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# ANALYZING DETERMINANTS OF REVENUE EXPANSION IN TANZANIAN AND NIGERIAN COMPANIES: A COMPARATIVE ANALYSIS USING WORLD BANK ENTERPRISE SURVEY DATA

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**Abstract:** This paper investigates the impact of contingent and institutional factors on firm revenue growth in Tanzania. Using the World Bank enterprise survey data from 2006 and 2013, we employ the Pooled Ordinary Least Square model to analyze the effects of competition, small size, corruption, female ownership, government regulations, tax rates, access to finance, and skilled workforce on the revenue growth of Tanzanian firms. Our findings show that contingent factors, such as competition, small size, and corruption, have a positive impact on revenue growth, while institutional factors, such as female ownership, government regulations, tax rates, access to finance, and skilled workforce, also play a significant role in driving firm growth. We recommend that the government review regulations for firms' operations and financial institutions provide loans to service firms to boost their liquidity, ultimately improving their revenue. Additionally, firms should prioritize recruitment policies that enable them to hire skilled workers. This study provides updated insights into the factors that influence revenue growth in Tanzanian firms and contributes to the literature on firm growth in developing countries.

**Keywords:** Firm growth, Tanzania, contingent factors, institutional factors, revenue growth, enterprise survey, Pooled Ordinary Least Square model, competition, corruption, female ownership, government regulations, tax rates, access to finance, skilled workforce.

## 1.0 Introduction

The growth of small and medium enterprises (SMEs) has been discussed extensively in the various literature. However, many studies have explored more firm growth regarding the technology it uses and its innovation (Aghion *et al.*, 2007). Several opinions are pointed out to explain the role of SMEs growth in the individual and country economy. For example, a firm growth may lead to an increase in demand that will make other sectors progress, and, in the long run, the economy at the macro level will rise. Other aspects that will prosper through the growth of SME are employment opportunities, economic productivity, and economic development at the micro and macro level (Davidsson & Wiklund, 2007). Nevertheless, factors such as market imperfection, information asymmetry, and agency problems have hindered firm growth. This is because they eventually find themselves having financial constraints, revenue growth problems, and problems acquiring funds. Several studies tried to investigate and measure firm growth in different aspects. Ullah & Wei (2017) studied firm growth in terms of the number of employees it has from the year of establishment to the year of study.

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Yazdanfar (2012), Ullah & Wei (2017), and Regasa *et al.* (2019) explained firm growth in terms of percentage change in sales. Girma & Vencappa (2015) measure firm growth by total factor productivity. Yet, none of the above papers linked revenue growth with contingent factors and institutional factors. For example, Girma & Vencappa (2015) associated sales growth with access to finance, sources of finance (Regasa *et al.*, 2019); finance patterns Yazdanfar (2012); internal capabilities and external networks on sales growth Lee *et al.* (2001).

On top of that, to the best of my knowledge, there are many studies on SMEs performance and constraints. Still, no studies in Tanzania took advantage of enterprise surveys from world bank micro data to explore the effect of contingent and institutional factors on the firm's revenue growth. The contingent factors, in this respect, refer to factors that occur with accidents, firms do not plan them to happen in their operation, and therefore they are unplanned circumstances. On the other hand, institutional factors are attributes that appear due to the internal or external environment of the firm. They may be economic, coercive, or normative issues raised with or outside a firm that may affect its revenue growth. All these factors are well explained in the literature review section. In this regard, this study is directed to associate revenue growth and the factors that affect it for some critical reasons. Firstly, most firms under investigation are of small and medium levels, and most need cash finance to boost their operation and growth. Secondly, factors like competition, crime, theft, and corruption are silent factors affecting the firm function that may lead to the reduction of revenue. Yet they are not sufficiently investigated in this aspect in Tanzania. Therefore, this study tends to answer the question, "do contingent and institutional factors affect firms' revenue growth"? Also, "To what extent do contingent and institutional factors affect the revenue growth of the small and medium firms in Tanzania? This finding has a contribution to the practitioners and government agencies such as the Fair competition commission (FCC), Tanzania revenue authority (TRA), and the Business registration and licensing agency (BRELA). The business stakeholders in Tanzania to be aware on the empirical factors that affect the revenue growth of SMEs.

Moreover, unlike other prior studies of SMEs in Tanzania, this study utilized a recently updated data set on an enterprise survey conducted by the world bank. The data set possesses rich information on Tanzania firms, including contingent and institutional factors associated with the operation of SMEs in Tanzania. It also contains, among others, information on annual total sales in 2006, 2009, and 2013.

## 2.0 Literature review and hypothesis development 2.1 Contingent factors

According to Tucker (2010), firm growth is influenced by the context within which it operates. He further argued that it is necessary to recognize the firm structures and designs in which revenue is generated and how a firm can grow and sustain the business. Contingent factors are anything that is not accurately predicted or planned in the future (García-Villaverde *et al.*, 2021). Looking at the contingent theory works of literature, the contingent factors such as technology, culture, the size of an organization, and the environment affect the design and functioning of firms.

Considering how firm size, competition, corruption, crime, theft, culture, environment, and technology affect the production and growth of the firm in generating revenue is necessary because revenue is a vital asset that a firm can have to produce and operate smoothly. From this background, the first hypothesis of the study is: H<sub>1</sub>: Contingent factors are negatively affecting firm revenue growth.

## 2.2 Institutional factors

These factors are associated with institutional pressure enforced by normative and coercive mechanisms influencing revenue growth. Institutional factors are related to social, political, regulatory, and cultural aspects

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in shaping organizational behavior in form and process (Ribeiro & Scapens., 2006; Fuentelsaz *et al.*, 2018). Institutional factors define the actors in a different institutional context. For example, actors in government procedures in business registration, tax administration, and forming tax rates are to be paid by firms as stipulated by an institutional framework that includes a set of formal and informal social, legal, and political rules and norms (Scott, 1987). Therefore, political and administrative or technical actors are powerful and their behavior is highly influenced by the institutionalized budget framework (Mzenzi, 2013).

Regarding institutional theory literature, various institutional factors are tested to investigate their influence on revenue growth. These factors are mentioned to be pressure from government regulations, difficulties in registration, tax rates, tax administration, business licensing and permits, transport, access to finance, land access, firms owned by females, ownership, and availability of skilled workforce.

Thus, this study posits that:

H<sub>2</sub>: Institutional factors have negative effect on firm revenue growth.

### 3.0 Methodology 3.1 Data source

This paper utilized enterprise survey data from the World Bank micro-library. It uses the combined World Bank enterprise data surveyed in 2006 and 2013

(<https://doi.org/10.48529/rgvk-7f42>). The data is recently updated as a panel set by the World bank to allow suitable research within the respective country and the world at large. It contained a total of 1,232 firms in Tanzania. To eliminate the outliers and make the data more reliable, especially on the computation of the outcome variable, I purposely decided to use the sample of the firm which was surveyed in both 2006 and 2013. This made to finally have a sample of 230 firms. Table 1 below clearly indicates the sample. Table 2 shows the descriptive summary of the variables used in this study.

**Table 1: Sample determination**

| Years                | Year of survey & Firms |            | Total number of firms |
|----------------------|------------------------|------------|-----------------------|
|                      | 2006                   | 2013       |                       |
| 2006 only            | 304                    | 0          | 304                   |
| 2013 only            | 0                      | 698        | 698                   |
| <b>2006 and 2013</b> | <b>115</b>             | <b>115</b> | <b>230</b>            |
| Total                | 419                    | 813        | 1,232                 |

**Source:** Author computation from World bank enterprise survey 2006-2013 panel data Generally, the mean of corruption, tax rates, transport, access to finance, firms owned by a female, availability of skilled workforce, domestic ownership, and foreign ownership indicates a high score. This implies that these factors are acceptable to influence the sales revenue growth of the firms in Tanzania. The descriptive results are depicted to comprehend the relationship with regression results that will be discussed in section 4.

**Table 2: Descriptive statistics**

| Variables                 | N   | Mean  | Std Dev. |
|---------------------------|-----|-------|----------|
| Sales growth              | 230 | 3.773 | 1.467    |
| <b>Contingent factors</b> |     |       |          |
| Competition               | 230 | 0.783 | 0.413    |

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|                                      |     |        |        |
|--------------------------------------|-----|--------|--------|
| Political pressure                   | 230 | 0.565  | 0.497  |
| Corruption                           | 230 | 0.800  | 0.401  |
| Crime, theft and disorder            | 230 | 0.787  | 0.410  |
| Firm size_Large                      | 230 | 0.217  | 0.413  |
| Firm size_Mideum                     | 230 | 0.343  | 0.476  |
| Firm size_Small                      | 230 | 0.439  | 0.497  |
| <b>Institutional factors</b>         |     |        |        |
| Pressure from government regulations | 230 | 4.420  | 6.852  |
| Tax Rates                            | 230 | 0.870  | 0.338  |
| Tax administration                   | 230 | 0.796  | 0.404  |
| Business licensing and permits       | 230 | 0.791  | 0.407  |
| Transport                            | 230 | 0.823  | 0.384  |
| Access to finance                    | 230 | 0.830  | 0.376  |
| Access of land                       | 230 | 0.752  | 0.433  |
| Firms owned by female                | 230 | 1.861  | 0.348  |
| Skilled workforce                    | 230 | 0.817  | 0.387  |
| <b>Legal status</b>                  |     |        |        |
| Sole proprietor                      | 230 | 0.304  | 0.461  |
| Partnership                          | 230 | 0.126  | 0.333  |
| Company                              | 230 | 0.565  | 0.497  |
| <b>Ownership</b>                     |     |        |        |
| Domestic ownership                   | 230 | 88.287 | 29.356 |
| Foreign ownership                    | 230 | 10.450 | 27.973 |
| Government ownership                 | 230 | 1.170  | 5.651  |

**Source:** Author computation (2022)

**3.2 Measurement of Variables**

This section shows variable definitions of variables used in this paper; it starts with the dependent variable followed by independent variables.

**3.2.1 Dependent variable**

**Revenue growth** (Sales growth) is measured by the sales percentage of change calculated based on the financial analysis concept. Following Nissan (1997), sales growth is computed by taking the difference between the current year's sales minus the base year's sales over the base year's sales. However, due to the availability of sales information of the firms, this study utilized the sales figures of the year 2009 as the base year and 2013 as the current year. The following is the formula used to

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compute sales growth.

$$Sales\ growth_{i,t} = \ln \left( \left( \frac{Sales_{i,t} - Sales_{i,t-1}}{Sales_{i,t-1}} \right) \times 100 \right) \dots \dots \dots (1)$$

Where  $i$  is the firm,  $t$  is adopted as the year 2013 and  $t-1$  as the year 2009.

### 3.2.2 Independent variables

This study has two essential parts of the independent variable. It considers contingent factors as anything that is not accurately predicted or planned in the future (García-Villaverde *et al.*, 2021). In other words, are unexpected factors out of the firm control, such as competition from firm rivals in the same market, political pressure, corruption, etc. Institutional factors are the factors associated with institutional force enforced through normative and coercive mechanisms that influence revenue growth. Examples of these factors are government regulations and procedures, entity characteristics, etc. Using a stepwise regression approach, 16 explanatory variables were selected from more than 60 variables in the data set to test the effect on revenue growth. These were competition, political pressure, corruption, crime, theft and disorder, entity size, legal status, pressure from government regulations, percent of firms identifying tax rates as a major constraint, percent of firms identifying tax administration as a major constraint, percent of firms identifying business licensing and permits as a major constraint, transport, access to finance, access of land, firms owned by female, ownership and availability of skilled workforce. Table 3 indicates well the description of the variables used in this study.

| Table3:                              | Description                                                                                       | of                         | variables |
|--------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|-----------|
|                                      | Definition                                                                                        |                            | Variable  |
| Sales growth                         | Log of percentage change in sales                                                                 | <b>Contingent factors:</b> |           |
| Competition                          | 1 if a firm experiences a competition from other firms; 0 otherwise                               |                            |           |
| Political pressure                   | 1 if firms report political pressure as an obstacle; 0 otherwise                                  |                            |           |
| Corruption                           | 1 if firms report corruption as an obstacle; 0 otherwise                                          |                            |           |
| Crime, theft and disorder            | 1 if firms report crime and theft as an obstacle; 0 otherwise                                     |                            |           |
| Firm size_Micro                      | 1 if having less than 5 employees; 0 otherwise                                                    |                            |           |
| Firm size_Small                      | 1 if have employees from 6 to 19; 0 otherwise                                                     |                            |           |
| Firm size_Medium                     | 1 if have employees from 20 to 99; 0 otherwise                                                    |                            |           |
| Firm size_Large                      | 1 if having an employee from 100 and above; 0 otherwise                                           |                            |           |
| <b>Institutional factors</b>         |                                                                                                   |                            |           |
| Pressure from government regulations | Percentage of senior management time spent dealing with the requirements of government regulation |                            |           |
| Tax Rates                            | Percent of firms identifying tax rates as a major                                                 |                            |           |

constraint on firm growth

Tax administration Percent of firms identifying tax administration as a major constraint on firm growth

Business licensing and permits Percent of firms identifying business licensing and permits as a major constraint

Transport 1= firms report access to transport as an obstacle;  
0 otherwise

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Access to finance 1= firm's access to finance; 0= firms report access to finance as an obstacle

Access of land 1= firms access to land; 0= firms report access to land as an obstacle

Firms owned by female Equals 1 if owned by a female; 0 by male

Skilled workforce 1 if a firm has a skilled workforce; 0 otherwise

### Legal status

Sole proprietor 1= sole proprietor; 0= otherwise

Partnership 1= partnership; 0= otherwise

Company 1= company; 0= otherwise

### Ownership

Domestic ownership 1 if a firm is 100% owned by Tanzanians; 0 otherwise

Foreign ownership 1 if a firm is 100% owned by foreigners; 0 otherwise

Government ownership 1 if a firm is 100% owned by the government; 0 otherwise

Source: Author

## 3.3 Empirical Model

To test whether contingent and institutional factors affect firm revenue growth, the Pooled Ordinary Least Square (OLS) technique was used. OLS model was opted for its ability to eliminate biases, minimize the sum of squared residuals, and explain the causal inference of parameters. Regarding this, the study will first examine the influence of contingent factors, such as competition, corruption, firm size, and political pressure, on the firm's revenue growth. Then, it will investigate to find how institutional factors influence revenue growth. In all these hypotheses, this paper will use the sample of the firms selected to estimate equation 2 below.

$$\text{Sales growth}_{i,j,t} = \beta_1 + \beta_2 \text{contingent factors}_{i,j,t} + \beta_3 \text{institutional factors}_{i,j,t} + \varepsilon_{i,j,t} \quad (2)$$

Where; sales growth<sub>ij</sub> is the dependent variable for firm *i* in factor *j*, whereas contingent factors<sub>ij,t</sub> and institutional factors <sub>ij,t</sub> are independent variables for firm *i* and factor *j* in year *t*;  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are coefficients to estimate and  $\varepsilon_{i,j,t}$  is an error term. Explanatory variables and the error term are assumed to be exogenous and homoscedastic.

## 4.0 Main results

This section presents the findings of this study by starting with multicollinearity tests, followed by estimation results and discussion, and ending with robustness checks.

### 4.1 Multicollinearity Tests

To solve the multicollinearity problem, some variables with missing values, such as partnership status and large and micro size of the firm, were first removed from the analysis. Then, Variance Inflation Factor (VIF) and Tolerance tests were conducted through collinearity diagnosis analysis before running the OLS regression. Table 4 below depicts the results.

**Table 4: Multicollinearity results**

| Variables   | Collinearity Statistics |       |
|-------------|-------------------------|-------|
|             | Tolerance               | VIF   |
| Competition | .604                    | 1.654 |

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|                                      |      |       |
|--------------------------------------|------|-------|
| Political Pressure and Instability   | .422 | 2.368 |
| Corruption                           | .157 | 6.383 |
| Tax Rates                            | .186 | 5.377 |
| Tax Administration                   | .135 | 7.409 |
| Business License and Permit          | .301 | 3.321 |
| Crime And Theft                      | .413 | 2.421 |
| Firms size_Medium                    | .400 | 2.500 |
| Firms size_Small                     | .375 | 2.667 |
| Transportation                       | .202 | 4.960 |
| Access finance                       | .389 | 2.571 |
| Access land                          | .282 | 3.550 |
| Skilled workforce                    | .203 | 4.914 |
| Sole proprietor                      | .381 | 2.628 |
| Partnership                          | .717 | 1.395 |
| Are any owner's female               | .612 | 1.633 |
| Pressure from government regulations | .326 | 3.068 |
| Private Domestic firms               | .112 | 8.869 |
| Private Foreign firms                | .116 | 8.600 |
| Government firms                     | .109 | 9.166 |

**Source:** Author computation (2022)

As seen from the table above, all of the variables selected in this study indicate a low correlation between them. The Tolerance figure for all variables is above the threshold of 0.1. Raykov & Marcoulides (2006) suggest that even VIF digits are below

10. Hence, the result made clear that there is no presence of multicollinearity.

### 4.2 Estimation results

Pooled OLS model was first estimated for the entire sample of the firms. The main variables of the study were regressed against the log of sales growth. For robust checks, two additional models were estimated to assess the consistency of the results of the explanatory variables. The sub-sample considered under this circumstance were firms in the manufacturing industry and firms from the service industry. Tables 5, 6, and 7 present the variable coefficients and P-values in brackets that examine the impact of contingent and institutional factors on the sales growth of the firms in Tanzania.

#### 4.2.1 Contingent factors on revenue growth

Concerning the model for the total sample, the results demonstrate that among the six contingent factors considered, only two factors, namely competition and the small size of the firms, are positive and significantly affect sales growth at a five percent significance level. The results show that competition has a coefficient of 0.740 and a p-value of 0.000, whereas small size has a coefficient of 0.210 and a p-value of 0.002. This result means that, on average, an additional unit of competition and size of the firm will increase the firm's sales growth by 74 percent for competition and 21 percent for small size. This is to say, small firms are affected by competition that disturbs their sales. Thus, firms should be careful about controlling the competition from

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their rivals and make strategies to grow themselves. Other contingent factors such as medium size, political pressure, crime, and theft negatively affect sales growth despite being statistically insignificant. Overall, the model is significant, and it is much explaining the effect by 61.9 percent.

**Table 5: Estimation results on Contingent factors**

|                                  |              |             |              |              | Number of obs = 230 |
|----------------------------------|--------------|-------------|--------------|--------------|---------------------|
|                                  |              |             |              |              | Prob > F = 0.000    |
|                                  |              |             |              |              | R-squared = 0.619   |
| Dependent variable: Sales growth | Coef.        | Std. Err.   | t            | P-value      |                     |
| Competition                      | .740         | .202        | -3.66        | 0.000**      |                     |
| Medium size                      | -.231        | .167        | -1.36        | 0.178        |                     |
| Small size                       | .210         | .210        | 3.15         | 0.002**      |                     |
| Corruption                       | .284         | .632        | 0.45         | 0.654        |                     |
| Political pressure               | -.057        | .271        | -0.21        | 0.831        |                     |
| <u>Crime and theft</u>           | <u>-.235</u> | <u>.323</u> | <u>-0.73</u> | <u>0.469</u> |                     |

\*\* represents significance at  $p < 0.05$

**Source:** Author computation (2022)

The first hypothesis posits that contingent factors negatively affect firm revenue growth. The results showed that contingent factors like competition, small size, and corruption positively affect sales growth. In this regard, the null hypothesis is rejected. However, the remaining contingent factors, such as medium size, political pressure, crime, and theft are, negatively affect sales growth. Therefore, the null hypothesis is accepted. The result by Fosu (2013), who studied the impact of capital structure and product market competition on firm performance in South Africa, proves that competition positively influences sales performance. This study's results are also supported by Cesinger *et al.* (2018) and Kusuma *et al.* (2021), who revealed a strong positive influence of firm size on sales growth. In contrast, the result by Kusuma *et al.* (2021) relies more on the positive effect of the large-size firm on sales, which means that large firms produce more revenue than small firms. This conclusion differs from this current paper as it shows the positive relationship between small and not large-size firms.

Moreover, the result on corruption resembles this study's regression result of Chan (2009), who indicated that corruption is the main factor that positively affects the firms' revenue growth. Using random and fixed effect models, the paper pointed out that corruption positively affects firms with no financial constraints but negatively affects firms with financial constraints. However, Fisman & Svensson (2007) evidenced that corruption negatively affects the firm's growth.

#### 4.2.2 Institutional factors on revenue growth

In terms of institutional factors, the results show that the estimated coefficients of access finance (Coef=-0.587;  $p$ -value=0.002), pressure from government regulations (Coef=-0.031;  $p$ -value=0.046), transport obstacle (Coef=-0.931;  $p$ -value=0.049), tax rates (Coef=-0.822;  $p$ -value=0.037) and skilled workforce (Coef=-0.719;  $p$ -value=0.047) are negatively and statistically significant at a five percent significance level. This implies that, on average, additional units on these factors will lead to a decrease in sales revenue growth by 58, 03, 93, 82, and 71 percent, respectively. Also, firms owned by a female (Coef=0.526;  $p$ -value=0.015) are positive and

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significantly affect sales growth, indicating that an increase in one unit of females to own firms will increase sales revenue. This suggests that firms should improve by obtaining loans, having skilled workers, and having internal controls on government regulations, taxes, and transport issues. The overall R squared 61.9 percent on full sample models indicated that the model fit the general estimate.

Table 6: Estimation results on Institutional factors

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Number of obs = 230

Prob > F = 0.000

R-squared = 0.619

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| <b><u>Dependent variable: Sales growth</u></b> | <b><u>Coef.</u></b> | <b><u>Std. Err.</u></b> | <b><u>t</u></b>    | <b><u>P-value</u></b> |
|------------------------------------------------|---------------------|-------------------------|--------------------|-----------------------|
| Company                                        | -.465               | .233                    | -1.99              | 0.049**               |
| Sole proprietor                                | .069                | .246                    | 0.28               | 0.780                 |
| Access finance                                 | -0.587              | .487                    | -3.26              | 0.002**               |
| Firms owned by female                          | .526                | .212                    | 2.48               | 0.015**               |
| Pressure from government regulations           | -.031               | .0164                   | -1.86              | 0.046**               |
| Transport obstacle                             | -.931               | .487                    | -1.91              | 0.049**               |
| Business license and permit                    | .477                | .399                    | 1.20               | 0.035**               |
| Tax rates                                      | -.822               | .633                    | -1.30              | 0.037**               |
| Skilled workforce                              | -.719               | .516                    | -1.39              | 0.047**               |
| Access of land                                 | .208                | .472                    | 0.44               | 0.660                 |
| Tax administration                             | -.416               | .837                    | -0.50              | 0.621                 |
| Domestic ownership                             | .0153               | .059                    | 0.26               | 0.797                 |
| Foreign ownership                              | .0160               | .060                    | 0.27               | 0.791                 |
| Government ownership                           | .050                | .064                    | 0.78               | 0.438                 |
| <b><u>Constant</u></b>                         | <b><u>3.682</u></b> | <b><u>5.899</u></b>     | <b><u>0.62</u></b> | <b><u>0.534</u></b>   |

\*\* represents significant at  $p < 0.05$

**Source:** Author computation (2022)

The regression results on access finance, pressure from government regulations, transport obstacles, tax rates, skilled workforce, and tax administration accept the null hypothesis that institutional factors are negatively and statistically significant. On the other hand, firms owned by a sole female proprietor, business license and permit, access to land, and firm ownership positively influence the sales revenue growth; hence they reject the null hypothesis. The earlier study by Riding & Swift (1990) and Fejza & Abdullahi (2020) indicated that female firms tend to have low revenue growth. The study concluded differently from my paper that a female-owned firm negatively influences revenue growth. Regarding access to finance, the study by Harvie *et al.* (2013) also revealed different results from mine that there is a positive relationship between access to finance and sales growth.

Moreover, tax rate results are consistent with those of Fisman & Svensson (2007) that tax rate negatively affects the firm's sales growth. This was expected because in developing economies, firms do affect by many tax rates available for them to adhere to. This is why even some registered firms do try to evade tax.

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## 4.3 Robustness tests

This paper conducted a robustness of results by testing the model in different categories. It divided the sample into Industrial categories, namely revenue growth of the firm manufacturing industry and firms in the services industry. This is important because the effect of the factors on revenue growth may differ from firm to firm depending on the industry they operate. The finding enlightens the responsible organs and practitioners to carefully look at the sector when deciding to operate the business or make policies related to trade in the country. The robust results are well presented in Table 7 below.

**Table 7: Estimation results based on the Firm's Industry** Dependent variable: Sales growth

| Contingent factors                   | Manufacturing       | Service              |
|--------------------------------------|---------------------|----------------------|
| Competition                          | .434<br>(0.026) **  | 4.417<br>(0.025) **  |
| Medium size                          | -.200<br>(0.237)    | .416<br>(0.557)      |
| Small size                           | -.276<br>(0.360)    | -.150<br>(0.825)     |
| Corruption                           | .882<br>(0.531)     | .748<br>(0.717)      |
| Political pressure                   | -.015<br>(0.952)    | .827<br>(0.575)      |
| Crime and theft                      | -.905<br>(0.221)    | 2.249<br>(0.024) **  |
| <b>Institution factors</b>           |                     |                      |
| Company                              | -.181<br>(0.481)    | -.7087845 (0.046) ** |
| Sole proprietor                      | -.111<br>(0.662)    | -.431<br>(0.375)     |
| Access finance                       | -.598<br>(0.579)    | -1.364<br>(0.040) ** |
| Firms owned by female                | .227<br>(0.328)     | .781<br>(0.139)      |
| Pressure from government regulations | -.078<br>(0.014) ** | -.045<br>(0.288)     |
| Transport obstacle                   | -.625<br>(0.492)    | -3.200<br>(0.021) ** |
| Business license and permit          | -.272<br>(0.425)    | -.445<br>(0.524)     |
| Tax rates                            | -1.562<br>(0.513)   | -1.063<br>(0.396)    |
| Skilled workforce                    | .062<br>(0.949)     | -4.622<br>(0.040) ** |
| Access of land                       | -1.074<br>(0.161)   | .358<br>(0.760)      |

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|                      |                    |                    |
|----------------------|--------------------|--------------------|
| Tax administration   | -0.555<br>(0.617)  | -1.004<br>(0.294)  |
| Domestic ownership   | -0.0179<br>(0.758) | .0007<br>(0.886)   |
| Foreign ownership    | -0.0182<br>(0.768) | 0.004<br>(0.794)   |
| Government ownership | -0.013<br>(0.835)  | .119<br>(0.020) ** |
| Constant             | 7.597<br>(0.196)   | 3.525<br>(0.050)   |

|               |   |       |               |   |        |
|---------------|---|-------|---------------|---|--------|
| Number of obs | = | 83    | Number of obs | = | 143    |
| Prob > F      | = | 0.000 | Prob > F      | = | 0.0072 |
| R-squared     | = | 0.653 | R-squared     | = | 0.858  |

\*\* represents significance at  $p < 0.05$

**Source:** Author computation (2022)

The results from the comparative analysis of contingent and institutional factors in the manufacturing and service industry are fascinating. While the competition factor looks to significantly affect more the firms in both sectors, only one factor that is pressure from government regulations statistically and significantly impacts the sales revenue growth of firms in the manufacturing industry. The intuition behind this could be that; manufacturing firms produce products that are highly related to human health, whether directly or indirectly. In this regard, compared to service firms, manufacturing firms are guided by several government regulations that they have to adhere to.

Furthermore, apart from the competition that affects firms in both industrial categories, only company, access finance, transport obstacle, availability of skilled workforce, crime, and theft significantly impact the service firms. In other words, these factors are not a threat to manufacturing firms. The possible elucidation for this could be that manufacturing firms have enough capital to operate the business, have strong recruitment policies, and have security agents for their assets compared to service firms which most of their initial capital and assets are low.

## 5. Conclusion and recommendation

Using data from recently updated enterprise surveys from the World Bank in Tanzanian firms, I estimate the effect of contingent and institutional factors on revenue growth. Revenue growth is measured by a log of percentage change in a firm's sales. I find factors that significantly impact revenue growth are competition, small size, and firms owned by a female. On the other hand, medium size, political pressure, access to finance, pressure from government regulations, transport

obstacles, tax rates, skilled workforce, crime, and theft negatively affect the firms' sales growth. The robust checks show that competition affects both manufacturing and service firms, while government regulations impact manufacturing firms. Moreover, it is concluded that the revenue growth of services firms is highly influenced by access finance, transport obstacle, availability of skilled workforce, crime, and theft.

These results have implications for policies intended to enhance economic growth in Tanzania through government coordination with SMEs. It seems that manufacturing firms, despite stiff competition, face a lot of compliances from the government that hinder their growth. It is a chance for the government to talk with

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firms' owners and review the regulations for firms' operations in the country. In addition, financial institutions should take an opportunity by giving the loan to service firms to boost their liquidity, ultimately improving their revenue. Moreover, firms, specifically service firms, should construct a good recruitment policy that will enable them to hire skilled labor to have an innovative operation and boost their revenue.

Last but not least, firms should minimize committing a crime by ensuring they legally register with responsible government organs and comply with available regulations. This is mainly for small firms that tend to diverge from these procedures. Their compliance with these procedures will help them with liquidity constraints and theft. In these situations, registered firms can smoothly acquire credits and sue a thief in court.

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