flow	January 1, 2017
BCAS 19	Budget and pro forma financial statement	January 1, 2017
BCAS 20	Activity-based management	January 1, 2017
BCAS 21	Capital budgeting	January 1, 2017
BCAS 22	Enterprise resource planning	January 1, 2017
BCAS 23	Strategic cost management	January 1, 2017
BCAS 24	Material cost	December 1, 2019
BCAS 25	Employee cost	December 1, 2019
BCAS 26	Cost of utilities	December 1, 2019
BCAS 27	Cost of production for captive consumption	December 1, 2019
BCAS 28	Capacity determination	December 1, 2019
BCAS 29	Cost of quality	December 1, 2019
BCAS 30	Service costing	December 1, 2019
BCAS 31	Construction contract costing	December 1, 2019

Source: *Bangladesh Cost Accounting Standards* Volume I, II & III

**Table AII. The CASB Cost Accounting Standards**

Number	Title	Effective date
400	Definitions	September 1, 1972
401	Consistency in estimating, accumulating, and reporting costs	July 1, 1972
402	Consistency in allocating costs incurred for the same purpose	July 1, 1972
403	Allocation of home office expenses to segments	September 30, 1973
404	Capitalisation of tangible assets	July 1, 1973
405	Accounting for unallowable costs	April 1, 1974
406	Cost accounting period	July 1, 1974
407	Use of standard costs for direct material and direct labour	October 1, 1974
408	Accounting for costs for compensated personal absence	July 1, 1975
409	Depreciation of tangible capital assets	July 1, 1975
410	Allocation of business unit general and administrative expenses to final cost objectives	October 1, 1976
411	Accounting for acquisition costs of material	January 1, 1976
412	Composition and measurement of pension cost	January 1, 1976
413	Adjustment and allocation of pension cost	March 10, 1978
414	Cost of money as an element of the cost of facilities capital	October 1, 1976
415	Accounting for the cost of deferred compensation	July 10, 1977
416	Accounting for insurance costs	July 10, 1979
417	Cost of money as an element of the cost of capital assets under consideration	December 15, 1980
418	Allocation of direct and indirect costs	September 20, 1980
420	Accounting for independent research and development costs and bid and proposal costs	March 15, 1980

Source: Cherrington, Hubbard, and Luthy (1988)