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Major Determinants of Prices Increase of Building Materials on Ghanaian Construction Market

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Abstract

Prices increase of building materials is a common trend in both developed and developing countries. The prices increase of building materials results in high cost of housing.The aim of this study is to identify the major determinants of prices increase of building materials on Ghanaian construction market, and also to assess the relationship between the independent variables of the prices increase. A five-point Likert scale was used for the study; from strongly disagree (1) to strongly agree (5). The variables in the questionnaire were ranked based on the response of the participants of the study using Mean Response Analysis (MRA) statistics. Spearman correlation matrix was used to determine the relationship between the variables of prices increase of building materials. Crude oil prices, energy cost, local taxes and charges, cost of fuel and power supply, high running cost, high prices of raw materials, cost of transportation and the high cost of labour were found to be the major determinants of prices increase of building materials on Ghanaian construction market. The study further found multicollinearity relationship among variables of prices increase of building materials, of which the highest correlation coefficient was found between fast-growing demand due to high global economic growth and over-dependence on imported building materials. The study recommends that further research should be carried out to determine the control measures of increase prices of building materials in Ghana.

Keywords

Building Materials, Construction Market, Cost of Building Materials, Prices Increase

1. Introduction

Building materials are materials used in construction work starting from the

underground to the finishing [1]. Building materials are basic construction products such as cement, bricks, concrete, and aggregates, *i.e.* sand, rock, and gravel [2]. Prices increase of building materials has become a common global trend, and even the developed countries are not left out. A number of developed countries are in recent times experiencing the problem with prices increase of building materials. According to Jonsson [3], in Sweden, building materials' cost rose by 3.1%, the largest increase in the building material group was in reinforcement steel which price increase by 5.8%, concrete products price rose at 2.7% and other building material groups also increased. Slowey [4] noted that the numbers from the Bureau of Labour Statistics US revealed a 4.8% rise in building material prices between February 2016 and February 2017. Building materials cost fluctuate on a daily basis, but the overall trend in recent time has been up [5].

The situation in developing countries is not different, where building materials prices keep increasing. A study by Windapo *et al.* [6] showed that the price of building materials in South Africa among others have an effect on the cost of the building. The cost of building new houses in Namibia increased considerably between 2008 and 2009 because of a hike in the prices of building materials, like cement [7]. According to Pashardesa and Savva [8] increase in house prices during the period 1988-2008 in Cyprus points to increase in the cost of building materials.

Wagura [9] noted that building materials are expensive in Kenya due to the transport and importation costs. A study by Oladipo and Oni [10] reviewed selected macroeconomic factors impacting building material prices in Nigeria. Huan and Jianhua [11] analysed the factors that cause the price change of building materials in China. Rajaprabha *et al.* [12] studied the factors affecting the cost of building material in construction projects in India. Nadramia [2] indicated that demographic trends and other indicators are most relevant in the assessment of market conditions for building materials prices. This means studying the factors that cause prices increase of building materials in different countries is relevant because the situation in each country is different. There is the need also to determine the factors that contribute to the prices increase of building materials in Ghana. This study, therefore, investigates the major determinates of prices increase of building materials on Ghanaian construction market, and also assess the relationship between the independent variables.

2. Literature Review

The supply of houses is affected by the increase in the costs of building materials [13]. The growth of the construction sector brings with it, the growth in the manufacturing industry for the building materials such as cement and steel [9]. Cost overruns among other factors are often caused by the increasing prices of resources such as building materials [14] [15] [16]. The cost of building a house has rapidly increased with the increase in the cost of construction materials such

as cement, steel, sand, and piling materials since 2008 [17]. According to Reyes [5] in the US, prices of building materials increased in 2016 by:

- 13.8% for oriented strand board (OSB), a type of particle board commonly used in home construction;
- 8.7% for softwood lumber, commonly used in home construction;
- 5.0% for gypsum products, such as plaster and plasterboard; and
- 3.5% for ready-mix concrete, used for projects like foundations and driveways.

Oladipo and Oni [10] established that inflation, exchange rate, import, interest rate, money supply and demand for money have a significant effect on the prices of building materials in Nigeria. Another study conducted in Nigeria by Akanni *et al.* [18] found that the three most rated factors responsible for the rising cost of building materials are the exchange rate of the Nigeria Naira, cost of fuel and power supply, and changes in government policies and legislation, while fluctuations in the construction cost, reduced volume of construction output and risk of project abandonment were the three most rated implications. A study by Huan and Jianhua [11] identified the value of building materials, supply-demand relationship, national macro policy, the value of money, notes circulation and the influence of the international market as the factors that cause the price change of building materials in China. In South Africa, a study by Windapo and Cattell [19] examined the trends in building material prices and the factors contributing to the increase in prices of building materials. The study found transport costs, crude oil prices, labour costs and energy costs as the factors that affect building material prices.

Rajaprabha *et al.* [12] found design issues and market condition issues as the major significant factors that cause building materials' prices increase in India. According to Nadramia [2], building materials companies that are able to defend and increase market share are likely to adjust their strategies to evolving market conditions, be innovative, have some pricing advantage, and maintain sales growth and profitability, even during adverse economic conditions. A study by Tupenaite *et al.* [20] reveals that prices movements in Lithuania's housing sector can largely be explained by economic fundamentals and housing market indicators. The housing supply lag in urban areas has been worsened by the high cost of building materials among others which make decent houses unaffordable to the urban poor who in turn result to makeshift houses [9].

3. Methodology

The research design used for this study was a descriptive survey. The population of the study were building material merchants, building contractors and registered quantity surveyors. They constituted the population of the study due to the fact that they are knowledgeable on issues related to pricing of building materials. Snowball and purposive sampling techniques were used to select the sample for collecting data. The snowball technique was adopted for selecting mer-

chants of building materials to participate in the study. Glen [21] explains snowball sampling as a technique where research participants recruit other participants for a test or study. It is used where potential participants are hard to find. It is called snowball sampling because once you have the ball rolling, it picks up more "snow" along the way and becomes larger and larger. Initially, three merchants of building materials were identified who aided in recruiting others for the study. Purposive sampling technique was also used to select the contractors and quantity surveyors for the study. Contractors and quantity surveyors who were currently involved in construction project works were chosen for the study since they possessed enough information on the current prices of building materials. Three cities were selected for the study, thus Accra, Kumasi and Sunyani. Accra and Kumasi were selected because they are the cities where major construction activities are taking place, while Sunyani was selected to represent cities with less construction activities.

The questionnaire was used to collect data on the major determinants of prices increase of building materials in Ghanaian construction market. A five-point Likert scale was used for the study; from strongly disagree (1) to strongly agree (5). The questionnaire contained items on demographic data and items on the determinants of building materials prices increase. The items on the determinants of building materials prices increase were adopted from literature. The instrument was pilot tested and the reliability coefficient (Cronbach's Alpha) determined was 0.93 which was above the recommended value of 0.7 [22]. The questionnaire was administered to a selected sample of 120, out of which 95 questionnaires were retrieved, representing 79% response rate.

The variables in the questionnaire were ranked based on the response of the participants using Mean Response Analysis (MRA) statistics. The mean score obtained was based on the five-point Likert scale. The formula for the MRA is:

$$\text{Mean score} = (5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1)/ (n_5 + n_4 + n_3 + n_2 + n_1)$$

where n_5, n_4, n_3, n_2, n_1 = number of respondents who answered from strongly agree to strongly disagree.

This ranking aided in determining which variables play the main role in determining price increase of building materials. The mean ratings were compared with the theoretical mean rating of 4.0 to determine the major determinants of prices increase of building materials in the construction market. Therefore, any mean relating to 4.0 or above indicated the expression of major determinant of the prices increase of building material, while mean values below 4.0 indicated the expression of none major determinants. Also, Spearman correlation matrix with the aid of statistical package for social sciences (SPSS) version 21 was used to determine the relationship between the variables.

4. Results and Discussion

4.1. Demographic Characteristics of the Respondents

The demographic characteristics of the respondents are shown in **Table 1**. It

could be seen that majority (80%) of the respondents were males, which indicates male dominant in the construction industry in Ghana as was also found by Danso [23]. 31% the respondents were less than 30 years of age. Those between 40 - 49 years also formed 29% of the overall respondents, whereas 30 - 39 years were 24% of respondents. Generally, it could be seen that majority of the respondents were less than 50 years with an overall percentage of 84% of total respondents. For Kumasi municipality, a total of 29 respondents were obtained with 10 quantity surveyors, 11 merchants and 8 contractors, whereas Accra had respondents of 49 with 18 quantity surveyors, 21 contractors, and 10 merchants. Sunyani, had 2 quantity surveyors, 3 contractors, and 12 merchants. Generally, the majority (68%) of respondents had 5 and more years of working experience.

4.2. Major Determinants of Prices Increase of Building Materials

To achieve the objective of the study, it was necessary to identify the determinants of prices increase of building materials, as such the variable were obtained from literature review which was used in the determination of these major determinants. The ranking of the variables of the prices increase of building materials was estimated from the MRA statistics. The mean score for each variable was based on the Likert-type scale of 1 to 5.

Table 1. Demographic characteristics of respondents (n = 95).

Characteristics	Merchants	Contractors	Quantity Surveyors	Total	
	(Freq.)	(Freq.)	(Freq.)	(Freq.)	(%)
Gender					
Male	21	31	24	76	80
Female	12	1	6	19	20
Age					
<30 years	4	10	15	29	31
30 - 39 years	9	7	7	23	24
40 - 49 years	12	10	6	28	29
50 - 59 years	8	3	1	12	13
≥ 60	0	2	1	3	3
Municipality					
Kumasi	11	8	10	29	31
Accra	10	21	18	49	51
Sunyani	12	3	2	17	18
Experience					
<5 years	8	11	12	31	32
5 - 9 years	12	10	13	35	37
>10 years	13	11	5	29	31

The results shown in Table 2 represent respondents ranking of the determinants of prices increases of building materials in Ghana. Out of the 29 variables from literature presented to the respondents, they ranked 8 as the major determinants of prices increase of building materials. Crude oil prices, energy cost,

Table 2. Mean Response Analysis (MRA) statistics of the respondents.

S/N	Causes	1	2	3	4	5	Total	Mean	Rank
1	Crude oil prices	0	3	4	50	28	85	4.21	1
2	Energy cost	0	4	5	44	30	83	4.20	2
3	Local taxes and charges	3	2	9	34	37	85	4.18	3
4	Cost of fuel and power supply	1	6	8	30	38	83	4.18	3
5	High running cost	1	3	7	43	30	84	4.17	5
6	High prices of raw materials	1	4	10	35	34	84	4.15	6
7	Cost of transportation	0	6	9	41	29	85	4.09	7
8	High cost of labour	0	7	8	40	29	84	4.08	8
9	Rapid depreciation of national currency	1	8	15	34	27	85	3.92	9
10	Interest rate and cost of finance	5	4	9	47	18	83	3.83	10
11	Government policies and legislature	4	7	15	35	24	85	3.80	11
12	Maximization of profit by manufacturers	4	5	15	47	14	85	3.73	12
13	High tariffs	2	14	11	35	21	83	3.71	13
14	Over-dependence on imported building materials	2	17	14	24	27	84	3.68	14
15	Cost of plant	3	13	20	34	13	83	3.49	15
16	Declining supply or anticipated shortage in supply	2	18	20	24	19	83	3.48	16
17	Behaviour of financial market participants	7	16	15	30	13	81	3.32	17
18	Competition	14	13	10	28	19	84	3.30	18
19	Fast-growing demand due to high global economic growth	6	27	12	24	13	82	3.13	19
20	Population growth	12	19	14	29	11	85	3.09	20
21	Related product pricing	8	16	23	33	3	83	3.08	21
22	Purchase frequency	2	30	17	28	6	83	3.07	22
23	Availability of substitute	7	20	20	30	5	82	3.07	22
24	Lack or absence of indigenous technology for the production of building materials	15	12	21	28	9	85	3.05	24
25	Price skimming	6	22	21	32	2	83	3.02	25
26	Producers incentives	8	21	23	27	2	81	2.93	26
27	Inadequate infrastructural facilities	11	27	18	17	12	85	2.91	27
28	Business cycles	10	19	23	25	3	80	2.90	28
29	Knowledge and management skills	18	29	18	17	2	84	2.48	29

local taxes and charges, cost of fuel and power supply, high running cost, high prices of raw materials, cost of transportation and high cost of labour with mean values 4.21, 4.20, 4.18, 4.18, 4.17, 4.15, 4.09 and 4.08 respectively, were found to be the major determinants of the increase prices of building materials. This result corroborates the findings of previous studies as the mean score of the opinions of respondents in **Table 2** confirms the findings of Akanni *et al.* [18], Windapo and Cattel [19], Ihuah [24], Mbugua [25], Kpogli [26], Bencivenga *et al.* [27] and Entin [28].

A close observation of the variables responsible for the increasing prices of building materials in **Table 2** reveals that the crude oil price is the most significant variable. This variable is perceived to have produced a chain effect and is responsible for the ranks of the energy cost and cost of fuel and power supply as Ghanaians dependency on imports of petroleum products, which are widely used to generate energy for both production and transportation of the building materials across the nation is very high [26]. The crude oil prices, which by implication affects the cost of fuel, energy and the cost of transportation, is also perceived to have been responsible for the trend in the rising cost of building materials such as aggregates, sand, cement, reinforcement etc. as depicted in the price index of Akanni *et al.* [18].

Energy cost ranked second by respondents was found to be a major determinant of price increase of building materials. High energy costs have an impact on the production of most building materials since producers need to expand building material costs to wage off the increments in high energy costs [19]. A large portion of the energy utilized for the manufacturing of building materials is subject to the use of crude oil, once the expenses of crude oil heighten, then the cost required in producing energy will likewise increase, with the influence increasing the cost of other products [27].

An increase in local taxes and charges influences everything required in the production of building materials in an unexpected way. Taxes and charges imposed on suppliers by the government and its allies may be passed on to the buyers of the building materials as a cost increment. In the event that the completed item can't ingest the taxation rate, the producer or the retailer may need to bear the taxation rate or find different strategies to assimilate the expense. Moving the weight of an expense is not generally a monetarily plausible alternative, and the versatility of interest will, at last, manage the capacity to move the taxation rate to another gathering [28].

The cost of raw materials for manufacturing building materials impact on the prices of the building materials. The rising raw materials costs along with other factors such as oil, gas and energy are the key causes of increases in the prices of building materials such as cement, roofing membranes and waterproofing [29]. The raw materials required and the proposed construction details have bearing on the cost of the project [30].

Cost of transportation has been identified to be one of the contributing factors

to the cost of building materials [31]. The increased material cost is primarily due to increased transport charges [32]. High transport and freight costs have been identified as the factors responsible for building material price increases in most African countries [19].

The high cost of labour leads to increase prices of building materials. A number of factors affect labour costs but can also boost productivity, these include better training, realistic performance-based incentives and effective organisation and supervision [33]. The employer's commitment to workers in terms of providing training and offering better rates of pay and conditions to staff is normally a worthwhile investment [30]. This invariably leads to high cost of labour which is passed on to the cost of the product.

4.3. Relationship between Independent Variables of Prices Increase of Building Materials

To assess the association between the independent variables of prices increase of building materials, a simple bivariate correlation was carried out and the results are shown in **Table 3** which reports the intercorrelation matrix of the independent variables. **Table 3** shows a Spearman correlation matrix among independent variables. The result portrayed multicollinearity among variables. A two-tailed spearmen correlation was used in order to ascertain the direction of the relationship between the variables since initially the direction was not known. Relationships between variables were either positive or negative. The highest correlation coefficient was found between *fast-growing demand due to high global economic growth* and *over-dependence on imported building materials* ($r = 0.607$; $p < 0.01$).

Government policies and legislature had a positive relationship with some variables such as *local taxes and charges* ($r = 0.438$, $p < 0.01$), and *fast-growing demand due to high global economic growth* ($r = 0.302$, $p < 0.01$). This indicates that if the impact of government policies and legislature on building materials prices increases then the impact of variables such as local taxes and charges, and fast-growing demand due to high global economic growth will also increase. This is as a result of the influence of government and its policies and legislature on other variables within the same jurisdictions as such a higher impact accruing from that will lead to the same impact from the other related variables.

The variable *interest rate and cost of finance* had a direct relationship between *cost of fuel and power supply* ($r = 0.407$, $p < 0.01$), *inadequate infrastructural facilities* ($r = 313$, $p < 0.1$), *cost of plant* ($r = 0.560$, $p < 0.01$), *business cycles* ($r = 0.360$, $p < 0.01$), *knowledge and management skills* ($r = 0.331$, $p < 0.01$), and *population growth* ($r = 0.385$, $p < 0.01$). This implies that in considering their influence on pricing, they all have the same level of impact as such they all have the iota of impact on building materials prices. Interest rate and cost of finance again had a negative or an inverse relationship between high prices of raw materials. The inverse relationship implies that inculcating a full effect of one on

Table 3. Spearman's correlation matrix of independent variables of prices increase of building materials.

	Independent Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1	Government Policies and Legislature	1																												
2	Local Taxes and Charges	0.438**	1																											
3	Interest rate and cost of finance	0.128	0.226*	1																										
4	Cost of fuel and power supply	0.017	0.260*	0.407**	1																									
5	Inadequate Infrastructural facilities	0.230*	0.035	0.313**	0.045	1																								
6	Cost of Transportation	0.061	0.206	0.148	0.500**	0.025	1																							
7	Cost of Plant	0.106	0.211	0.560**	0.395**	0.366**	0.132	1																						
8	Fast–growing demand due to high global economic growth	0.302**	0.139	0.213	0.162	0.235*	0.228*	0.143	1																					
9	Declining supply or anticipated shortage in supply	0.195	0.043	0.001	0.119	0.352**	0.300**	−0.005	0.297**	1																				
10	Behaviour of financial market participants	0.102	−0.078	0.272*	0.034	0.479**	0.031	0.292**	0.221	0.385**	1																			
11	Competition	−0.007	−0.236*	−0.038	−0.086	−0.055	−0.003	−0.064	0.187	0.222*	0.143	1																		
12	Energy cost	−0.123	−0.226*	0.066	0.253*	−0.036	0.180	0.032	−0.068	0.060	−0.013	0.022	1																	
13	Crude oil prices	−0.010	0.013	−0.003	0.023	0.085	0.030	0.026	0.079	−0.041	0.009	−0.107	0.557**	1																
14	Maximization of profit by manufacturers	0.139	0.154	0.029	−0.011	0.203	0.150	0.031	0.378**	0.280*	0.207	0.035	−0.099	0.177	1															
15	Over–dependence on imported building materials	0.231*	0.082	0.221*	0.311**	0.290**	0.297**	0.154	0.607**	0.564**	0.324**	0.294**	0.099	0.077	0.547**	1														
16	Rapid depreciation of national currency	0.077	−0.092	0.042	−0.070	0.224*	−0.011	0.103	0.028	0.207	0.304**	0.058	0.208	0.250*	0.280**	0.315**	1													
17	Lack or absence of Indigenous technology for the production of Building materials	0.125	−0.199	0.181	0.101	0.312**	−0.124	0.285**	0.197	0.148	0.365**	0.115	0.157	0.098	0.144	0.289**	0.298**	1												
18	High prices of raw materials	−0.008	−0.046	−0.267*	0.088	−0.135	0.302**	−0.207	0.187	0.396**	0.047	0.258*	0.164	0.214*	0.285**	0.274*	0.295**	0.055	1											
19	High running cost	0.099	0.086	−0.144	0.053	0.053	0.218*	−0.050	0.125	0.369**	0.143	0.134	0.259*	0.277*	0.335**	0.317**	0.295**	0.065	0.509**	1										
20	High cost of labour	−0.201	−0.072	0.027	0.156	−0.044	0.100	0.082	0.076	−0.022	−0.154	−0.044	0.167	0.285**	0.022	−0.025	0.028	−0.049	0.288**	0.326**	1									
21	High tariffs	0.093	−0.052	0.028	−0.127	0.106	−0.133	0.007	0.093	0.315**	0.092	0.226*	0.046	0.128	0.268*	0.299**	0.331**	0.279*	0.365**	0.410**	0.377**	1								
22	Related product pricing	0.127	−0.154	0.057	0.005	0.324**	0.009	0.038	0.375**	0.377**	0.234*	0.437**	0.061	0.014	0.085	0.357**	0.151	0.291**	0.158	0.182	0.007	0.431**	1							
23	Purchase frequency	0.117	−0.045	−0.065	−0.104	0.401**	0.106	−0.034	0.344**	0.611**	0.398**	0.220*	0.012	0.117	0.281*	0.432**	0.323**	0.293**	0.231*	0.295**	0.046	0.372**	0.428**	1						
24	Price skimming	0.035	−0.009	0.116	0.153	0.374**	0.171	0.154	0.435**	0.467**	0.356**	0.004	−0.007	−0.012	0.293**	0.487**	0.096	0.324**	0.143	0.123	0.086	0.172	0.424**	0.546**	1					
25	Producers incentives	0.066	−0.076	0.255*	0.185	0.233*	0.010	0.255*	0.415**	0.289**	0.308**	0.205	−0.056	−0.062	0.114	0.341**	0.065	0.336**	0.023	0.143	0.166	0.329**	0.334**	0.438**	0.349**	1				
26	Availability of substitute	0.067	−0.095	0.209	0.223*	0.106	0.098	0.228*	0.091	0.179	0.172	0.066	0.240*	0.054	0.192	0.261*	0.276*	0.366**	0.202	0.255*	0.197	0.414**	0.215	0.166	0.343**	0.433**	1			
27	Business Cycles	0.273*	0.233*	0.360**	0.300**	0.312**	0.102	0.337**	0.272*	0.134	0.182	0.044	−0.217	−0.151	0.192	0.258*	−0.157	0.264*	−0.216	−0.117	−0.034	0.112	0.205	0.174	0.331**	0.385**	0.240*	1		
28	Knowledge and management skills	0.180	−0.041	0.331**	0.179	0.394**	0.071	0.329**	0.184	0.274*	0.452**	−0.075	0.019	−0.024	0.256*	0.242*	0.264*	0.571**	0.054	0.216*	0.081	0.419**	0.349**	0.433**	0.403**	0.595**	0.451**	0.395**	1	
29	Population growth	0.129	0.049	0.385**	0.266*	0.075	0.175	0.228*	0.140	0.123	0.201	0.049	0.053	−0.011	0.140	0.157	−0.200	0.178	0.004	0.168	0.145	0.092	0.070	0.233*	0.290**	0.319**	0.303**	0.361**	0.368**	1

prices will result in a reduction of the others influence on prices of building materials as such as ones' impact increases the others impact decreases.

Besides, there was a substantial relationship between *fast-growing demand due to a high global economic growth* and *over-dependence on imported building materials* ($r = 0.607$, $p < 0.01$). This means that when the demand for building materials increase as a consequence of the fast growing rate of economic factors, most people will then tend to highly depend on imported building materials as such their impacts and vice versa [34]. Another essential positive relationship was found between *declining supply or anticipated shortage in supply* and *over-dependence on imported building materials* ($r = 0.564$, $p < 0.01$). Once producers fail to supply the quantum of building materials required or when the supplies of construction materials are reduced, individual or customers will tend to rely on imported building materials to be able to see the amount of quantity required [34]. *Crude oil prices* were found to be the major determinant on the price level, caused a confident relation with *energy cost* ($r = 0.557$, $p < 0.01$). Most of the energy used for the production of building materials is dependent on the utilization of crude oil as such once the costs of crude oil escalate then the cost involved in providing energy will also increase [27].

Maximization of profit by the manufacturers as one of the determinants also had a positive relation on *over dependence on imported building materials* ($r = 0.547$, $p < 0.01$) implying that, when manufacturers decide to increase their net margins on building materials, the prices of the products will increase as such consumers will tend to rely more on imported products as that leads to less price than the ones being made within their locality. Also, the positive relationship between *high running cost* and *high prices of raw materials* was known ($r = 0.509$, $p < 0.01$). Raw materials are part of the running cost of production as such the cost of raw materials will consequently lead to high running cost [30]. *Price skimming* and *purchase frequency* are positively correlated ($r = 0.546$, $p < 0.01$). With price skimming having to do with the setting of a price at a higher level and later reducing it over time, consumers purchase frequency will determine how long this price would be reviewed as time goes on [35]. This implies that the lower the purchase frequency of consumers, the higher it is possible to maintain the high price for a specific period of time so as not to run loss and vice versa. Producers of building materials would inevitably inculcate an iota of their knowledge on management in the pricing of building materials as such there was a positive correlation between *producers' incentives* and *knowledge and management skills* ($r = 0.595$, $p < 0.01$).

5. Conclusions

This study aimed at identifying the major determinants of prices increase of building materials on Ghanaian construction market, and also to assess the relationship between the independent variables of prices increase. 29 variables obtained from the literature were presented to the respondents in the questionnaire,

out of which 8 variables were ranked by the respondents as the major determinants of prices increase of building materials in Ghana. The major determinants are crude oil prices, energy cost, local taxes and charges, cost of fuel and power supply, high running cost, high prices of raw materials, cost of transportation and the high cost of labour. The study further found multicollinearity relationship among variables of prices increase, of which the highest correlation coefficient was found between fast-growing demand due to high global economic growth and over-dependence on imported building materials ($r = 0.607$; $p < 0.01$).

The results of this study are expected to assist construction industry practitioners to focus attention on the identified determinants so as to help control the prices of building materials. The Government could also consider the results of this study to help in putting in place legislation to control the identified determinants, in order to curb the increasing prices of building materials. It is recommended that further research should be carried out to determine the control measures of increasing prices of building materials in Ghana.

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