



**Impact of institutional voids on the performance of Small and Medium sized Enterprises**

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: There is a critical gap in assessing how institutional voids affect SMEs' growth, investment commitment and reputation. The purpose of this paper is to explain how institutional void affects these three dimensions of SME performance; and to develop an institutional void-SME performance framework that can be applied for strategising, resourcing and competency acquisition for better performance. study used the Enterprise Survey Data of the World Bank, consisting of 118763 firms from 140 countries. The structural equation modelling (SEM) is used to analyse the data, validate our analytical model, and investigate the imposed theoretical claims of causality as indicated by specific research questions through correlation/covariation between the constructs of institutional void and SME performance. suggests that there is a strong positive correlation between formal institutional infrastructure (independent variable) and SMEs' reputation (dependent variable). Among the institutional sub-constructs, tax administration, business licensing and permits, access to a bigger market and skilled labour, and informal competition are significant for the SME performance constructs. We find similar results while comparing SMEs with large businesses. \_RESEARCH\_LIMITATIONS/IMPLICATIONS\_(LIMIT\_100\_WORDS) :No data available. institutional void-SME performance framework developed from our findings will allow SMEs to manage institutional void affecting their performance. The analytical framework can also be the foundation for future empirical research. originality of the study is embedded in its investigation of SMEs' investment commitment and reputation in relation to institutional voids. The latent relationship between the sub-constructs of institutional voids and SME performance adds new knowledge to the dynamic relationship between institutions and firm performance.

## Impact of institutional voids on the performance of Small and Medium-sized Enterprises.

### Abstract

#### Purpose

There is a critical gap in assessing how institutional voids affect SMEs' growth, investment commitment and reputation. The purpose of this paper is to explain how institutional void affects these three dimensions of SME performance; and to develop an institutional void-SME performance framework that can be applied for strategising, resourcing and competency acquisition for better performance.

#### Design/methodology/approach

The study used the Enterprise Survey Data of the World Bank, consisting of 118763 firms from 140 countries. The structural equation modelling (SEM) is used to analyse the data, validate our analytical model, and investigate the imposed theoretical claims of causality as indicated by specific research questions through correlation/covariation between the constructs of institutional void and SME performance.

#### Findings

Evidence suggests that there is a strong positive correlation between formal institutional infrastructure (independent variable) and SMEs' reputation (dependent variable). Among the institutional sub-constructs, tax administration, business licensing and permits, access to a bigger market and skilled labour, and informal competition are significant for the SME performance constructs. We find similar results while comparing SMEs with large businesses.

#### Practical implications

The institutional void-SME performance framework developed from our findings will allow SMEs to manage institutional voids affecting their performance. The analytical framework can also be the foundation for future empirical research.

Originality/value

The originality of the study is embedded in its investigation of SMEs' investment commitment and reputation in relation to institutional voids. The latent relationship between the sub-constructs of institutional voids and SME performance adds new knowledge to the dynamic relationship between institutions and firm performance.

Keywords

Institutional voids, SME performance framework, Reputation, Investment commitment

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### 1. Introduction

SMEs are critical to global, national and regional economies due to their economic and social contributions (OECD, 2017). However, the current institutional environment around the world is challenging for SMEs, as a recent World Bank survey suggested. Surveying 161,000 firms from 144 countries worldwide, the Enterprise surveys (2020) found institutional corruption is a significant constraint. 20% of the survey population were expected to bribe government officials to get things done. In the same survey, approximately 15% of the responding firm stated that access and cost of finance was the biggest obstacle. About 57% of them had to incur substantive additional cost due to a lack of primary services, e.g. electricity and water. Another 52% of businesses compete against informal competitors, among which 29% identified such competition is detrimental to their performance.

Institutional voids denote the complete absence or lack of institutions to promote or support market functions and facilitate effective transactions (Khanna et al., 2005; Mair et al., 2012; Webb et al., 2020). North (1990) argued that institutions are ways through which political and administrative authority is exercised in a country to establish the 'rules of the game'. Firms create and distribute products and services to satisfy customers' needs within the constraints and incentives determined by these institutions. Institutional voids increase SMEs' operational costs and decrease their performance (Brinkerink and Rondi, 2020; Moro et al., 2018).

There is a clear need for research on the dynamic relationship between institutional voids and SMEs performance (Peng, 2014; Urbano et al., 2019). We understand that more than 60% of institutional void research is macro-level (Su et al., 2017). Most studies investigating institutional void at the firm level focused on multinational corporations (MNCs) and ignored SMEs (Khoury and Prasad, 2016; Mickiewicz and Olarewaju, 2020). On the other hand, Parmigiani and Rivera-Santos (2015) identified that product, labour and capital markets along with the regulatory and contract

enforcements are the most critical constructs of institutional void research in the base of the pyramid (BoP) markets (Prahalad and Hart, 1999). In addition, authors mostly assumed institutions have a direct impact on firms (Gohmann, 2012). They reached such conclusions by using country-level institutional quality data (e.g. WGI). We believe drawing a direct correlation between the institutional inputs (e.g. quality of democracy, forms of government) and SME performance is an overstretch (Joshi et al., 2015). Bevir (2009) defined institutional input as the involvement of citizens in the governing process. Among others, the quality and varieties of democracy (Coppedge et al., 2016) are two good indicators of institutional input. On the other hand, institutional outputs include government effectiveness, bureaucratic autonomy and efficacy and the rule-of-law (Acemoglu and Robinson, 2005). Institutional outputs determine how governments deliver services to their populations (Fukuyama, 2013). Therefore, our paper focuses on the institutional outputs (e.g. control of corruption, primary services, access and cost of finance, and market infrastructure).

In addition, the relatively scant literature on institutional voids and SME performance relationship generally assessed one form of performance (e.g. innovation, internationalisation, accessing finance). For example, Ahsan et al. (2020) investigated the mediating role of entrepreneurial persistence concerning institutional support and small venture performance; Chowdhury et al. (2019), Ge et al. (2019), and Webb et al. (2020; 2014) looked into the relationship between institutions, entrepreneurship and development, while Fuentelsaz et al. (2018) and Minh and Hjortsø (2015) assessed the negative impact on SMEs' innovation. On the other hand, Chen et al. (2019) explored the effect of the sub-national institution on SMEs' diversification strategies. Williams and Vorley (2015a; b) addressed the impact of institutional change and asymmetry on entrepreneurship. Nonetheless, there is a significant research gap on how the lack of primary services and market regulation affect SMEs' performance (Distinguin et al., 2016). Similarly, studies dedicated to investment commitment is limited despite their apparent correlation to institutional voids (Nicolas, 2021). Recently, Franco and Haase (2021) and Gao et al. (2017) identified that reputation mediates SMEs' cooperation process and the effect of institutional voids on firm performance. Yet, the impact of

institutions on reputation is an area that requires further investigation. Considering the gaps in the literature, this study addresses the following research questions (RQs):

RQ1: Which types of institutional void affect SMEs' performance and how?

RQ2: Is the impact of institutional void more severe on SMEs compared to large businesses?

RQ3: How to address performance barriers arising from institutional voids?

The first research question identifies the relationships between institutional voids and SMEs performance, while the second compares the relationship with large businesses. The comparative assessment allows SMEs to understand how large companies grew over a period dealing with similar institutional challenges. Their knowledge and experience can help SMEs to navigate through the current business environment affected by institutional voids. Besides, SMEs that are often suppliers to and customers of large businesses can gain meaningful learning by comparing the impact of institutional voids. Such wisdom is helpful for solutions-driven innovation and network collaborations, among other benefits. SMEs can gain resilience and tolerance to institutional voids related challenges from this. Building on the findings, our third research question develops an institutional void-SME performance framework for practitioners and policymakers to improve SME performance.

This study applies the structural equation modelling (SEM) (Hussey and Eagan, 2007) to analyse the World Bank's enterprise survey data released in 2019 (Enterprise surveys, 2020) to address the research questions.

Building from North's (1990) view of the institution, our study contributes to the SME literature in two ways:

First, our results illustrate how various types of institutional void (formal institutional, primary service, market regulating and financial service infrastructures) affect SME performance (investment commitment, growth, and reputation) (Adom, 2014; Nicolas, 2021; ur Rehman et al., 2020; Williams and Shahid, 2016).

Although numerous studies have looked into a particular aspect of institutional voids (Distinguin et al., 2016), our paper is unique as it analyses different types of institutional voids on SMEs' performance. In addition, SMEs' investment commitment and reputation are two performance constructs that have not been researched extensively. The hitherto unknown latent relationship between the sub-constructs of institutional voids and SME performance will add new knowledge on the dynamic relationship between institutions and firm performance.

Second, an institutional void-SME performance framework is developed based on the critical relationships of various institutional voids and the three performance constructs. SMEs and policymakers can apply such a framework to ensure long term sustainability. Thus, we not only identify how SME performance is affected but also endeavour to provide a solution to performance issues arising from institutional voids. We believe our findings are helpful for academia, practitioners and policymakers alike as it is possible to prioritise the institutional development plan for SMEs.

The remainder of the paper is structured as follows. The second section presents a literature review, provides the theoretical underpinning and explains the relevant constructs for analysis, followed by the conceptual framework and hypotheses development. The methodology is outlined in the fourth section. The fifth section illustrates the results, and the final sections provide a discussion and conclusion to the paper.

**2. Literature review**

The theoretical underpinning of this study follows the institutional theory (North et al., 2009; 2013; Khanna et al.2005), assuming that a firm's strategy development, implementation, resource commitment and overall performance are influenced by the nature and quality of the governing institutions (Ahsan et al. 2020; Urbano et al., 2019). Institutional voids are the result of weak or complex or lack of governing institutions that increase uncertainty and operational risk for SMEs (Doh et al., 2017). Although the academic discourse around institutional void originated in the international business



and strategy discipline to explain challenges for multinational corporations (MNCs) entry into the emerging countries (Khanna et al., 2005; Peng, 2014) they are pertinent for SMEs due to their participation as supplier or customer in the MNCs value chain.

## 2.1 Types and constructs of Institutional voids

Brix-Asala and Seuring (2020) and ur Rehman et al. (2020) confirmed the importance of the five types of institutional voids (i.e. product, labour and capital markets, along with the regulatory and contract enforcements) identified by Parmigiani and Rivera-Santos (2015) in the context of the BoP markets. They also differentiated these further into dyadic and network levels for analysis. We have the product market and contracting institutional voids at the dyadic level, while voids in labour and capital markets and market regulation fall at the network level. Therefore, voids at the network level affect SMEs' entire value chain and affect their performances more pertinently. In contrast, dyadic voids only affect the suppliers and buyers of SMEs. However, we do not apply the same categorisation since the typology was developed in the context of the BoP markets irrespective of firm size. Instead, we build on Adom (2014), Distinguin et al. (2016), Nicolas (2021), Parmigiani and Rivera-Santos (2015), Williams and Shahid (2016) and others to identify the type of institutional voids that affect SMEs across all kinds of markets. Thus, we categories institutional voids into four categories, i.e. formal institutional, primary service, market regulating and financial service infrastructures. Table 1 presents the sub-constructs of these institutional voids and source literature.

In terms of the formal institution, we capture bureaucratic efficacy, tax administration, licensing laws, fairness of court and control of corruption (Williams and Vorley (2015 b). Similarly, the absence or lack of primary services such as access to utility, communication and transportation infrastructure forms institutional voids (Khoury and Prasad, 2016). Such a lack of utility infrastructure and primary services can hamper SMEs' growth by increasing operational costs (Webb et al., 2020; 2014). Mickiewicz and Olarewaju (2020) argue that SMEs from developing economies can alleviate transaction costs and bridge institutional voids through a trust-based relationship. However, such

a mutual trust-based relationship can negatively affect SMEs ability to spot opportunities in the international market.

Market size and regulating infrastructure (informal competition, access to export market and skilled labour) affect firm performance significantly (De Castro et al., 2014; Williams and Shahid, 2016). A conservative estimate indicates that the informal economy is worth 40 to 60 per cent of the GDP in emerging economies (Williams and Schneider, 2016). SMEs operate informally due to necessity or opportunistic behaviour or for both (Adom, 2014; Hudson et al., 2012). Corruption (Williams and Schneider, 2016), awareness, difficulty and cost of registration (De Mel et al., 2013), resistance towards government (Torgler, 2011), the likelihood of detection and severity of punishment and tax rates (Vanderseypen et al., 2013) influence informal economy.

**Table 1 about here**

Dinh et al. (2012) found that the access to institutionalised finance was one of the biggest causes of entrepreneurial failure in developing countries due to the complexities of collateralising assets. The enterprise surveys (2020) also suggested that access and cost of finance also deter smaller firms in the developed countries similarly, although the property rights of these countries are upheld. Thus, access and cost of finance are selected as the sub-construct to assess the financial service infrastructure.

**2.2 Firm performance constructs**

Firm performance includes measures beyond financial indicators (e.g. sales revenue, growth, return on investment). Orozco and Galindo-Dorado (2018) suggested that non-financial performance such as climate change, employee wellbeing, human rights and ethical compliance are increasingly used as performance indicators to holistically assess a firm's contribution to wealth creation, social and environmental wellbeing. We disaggregated firm performance into financial (growth investment commitments) and non-financial (reputation) perspectives to holistically assess the impact of institutional voids on SMEs.

The reputation of a firm signals these contribution to its customers. Fombrun (1996) defined reputation as a collective opinion about a firm's past actions and future expectations that bestows it with a positive image. Similarly, Orozco and Galindo-Dorado (2018) argued that reputation is built in the process of social construction and validation. Sorenson (2014) defined that reputation signals firms' continuous ability to produce and deliver quality products/services. Complementing Sorenson's (2014) economic perspective of reputation, Bremisss et al. (2017), Pfarrer et al. (2010) and Rindova et al. (2005) suggested that institutional intermediaries such as industry analysts, media establishments and rating agencies contribute to a firm's reputation. These institutional intermediaries can communicate reputation to a wider stakeholder and enhance the credibility of a firm to such an extent that it reduces transaction costs (Gao et al., 2019). However, voids in these institutional intermediaries will reduce the signalling power of a firm reputation due to information asymmetry (ur Rehman et al., 2020). Such negative impact of institutional void on reputation will undermine a firm's ability to recruit and retain human capital, raise finance and form alliances with potential partners, absorb operational and market shocks (Gao et al., 2017). It's pertinent to address the fundamental question of how the lack of institutional intermediaries affect a firm's reputation (Khanna & Palepu, 2010). Therefore, we incorporated reputation as a non-financial performance measure. Based on the reviewed literature, we included managers' experience, quality certification and years in business as the key constructs to measure reputation (Austin et al., 2017; Ge et al., 2019; Ge and Micelotta, 2019).

As identified from the literature, a firm's resource commitment depends on the institutional void (Brinkerink & Rondi, 2020; Minh and Hjortsø, 2015). Investing in tangible and intangible resources is a strategic decision. It appears that significant investment often acts as an exit barrier and reduces firms' flexibility to respond to institutional change. Fuentelsaz et al. (2018), Minh and Hjortsø (2015), Love and Roper (2015) and Nicolas (2021) evidence how institutional voids limit firms' long-term investments for product-oriented innovation, favouring exploitative cost-control strategies. Investment in fixed asset, machinery and equipment and owners

commitment to the firm is our sub-constructs. Among the three constructs, growth (Dinh et al., 2012) is perhaps the most commonly used performance measure. An increase in sales and employee numbers serve as the measure for growth (Beck et al., 2006; Love and Roper, 2015).

Accordingly, we derived the construct and sub-construct from the existing literature to reveal the impact of institutional void on firm performance as presented earlier in Table 1.

### 3. Conceptual model and hypothesis development

Our analytical framework captures the various facets of institutional void concerning SMEs performance (Figure 1). In this section, we develop a few hypotheses to address RQ1 and 2.

#### Formal institution and SMEs' performance

The formal institution has sub-constructs such as property rights, bureaucratic efficacy, fairness of courts, tax administration, licensing and permits, corruption control, labour regulation and political instability (Su et al., 2017). Bureaucratic harassment, corruption, licensing and permits often frustrate entrepreneurial efforts and motivate domestic businesses to move their investments abroad. Employment rights and labour regulation related voids induce brain-drain as well (Pellegrini, 2011).

Similarly, political instability often leads to confiscation of private ownership, the weak rule of law and biased courts heightens the risk of contract breach. Brinkerink and Rondi (2020) and Chowdhury et al. (2019) found evidence that lack of contract enforcement reduces both the value and number of business transactions and deter SMEs from committing to invest. Breach of contracts in the supply chain and lack of investment can lead to inferior quality in products and services produced by SMEs and thus harm their reputation. They also reduce R&D and human resources investment, decreasing their technological advancement (Aisen and Veiga, 2013).

However, firms often fail to live up to their reputation due to institutional voids. For example, quality certificates issued by a corrupt certification agency will fail to disseminate trust and confidence to stakeholders. The negative effect of such reputation damage is far higher for export oriented businesses due to an intensely competitive international market. Market-based, active and passive institutional strategies are commonly adopted to deal with institutional voids (Gao et al., 2017). Large firms opted for product and market diversification, solutions-driven innovation and vertical integration.

On the other hand, Fungáčová et al. (2015) found that SMEs often participate in corruption to bridge institutional voids. However, Liu et al. (2020 ) found an inverse U shaped relationship between corruption propensity and SME performance. Our hypotheses are:

H1. Eliminating formal institutional void will positively affect SMEs' performance by contributing to their (H1a) investment commitment, (H1b) growth, and (H1c) reputation.

*Figure 1 about here*

### **Impact of primary services infrastructure on SMEs' performance**

Primary services include access to power and energy and quality of utility infrastructure. SMEs' growth and reputation are more affected by poor primary service infrastructure than larger firms, as they have limited resources to build their infrastructure (Williams and Vorley, 2015 a). The absence of primary services severely limits SMEs' ability to compete with imported goods and reach export potential. However, large businesses with resources take advantage of such infrastructural weakness by building up in-house facilities, and disqualify SME's from competing.

Webb et al. (2020) indicated that primary service infrastructure reflects institutional development priorities and capacities. However, governments often fail to invest in infrastructure development since resource allocation shifts towards security when corruption and political instability threatens the safety of the state and citizens. Weak primary service also deters investment as it is unlikely for firms to commit technical resources in areas without power and communication infrastructure. However, improvements in such services allow the government to attract investment and earn tax revenue. In a virtuous cycle, increased tax revenue incentivise improved governments to invest in vital infrastructure projects.

However, the absence of primary service can affect a SMEs' reputation by reducing its prominence, quality and testing their resilience to the limit (Gao et al., 2017). Customers may not be aware of the underlying cause of inferior quality or delivery delays but see it as a signal of the firm's inability to fulfil its promises.

We hypothesise:

H2. Improved primary services will positively affect firm performance by contributing to their (H2a) investment commitment, (H2b) growth, and (H2c) reputation.

**Nature of the market regulating infrastructure and SMEs' performance**

The intensity of informal competition, local market size, access to export markets and skilled labour are the constructs for market regulating infrastructure (Moro et al., 2018). Market regulation can facilitate or limit firms' access to domestic and international markets by enforcing a certain quality standard. Similarly, regulation drives innovations. For example, there is an increasing global demand for eco-friendly products from socially sustainable sources.

Authors (e.g. Adom, 2014; Distinguin et al., 2016) identified various reasons for regulatory failure and informality in markets. Regardless of the cause of informality, formally registered businesses often face severe and uneven competition from the informal entities, as their operating costs are higher due to the recurring fees of registration and other forms of regulatory compliance. The competition intensifies if

the size of the local market is small and access to the international market is not feasible. Levchenko (2013) found evidence that excessive regulation in developing countries does not help businesses thrive but lead to large unofficial economies and corruption. The rigid regulatory system appears to be costlier financially and time-wise and persistently challenges all industries from agriculture to the hi-tech services sector.

Similarly, behavioural uncertainties from suppliers caused by a lack of market regulating infrastructure can cause severe reputation damage. Suppliers' unregulated behaviour in delivering quality and timeliness creates transactional delays downstream of the supply chain. The customer would generally expect firms to keep their promises regardless of the lack of essential primary services.

Therefore, we hypothesise:

H3. Improved market regulating infrastructure will positively affect firm performance by contributing to their (H3a) investment commitment, (H3b) growth, and (H3c) reputation.

### **Financial service infrastructure and SMEs performance**

Limited access and cost of finance are critical deterrents to SMEs' performance (Dinh et al., 2012). The challenges are generally much harder for younger SMEs than the established big firms (Ayyagari et al., 2008). Fungáčová et al. (2015) evidenced that bribery is common to access credit facilities to address institutional failure. However, the effect of access to finance on firms depends on the host industry and country. An earlier study of Beck and Demircug-Kunt (2006) showed that industries that are mainly formed by low-tech SMEs achieve much lower growth than industries with large hi-tech businesses due to the lack of access to institutional finance. Family-owned businesses also demonstrate non-borrowing behaviour, which slows down growth due to the lack of investment. Fowowe (2017) suggested that firms must overcome the barrier to finance access to become sustainable. However, a recent study shows that the presence of informal firms intensifies the credit constraints for registered SMEs (Distinguin et al., 2016). Ayyagari et al. (2008) and Motta (2020) argued that policymakers in developing countries could facilitate informal/alternative finance to

ensure credit availability for SMEs where access and cost of finance are significant growth obstacle.

However, Ostrovsky et al. (2019) defied most studies by identifying that access and cost of finance was the least important issues among various challenges facing SMEs and new start-ups in Canada. Therefore, we hypothesise:

H4. Better access and lower cost of finance will positively affect firm performance by contributing to their (H4a) investment commitment, (H4b) growth, and (H4c) reputation.

3. Methodology

Our research questions drive the methodological choice, and the proposed methodological framework (Figure 2) consists of the following steps to address the RQs:

Step 1- the constructs and sub-constructs for institutional voids, and firm performance are derived from the literature review and presented in Table 1. A conceptual model is developed to underpin the study theoretically.

Step 2- we develop the analytical framework and a few hypotheses to address RQ1 and 2 to reveal correlations among the constructs based on the literature review. A set of proxies from the World Bank Enterprise Survey questionnaire (Appendix 1) in line with the hypotheses and proposed framework is developed in this stage. The proxies are generated based on the sub-constructs outlined in Table 1. The validity of our proxies is based on our construct and sub-constructs determined from the literature. In addition, an exploratory factor analysis (EFA) is initially performed on the sub-constructs. Thus we derive our statistical data on the SMEs and the large firms to compare the impact of institutional voids according to firm size. However, the data in the enterprise survey are presented in various units (e.g. monetary unit, time, Likert-scale etc.). Additionally, unanswered survey questions are coded in negative values. We have applied a 1-5 coding system to standardised data and also to avoid zeros and



negative values. The demography of our data is presented in Table 2. The countries' details, economic condition, years, number of businesses from each country are captured in Appendix 2.

**Table 2 about here**

Step 3- the survey responses were analysed to estimate the relationship of the variables within the analytical model using the structural equation methodology (SEM) approach (Hussey and Eagan, 2007) to validate the corresponding hypotheses model (Figure 1) and to investigate the imposed theoretical associations of research hypotheses through the covariation between the constructs of institutional void and SME performance (Antonakis et al., 2010) by testing the hypotheses posed in section 3. The SEM methodology has certain advantages since it allows for (1) explanations of the possible correlation deriving from the conceptual model and (2) simultaneous analysis of the associations of different proxies on the dependent measure(s). The distinguishing feature of SEM is that the utilised variables – in contrast to typical regression analysis techniques – can be either directly observed or latent or a mixture of both. The methodology can also assess associations and partial associations among observed and/or latent variables (Bollen and Pearl, 2013).

Our hypothesised model is a typical example of such a complex modelling structure, posing associations between latent and observed constructs. Using the fitted SEM models, the World Bank Enterprise Survey data were estimated through the AMOS software program (Arbuckle, 2014). The weighted least squares (WLS) (Jöreskog, 1994) is the estimation method suitable for our ordinal data derived from Likert-scale answers.

**Figure 2 about here**

Step 4- here, we develop the institutional void-SME performance framework based on our result to address the third research question (RQ3). We have used the factor

loading analysis derived from the SEM to establish significant relationships between the latent variables.

**5. RESULTS**

***Results of reliability and validity analysis***

The results of testing for reliability and the common method bias of the fitted structural equation models are presented in Tables 3. Cronbach's  $\alpha$  and the percentage of the variance of the selected items explained by each of the latent factors are the measures utilised. Generally, it is seen that the collected data do not suffer from common method bias, since in most cases, the percentage of variance explained is above the desirable limit of 50%, with only a few exceptions. Table 3 also shows the goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), and the Root Mean Square Error of Approximation (RMSEA), indicating the fit of the SEM models ranges from adequate to good fit.

***Estimated parameters***

In the current section, the SEM results are presented in a summarised form. A graphical representation of these results is shown in Figures 3 and 4 for each company size category.

***Figure 3 and 4 about here***

Our result (Table 4) suggests that formal institution is not significant to investment commitment. Although such results contradict previous studies (e.g. Aisen and Veiga, 2013; Brinkerink and Rondi, 2020), they are logical. Firms generally commit to investing in process, technology, facility, or product/service development as reactive or proactive measures to deal with the competition or comply with the regulation. Therefore, regardless of existing voids informal institutions, both the SMEs and large firms in our sample are committed to viable investment for short and/or long term gains. Additionally, firms may invest in protecting themselves from challenges arising from the formal institutional void. We find similar contradictory evidence (e.g.

Chowdhury et al., 2019) while testing the correlation between formal institution and growth. Our results show that formal institution negatively affect growth ( $\beta = -0.302$ ;  $p < 0.05$ ). This is perhaps due to firms' experience of dealing with the existing formal institution. It is assumed that the experience of dealing with institutional voids develops dynamic capabilities within firms, allowing them to utilise the voids in their favours (often by participating in corruption). North et al. (2009:2013) and Van Bavel (2017) indicated that firms (often through their collective lobby power) could exert influence in generating and distributing wealth in countries where formal institutional voids exist. They form a mutually benefitting patron-client relationship with formal institutions to maintain institutional equilibrium and extract strategic and economic gains. Institutional improvement may require a new transaction method and opportunity cost, which can be detrimental to the existing growth process.

**Table 4 about here**

However, a strong positive correlation exists between formal institutional infrastructure and SMEs' reputation ( $\beta = 0.730$ ;  $p < 0.01$ ). We find a similar outcome for large businesses while comparing the impact of formal institutional infrastructure. However, the magnitude of the effects are stronger (growth [ $\beta = -0.644$ ;  $p < 0.05$ ], reputation [ $\beta = 0.862$ ;  $p < 0.01$ ]). Such results contradict the assumption (e.g. Chen et al., 2019; Ge et al., 2019) that SMEs are worse affected by formal institutional void than large businesses. It is assumed that large businesses gain trade advantage in access to strategic and operational resources, vital trade information, exclusive government contract and license due to existing institutional void (Ahmed et al., 2014; Van Bavel, 2017).

Unlike formal institutions, primary services show positive correlations to all three performance constructs for SMEs. However, the significance and magnitude of the positive correlation is far stronger for investment commitment ( $\beta = 0.944$ ;  $p < 0.01$ ) compared to growth ( $\beta = 0.391$ ;  $p < 0.05$ ) and reputation ( $\beta = 0.115$ ;  $p < 0.10$ ). Voids in primary services force SMEs to invest significantly in basic infrastructure, e.g. utility and transportation. SMEs can have in-house power generating facilities and pumps to extract surface and underground water for industrial use to replace or

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4 supplement electricity and water drawn from the power grid and water supply system.  
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6 Due to the limitation of funds, SMEs cannot invest in greener technology and advanced  
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8 processes. R&D and green technology investment may increase if SMEs don't have to  
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10 invest in primary services that their respective governments should ensure. Thus, our  
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12 results correspond to Khoury and Prasad (2016) and others. On the other hand, our  
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14 result indicates a weak positive correlation between primary services and the  
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16 reputation of large businesses ( $\beta = 0.140$ ;  $p < 0.10$ ).  
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19 Similar to primary service, market regulating infrastructure is also significant to the  
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21 three performance constructs for SMEs. However, it is negatively correlated to  
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23 investment commitment ( $\beta = -0.316$ ;  $p < 0.05$ ). Similar results were also found earlier  
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25 by Fuentelsaz et al. (2018) and Minh and Hjortsø (2015). Whereas growth ( $\beta = 0.829$ ;  
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27  $p < 0.01$ ) and reputation ( $\beta = 0.610$ ;  $p < 0.01$ ) show the strong positive correlation  
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29 with primary services. Market regulating infrastructure has sub-constructs such as the  
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31 intensity of informal competition, local market size, access to the export market and  
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33 skilled labour. Investing in tangible and intangible resources provides businesses with  
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35 a competitive edge in markets that efficiently maintain fair competition. In such market  
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37 conditions, a firm's survival and growth depends on its ability to generate values for its  
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39 customers in better ways compared to its competitors. However, our result implies that  
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41 SMEs invest more in better technology, human resources, innovation, production and  
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43 delivery process improvement in countries where informal competition is less intense,  
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45 and access to the domestic and international market and skilled workforce are good.  
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47 Markets with many informal competitors fail to maintain fair competition since  
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49 unregistered businesses are not within reach of the regulatory mechanism. SMEs are  
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51 more prone to reputational loss due to their limited supplier switching and price-  
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53 determining abilities while facing behavioural uncertainties from suppliers operating  
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55 informally. Besides, informal competition often disqualifies legally operating SMEs to  
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57 benefit from their technical and human capital investment. We find similar results  
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59 while comparing with large businesses (investment commitment [ $\beta = -0.999$ ;  $p <$   
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0.01]; growth [ $\beta = 0.416$ ;  $p < 0.05$ ]; and reputation [ $\beta = 0.239$ ;  $p < 0.05$ ]).

Nonetheless, financial service infrastructure is non-significant to SMEs investment commitment, positively correlated to growth ( $\beta = 0.264$ ;  $p < 0.05$ ) and negatively correlated to reputation ( $\beta = -0.286$ ;  $p < 0.05$ ). Ostrovsky et al. (2019) also found a very weak correlation between access to finance and growth. SME owners often have less appetite to raise capital from the institutionalised financial market. Family ownership and access to personal wealth to deal with institutional void are common features for SMEs (Ge and Micelotta, 2019). Many are proud to have no credit and prefer to grow slowly than borrow money to fuel growth. Such a non-borrower attitude is partly due to their lack of trust and confidence in the capital market. De Castro et al. (2014) attributed this behaviour as preserving their socioemotional wealth at the expense of growth. Similarly, the relationship between financial service infrastructure and investment commitment of large businesses is also non-significant. Once more, we returned to North et al. (2009:2013) and Van Bavel (2017) to explain the non-significant relationship. We believe large firms in our sample are served well by the existing financial service infrastructure in a similar way the formal institution benefits them. Therefore, they do not perceive that a further improvement will add benefits to their investment commitment. However, the correlations are far stronger for large business (growth [ $\beta = 0.64$ ;  $p < 0.01$ ]; reputation [ $\beta = -0.424$ ;  $p < 0.05$ ]). Reputation has sub-constructs, such as the firm's size, ownership structure, experience, quality certification, and managerial experience. Existing literature (e.g. Ayyagari et al., 2008; Dinh et al., 2012) assumes that poor financial service adversely affects SMEs' performance as well as their reputation. Our results invalids such claim and resonate closely with Ostrovsky et al. (2019). Our results only show a negative correlation between financial service infrastructure and reputation across the board.

#### ***Table 5 about here***

Below we discuss our result according to our hypotheses (Table 5).

Hypothesis 1 proposed a positive correlation between formal institutional void elimination and SME performance. Our hypothesis is verified partially for the reputation (H1c) construct of both the SME and large business performance. Although

we do not see a direct positive correlation between the formal institution and growth/investment commitment constructs of performance, it is assumed that increased reputation will allow firms to collaborate with other reputed domestic and international firms. Such collaboration will, in turn, positively impact firms' growth and investment commitment to research and development. Thus, our findings align with previous research and make valuable and novel contextual (SME) empirical contributions and allow us to compare and contrast firm size.

Hypothesis 2 proposed a positive linkage between improved primary services and SMEs' performance. The results reveal that all three constructs of SMEs' performance are positively correlated to improved direct services. Therefore, the results support hypothesis 2. However, the contrast with large businesses is striking as only the reputation construct shows a positive correlation for large firms.

Hypothesis 3 proposed a positive correlation between improved market regulating infrastructure and performance. This hypothesis is also partly verified as we found a positive correlation between market regulation and growth (H3b) and reputation (H3c) for SMEs and large businesses. While Hypothesis 4 proposed better access and lower cost of finance will positively affect performance. Similarly, our hypothesis is partly verified for growth (H4b) regardless of firm size. Reduced informal competition, better access to domestic and international markets, and a skilled workforce can significantly improve SMEs performance. On the other hand, better access and lower cost of institutional finance will enhance SMEs performance. Hence, market and financial regulators could consider these to support SMEs performance.

**Table 6 about here**

In order to address the RQ3 and develop our performance framework, we apply the factor loading of latent variables (Table 6). The institutional void-SME performance framework demonstrated in Figure 5 is outlined based on these findings. The factor loadings reveal that utility infrastructure positively contributes to primary service quality. SMEs' growth is positively influenced by employee number ( $\beta = 0.304$ ;  $p < 0.10$ ), whereas large businesses are affected negatively ( $\beta = -0.157$ ;  $p < 0.10$ ) by

employee number. Although the confidence level and magnitudes are low, such findings are relevant for SME's human resource strategy. We find reputation is more influenced by managerial experience and provenance for SMEs and large businesses, implying the importance of recruiting experienced people into management and familiarity in the markets they operate. Reputation will allow SMEs to mitigate the transactional uncertainties arising from institutional voids.

**Figure 5 about here**

A good reputation signals an SME's ability and willingness to honour contracts, whereas a bad reputation signals the opposite. Larger firms can protect their reputation in institutional voids due to their inherent attributes, e.g. size, age, managerial experience, leadership and so on (Reed, 2021). SMEs can imitate such characteristics for a competitive advantage over their competitors. With their reputation, SMEs can attract and retain talented employees, access industrial loans, and form alliances with other large domestic and international partners. SMEs with a good reputation in the domestic market are likely to engage in export trade. Our result resonates with previous studies of Austin et al. (2017), Gao et al. (2017), Manikandan and Ramachandran (2015), to mention a few.

Among the sub-constructs of formal institutional infrastructure, tax administration (beta = 0.614;  $p < 0.01$ ) and business licensing and permits (beta = 0.659;  $p < 0.01$ ) contributes most significantly whereas property rights (beta = 0.441;  $p < 0.05$ ) and labour regulation (beta = 0.388;  $p < 0.05$ ) are the least contributes factors. Therefore, it implies that tax and licensing regulation need immediate improvement for SME performance. Bureaucratic efficacy (beta = 0.590;  $p < 0.01$ ), political stability (beta = 0.532;  $p < 0.01$ ), corruption control (beta = 0.542;  $p < 0.01$ ), and fairness of courts (beta = 0.547;  $p < 0.01$ ) moderately contribute to formal institution and also require improvement across the world to ensure better SME performance. Respective governments and policy makers should note these findings to help improve SMEs' performances



Market size, informal competition and availability of skilled labour contributes positively to the market regulating infrastructure. Such results imply that SMEs performance will improve if better access to the domestic market and the ability to recruit skilled labour is ensured along with reduced informal competition. Export opportunity is only significant at the  $p < 0.10$ , implying SMEs limited exposure to international trade. Compared to large businesses, utility infrastructure and informal competition are the two sub-constructs that show variation as they are significant for SMEs but not for large companies. SMEs that own utility and power infrastructure (e.g. in-house power generating facilities and/or pumps to extract surface and underground water for industrial use to replace or supplement electricity and water drawn from the power grid and water supply system) can take a location strategy where there is lack of access to primary service. Such a location will provide more economical fixed assets and workforce. Investing in tangible and intangible resources will provide SMEs with a competitive edge in markets that efficiently maintain fair competition. It is also worth considering that SMEs would forgo loans from the institutionalised capital markets and nourish a permanent non-borrower mindset due to the complexities and associated risk of raising capital. They will grow slower due to the lack of capital to preserve their socio-emotional wealth. However, SMEs can pursue non-economic goals such as reputation building and deeply embedding in the local communities, providing them with a competitive edge in the local markets.

**6. Discussion**

This research aims to understand the impact of institutional void on SMEs and compare it with large businesses to develop a performance framework. Our results indicate that improvement in institutional quality positively contributes to SMEs' performance, but not equally in each performance construct. SMEs growth and reputation are affected by institutional quality across the board, while primary services and market infrastructure contributes to investment commitments.

In general, our results correspond to the plethora of institutional literature cited earlier (Ahmed et al., 2014; Gao et al., 2017; Distinguin et al., 2016; Khoury and Prasad, 2016;



Ostrovsky et al., 2019; Van Bavel, 2017). However, our results contradict a range of institutional literature (e.g. Aisen and Veiga, 2013; Ayyagari et al., 2008; Brinkerink and Rondi, 2020; Chowdhury et al., 2019; Chen et al., 2019; Dinh et al., 2012). Nonetheless, our study is unique because it investigated the impact of institutional void on both financial and non-financial performance constructs (i.e. growth, investment commitment and reputation) using firm-level data. Furthermore, our four measures for the institutional voids captured the output side of the institution rather than the input side.

Our paper makes a methodological contribution by applying the SEM method to analyse firm-level institutional data. Our SEM method enables a consistent and robust estimation of the institution-firm performance relationship. The majority of the literature used the input side as the proxy for institutional void using aggregated data set mentioned in our introduction (e.g. Chowdhury et al., 2019; Ge et al., 2019; Webb et al., 2020). What matters for us is how such institutional voids affect businesses. For example, the extent and magnitude of the increased cost of corruption, governments' ability to supply electricity, utilities, access and cost to capital, increased cost and transactional complexities associated with macro-level political instabilities, and the intensity of informal competition due to regulatory failure. Our latent variables (property rights, power and energy, quality of utility infrastructure and transportation, the local market and access to export market) are applied either for the first time or in a way never been done before within the existing literature. In addition, most institutional literature investigated either financial or non-financial performance. However, our paper makes a more holistic contribution by analysing both the financial and non-financial performances. Additionally, analysing the impact of institutional void on non-financial performance such as reputation added a new dimension to the institution-based view literature and also significantly contributed to the emerging reputation base view (Gao et al., 2017). Thus our model calls for both theoretical, policy and methodological implications.

Our most significant contribution is the framework (Figure 5) that determines what types of institutional void affect which performance construct most significantly. We

reviewed the existing literature to identify relevant factors, develop proxies for data analysis, and identify the critical relationships between institution and performance. For example, we find a strong positive correlation between formal institutional infrastructure and reputation regardless of firm size; primary services with all performance constructs for SMEs; market regulation with growth and reputation and financial services to growth for SMEs and large firms. Such detailed analysis demonstrates clear relationships between institutional void and performance. SMEs and policymakers can use this framework to determine performance priorities and deal with institutional voids accordingly.

Besides, our findings also challenge the overgeneralised notion that improvement in institutional infrastructure will always produce better performance outcomes for firms. Our results demonstrate that formal institutional infrastructure, market regulation, and financial service can negatively impact growth, investment commitment, and reputation for SMEs and large firms. Such findings provide empirical evidence to the discourse of 'limited access order' initiated by North et al. (2009:2013) and recently discussed by Van Bavel (2017). This can provide institutional researchers with a new theoretical lens to analyse and explain the impact institutional void can have on SMEs' various performance dimensions compared to larger businesses in future contextualised studies.

Nonetheless, our work has its limitations, which may pave the path for future research. We tested our model using one specification (size); future studies could use the geographic and ownership structure, location and economic development stage of the countries included in the data set, as we know institutional qualities are often associated with such attributes.

Our analysis has not captured the informal institution consciously as the commonly used Hofstede cultural dimension would not satisfy the constructs of the informal institutional void. Future studies may investigate how the absence of informal institutional capital affect businesses run by individuals facing ethnic, religious, sexual or other forms of discrimination. On a similar note, we have not specifically looked into

the institutional effect on SMEs run by women entrepreneurs or recruiting a primarily female workforce. Such studies will have significant development implications given the scale of such discrimination across the world. Also, a smaller sample of countries could be analysed with greater detail to capture the nuances of institutional void and business performance.

## 7. Conclusion

This study identified how various institutional voids affected SMEs' performance dimensions, compared them with large firms, and developed a performance framework. Among the institutional sub-constructs, improvement in the primary service infrastructure can have the most significant positive impact on SMEs' performance. Therefore, policymakers need to prioritise these in their institution development plan and adopt a hand-holding attitude to support the sustainability of the smaller businesses. We hope this study will stimulate further theorising on the topic.

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## Tables and Figures

**Table 1: Constructs and sub-constructs to reveal the impact of institutional void on firm performance**

<i>Institutional void, firm performance &amp; strategies</i>	<i>Construct</i>	<i>Sub-construct</i>	<i>Sources</i>
<i>Institutional void</i>	Formal institutional infrastructure	Property right	Aisen and Veiga, 2013; Chen et al., 2019; Ge et al., 2019; Joshi et al., 2015; Khanna & Palepu, 1997; Vanderseypen et al., 2013; Webb et al., 2014; 2020; Williams and Vorley 2015b.
		Bureaucratic efficacy	
		Tax administration	
		Business licensing and permits	
		Corruption control	
		Fairness of Courts	
	Primary service infrastructure	Labour regulation	Williams and Vorley 2015b.
		Political Stability	
	Primary service infrastructure	Access to utility infrastructure	Khoury and Prasad, 2016; Mair et al., 2012; Webb et al., 2014; 2020.
		Quality of utility infrastructure	
	Market regulating infrastructure	Intensity of informal competition	Adom, 2014; Brinkerink and Rondi, 2020; De Castro et al., 2014; Distinguin et al., 2016; Hudson et al., 2012; Williams and Shahid, 2016; Williams and Vorley, 2015a.
		Local market size	
		Access to export market	
		Access to skilled labour	
	Financial service infrastructure	Access and cost of finance	Ayyagari et al., 2008; Beck and Demirguc-Kunt 2006; Fowowe, 2017; Motta, 2020; Nicolas, 2021; Ostrovsky et al., 2019.
<i>Firm performance</i>	Growth	Sales growth	Beck et al., 2006; Dinh et al., 2012;
		Growth in number of employees	
	Investment commitment	Investment in fixed asset	Brinkerink & Rondi, 2020; Nicolas, 2021; Pellegrini, 2011; Fuentelsaz et al., 2018; Minh and Hjortsø, 2015.
		Owners commitment	
	Reputation	Managers experience	Franco and Haase, 2021; Gao et al., 2017; Manikandan and Ramachandran 2015; Reed, 2021; Sorenson, 2014; Su et al. 2017.
		Certification	
		Years in business	

Table 2: Data demography

Size	Definition (employee nos.)*	No.	%
SME	< 250	96275	81
Large	250>	22488	19
Total		118763	100

\* [https://ec.europa.eu/growth/smes/sme-definition\\_en](https://ec.europa.eu/growth/smes/sme-definition_en)

Table 3: Goodness-of-fit statistics, Reliability and validity test results for the fitted SEM models

Latent construct					SMEs		Large		
	RMR	GFI	AGFI	PGFI		Cronbach's alpha	% variance	Cronbach's alpha	% variance
SMEs	0.10	0.901	0.873	0.829	Formal institutional	0.787	53.82	0.760	48.06
Large	0.13	0.818	0.773	0.765	Primary service	0.601	52.92	0.701	52.58
					Market regulating	0.804	53.48	0.859	62.69
					Growth	0.792	51.09	0.507	50.22
					Reputation	0.684	52.61	0.735	54.86

\*RMR: Root Mean Square Residual; GFI: Goodness-of-fit index; AGFI: Adjusted goodness-of-fit index; PGFI: Parsimony goodness-of-fit index.

Table 4: Standardised parameter estimates and corresponding significances for the fitted SEM models according to company size

Associations between institutional void and firm performance			SMEs		LARGE	
			Estimate	P	Estimate	P
Formal institution	→	Investment commitment	0,095	n.s	-0,027	n.s.
Formal institution	→	Growth	-0,302	**	-0,644	***
Formal institution	→	Reputation	0,730	***	0,862	***
Primary service	→	Investment commitment	0,944	***	-0,005	n.s.
Primary service	→	Growth	0,391	**	0,058	n.s.
Primary service	→	Reputation	0,115	*	0,140	*
Market regulation	→	Investment commitment	-0,316	**	-0,999	***
Market regulation	→	Growth	0,829	***	0,416	**
Market regulation	→	Reputation	0,610	***	0,239	**

<b>Financial service</b>	→	Investment commitment	-0,010	n.s.	0,022	n.s.
<b>Financial service</b>	→	Growth	0,264	**	0,64	***
<b>Financial service</b>	→	Reputation	-0,286	**	-0,424	**

\*: Parameter is statistically significant at a 10% level, \*\*: Parameter is statistically significant at a 5% level, \*\*\*: Parameter is statistically significant at a 1% level

Table 5 Hypotheses verification and corresponding and contradicting evidence

Hypotheses		SME	Large
<b>H1. Eliminating formal institutional void will positively affect business performance</b>	H1a. investment commitment	Not verified	Not verified
	H1b. Growth	Not verified	Not verified
	H1c. Reputation	Verified	Verified
<b>H2. Improved primary services will positively affect business performance</b>	H2a. investment commitment	Verified	Not verified
	H2b. Growth	Verified	Not verified
	H2c. Reputation	Verified	Verified
<b>H3. Improved market regulating infrastructure will positively affect business performance</b>	H3a. investment commitment	Not verified	Not verified
	H3b. Growth	Verified	Verified
	H3c. Reputation	Verified	Verified
<b>H4. Better access and lower cost of finance will positively affect business performance</b>	H4a. investment commitment	Not verified	Not verified
	H4b. Growth	Verified	Verified
	H4c. Reputation	Not verified	Not verified

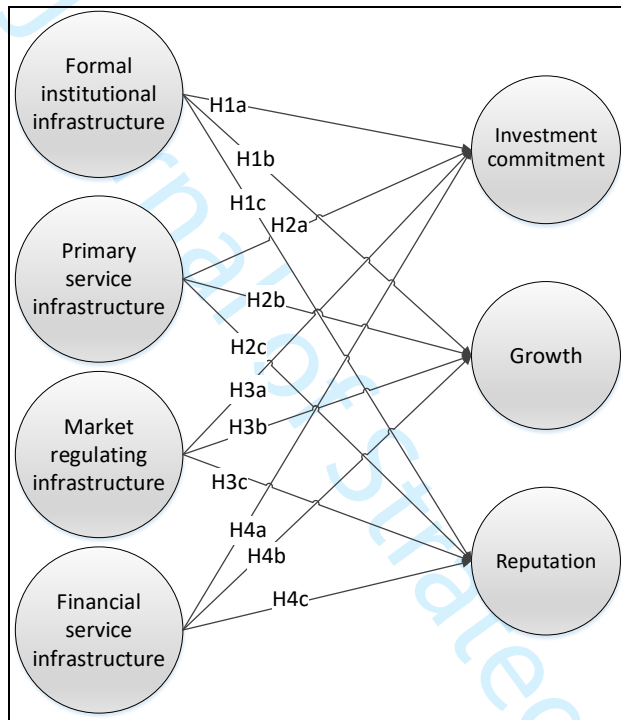
Table 6: Estimated standardized path coefficients between (sub)-factors and observed items (SMEs, Large enterprises)

Constructs			SMEs		Large	
			Estimate	P	Estimate	P
Annual sales (USD)	→	Growth	0.094	n.s.	0.044	n.s.
Growth (in employee number)	→	Growth	0.304	*	-0.157	*
Managers experience	→	Reputation	0.446	**	0.434	**

Certification	→	Reputation	0.071	n.s.	-0.011	n.s.
Year in business	→	Reputation	0.418	**	0.201	*
Access to utility infrastructure	→	Primary Service Infrastructure	0.371	**	0.053	n.s.
Quality of utility infrastructure	→	Primary Service Infrastructure	0.292	*	0.429	**
Property rights	→	Formal Institutional Infrastructure	0.441	**	0.388	**
Tax administration	→	Formal Institutional Infrastructure	0.614	***	0.669	***
Business licensing and permits	→	Formal Institutional Infrastructure	0.659	***	0.678	***
Bureaucratic efficacy	→	Formal Institutional Infrastructure	0.590	***	0.498	***
Political stability	→	Formal Institutional Infrastructure	0.532	***	0.626	***
Corruption control	→	Formal Institutional Infrastructure	0.542	***	0.702	***
Fairness of courts	→	Formal Institutional Infrastructure	0.547	***	0.703	***
Labour regulation	→	Formal Institutional Infrastructure	0.388	**	0.408	**
Local market size	→	Market Regulating Infrastructure	0.346	**	0.242	*
Intensity of informal competition	→	Market Regulating Infrastructure	0.308	**	0.008	n.s.
Access to export market	→	Market Regulating Infrastructure	0.112	*	0.302	**
Access to skilled labour	→	Market Regulating Infrastructure	0.375	**	0.427	**

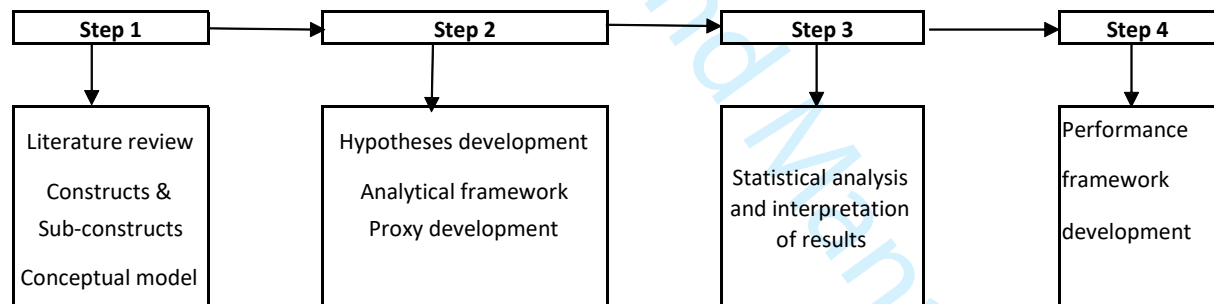
\*: Parameter is statistically significant at a 10% level, \*\*: Parameter is statistically significant at a 5% level, \*\*\*: Parameter is statistically significant at a 1% level

### Figures



**Figure 1:** Hypothesized model and related research hypotheses

*Note: Circles denotes latent structures, showing the combined effect of more than one observed items*



**Figure 2:** Methodology diagram

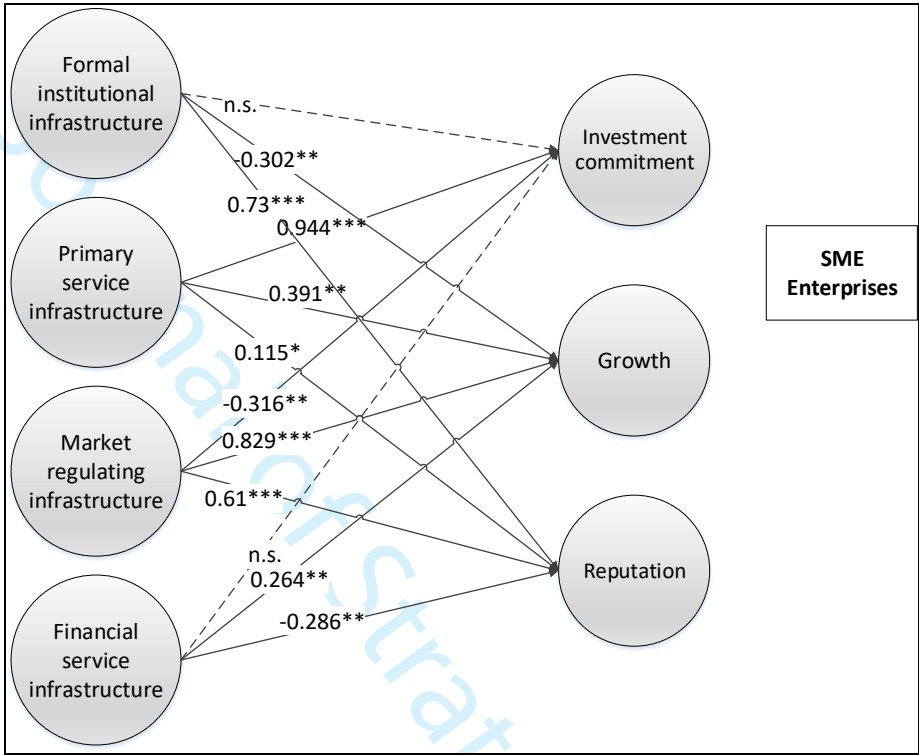


Figure 3: Path diagram and standardized coefficients for the Small-and-medium sized (SMEs) enterprises SEM model.

Note: The single-headed arrows in the path diagrams are used to imply a direction of assumed causal influence while the numerical values next to each arrow correspond to the standardised regression weights of the corresponding item on the latent construct while the statistical significance of each weight is also indicated. The dashed lines in the path diagrams indicate no statistical significance for the specific associations.

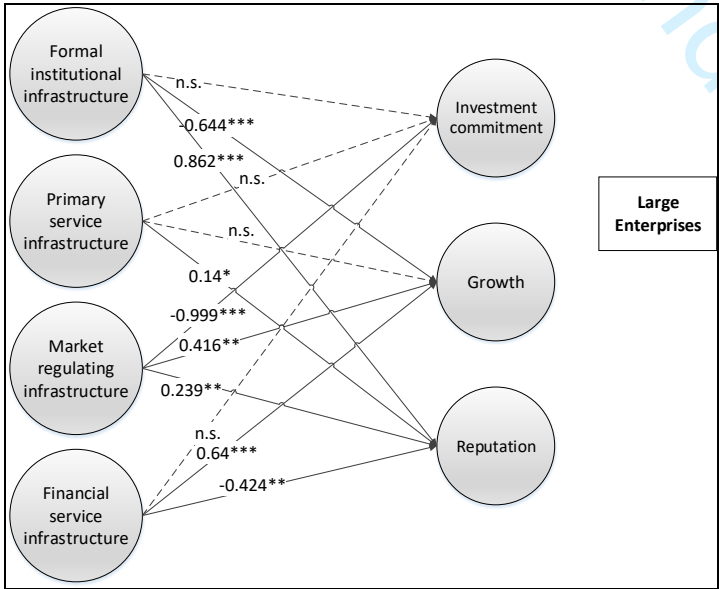
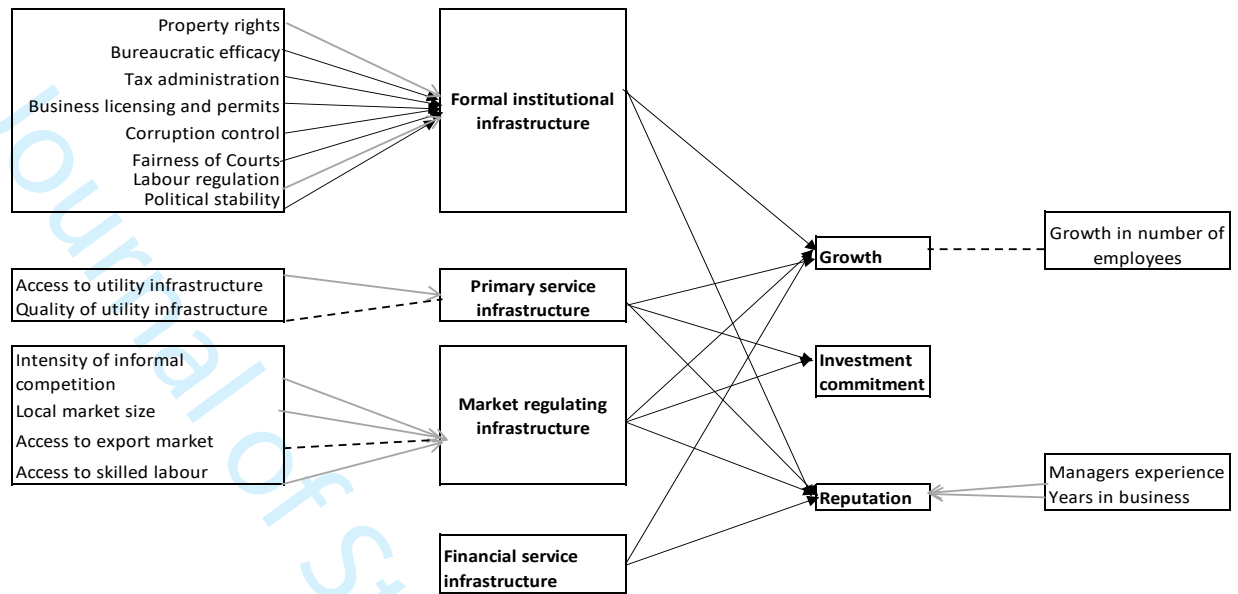


Figure 4: Path diagram and standardized coefficients for the Large enterprises SEM model





**Figure 5:** Emergent theory of institutional void and SME performance relationship

Note: 1. Black arrows connecting the sub-constructs denote the most significant relationships ( $p < 0.01$ ), while the grey arrows presents the moderately significant ( $p < 0.05$ ), and the dash lines indicate low priority relationships.

2. Black arrows connecting the institutional infrastructure with performance constructs presents critical relationship contributing to SMEs' performance.

## Appendices

### Appendix 1: Sub-construct, proxies and survey questions

Sub-construct	Questions from the enterprise survey
<b>Property right</b>	G.30 Do you think that access to land is No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?
<b>Bureaucratic efficacy</b>	D.30 b. Do you think that customs and trade regulations are No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?  D.4 In fiscal year [insert last complete fiscal year], when this establishment exported goods directly, what was the average number of days that it took from the time this establishment's goods arrived to their main point of exit [e.g., port, airport] until the time these goods cleared customs?
<b>Tax administration</b>	J.30 a Please look at this card and tell me if you think Tax administration is No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment.
<b>Business licensing and permits</b>	J.30 c Please look at this card and tell me if you think business licensing and permits is No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment.
<b>Corruption control</b>	M4-what kind of obstacle corruption is: No, minor, moderate, major, very severe
<b>Fairness of courts</b>	M5-what kind of obstacle fairness of court is: No, minor, moderate, major, very severe
<b>Labour regulation</b>	M10-what kind of obstacle labour regulation is: No, minor, moderate, major, very severe
<b>Political stability</b>	M11-what kind of obstacle political stability is: No, minor, moderate, major, very severe
<b>Access to utility infrastructure</b>	C.6 Over fiscal year [insert last complete fiscal year], did this establishment experience power outages?
<b>Quality of utility infrastructure</b>	C.30 Is electricity No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?
<b>Intensity of informal competition</b>	E.30 Do you think that the practices of competitors in the informal sector are No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?
<b>Local market size</b>	a3. location
<b>Access to export market</b>	D.3 In fiscal year [insert last complete fiscal year], what percent of this establishment's sales were: a. National sales, b. Indirect exports [sold domestically to third party that exports products], c. Direct exports.
<b>Access to skilled labour</b>	I30b. Is an inadequately educated workforce No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?
<b>Access and cost of finance</b>	K.17 What was the main reason why this establishment did not apply for line of credit or loan in fiscal year [insert last complete fiscal year]?  K.30 Is access to financing, which includes availability and cost [interest rates, fees and collateral requirements], No Obstacle, a Minor Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?
<b>Sales growth</b>	N.3 In fiscal year [insert three complete fiscal years ago], three fiscal year's ago, what was total annual sales for this establishment?

D.2 In fiscal year [insert last complete fiscal year], what were this establishment's total annual sales?	
<b>Growth in number of employees</b>	L.1 At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time employees did this establishment employ?
	L.2 Three fiscal years ago, in the year [insert three complete fiscal years ago], how many permanent, full-time employees did this establishment employ?
	L.6 How many full-time temporary employees did this establishment employ in fiscal year [insert last complete fiscal year]?
	L.8 What was the average length of employment of all full-time temporary employees in fiscal year [insert last complete fiscal year]?
<b>Investment in fixed asset</b>	K.4 In fiscal year [insert last complete fiscal year], did this establishment purchase fixed assets, such as machinery, vehicles, equipment, land or buildings?
	B3 What percent of this firm does the largest owner or owner(s) own?
<b>Managers experience</b>	B.7 How many years of experience working in this sector does the top manager have?
<b>Certification</b>	B.8 Does this establishment have an internationally-recognized quality certification?
<b>Year in business</b>	B.5 In what year did this establishment begin operations in this country?

Source: THE WORLD BANK Enterprise Survey, Core Module (2007) [available from <https://www.enterprisesurveys.org/en/survey-datasets>]

## APPENDIX 2 Data according to country, year, and economic classification

Country	Year	No. of businesses in data sample	Economies by per capita GNI ( 2012)
Afghanistan	2008, 2014	470	Heavily indebted poor country
Albania	2007, 2013, 2019	1032	Upper middle income (transitional economy, SE Europe)
Angola	2010	374	Upper middle income
Antigua and Barbuda	2010	151	Small island developing State
Argentina	2006, 2010, 2017	1939	Upper middle income
Armenia	2009, 2013	577	Lower middle income (transitional economy, CIS)
Azerbaijan	2009, 2013	634	Upper middle income (transitional economy, CIS)
Bahamas	2010	131	Small island developing State
Bangladesh	2013	1506	Low-income
Barbados	2010	132	High-income
Belarus	2008, 2013, 2018	1080	Upper middle income (transitional economy, CIS)
Belize	2010	174	Small island developing State
Benin	2009, 2016	286	Low-income
Bhutan	2009, 2015	568	Least developed country
Bolivia	2006, 2010, 2017	574	Heavily indebted poor country
Bosnia and Herzegovina	2009, 2013, 2019	917	Upper middle income (transitional economy, SE Europe)
Botswana	2010	251	Upper middle income
Brazil	2009	1137	Upper middle income
Bulgaria	2007, 2009, 2013	524	Upper middle income
Burkina Faso	2009	349	Low-income
Burundi	2014	165	Low-income
Côte d'Ivoire	2009, 2016	660	Heavily indebted poor country

Country	Year	No. of businesses in data sample	Economies by per capita GNI ( 2012)
Cambodia	2013, 2016	813	Least developed country
Cameroon	2009, 2016	734	Heavily indebted poor country
Cape Verde	2009	143	Lower middle income
C. African Republic	2011	159	Low-income
Chad	2009, 2018	309	Low-income
Chile	2006, 2010	966	High-income
China	2012	3245	Upper middle income
Colombia	2006, 2010, 2017	2049	Upper middle income
Congo	2009	102	Low-income
Costa Rica	2010	443	Upper middle income
Croatia	2007, 2013, 2019	796	High-income
Cyprus	2019	204	High-income
Czech Republic	2009, 2013	432	High-income
Djibouti	2013	204	Lower middle income
Dominica	2010	785	Small island developing State
Dominican Republic	2010, 2016	616	Upper middle income
D.R. of Congo	2010, 2013	719	Low-income
Ecuador	2006, 2010, 2017	789	Upper middle income
Egypt	2013, 2016	3991	Lower middle income
El Salvador	2006, 2010, 2016	1039	Lower middle income
Eritrea	2009	120	Low-income
Estonia	2009, 2013, 2019	935	High-income
Eswatini	2016	145	Landlocked developing state
Ethiopia	2011, 2015	1251	Low-income
Fiji	2009	80	Small island developing State
Gabon	2009	142	Upper middle income
Gambia	2018	165	Low-income
Georgia	2008, 2013, 2019	1106	Lower middle income (transitional economy, CIS)
Ghana	2007, 2013	692	Heavily indebted poor country
Greece	2018	645	High-income
Grenada	2010	148	Small island developing State
Guatemala	2006, 2010, 2017	771	Lower middle income
Guinea	2016	129	Low-income
Guyana	2010	147	Heavily indebted poor country
Honduras	2006, 2010, 2016	588	Heavily indebted poor country
Hungary	2009, 2013	453	Upper middle income
India	2014	10049	Lower middle income
Indonesia	2009, 2015	2268	Lower middle income
Iraq	2011	815	Upper middle income
Israel	2013	493	High-income
Italy	2019	750	High-income
Jamaica	2010	277	Upper middle income
Jordan	2013, 2019	951	Upper middle income
Kazakhstan	2009, 2013, 2019	2187	Upper middle income (transitional economy, CIS)
Kenya	2013, 2018	1672	Low-income
Montenegro	2009, 2013, 2019	1957	Upper middle income (transitional economy, SE Europe)
Kyrgyz Republic	2009, 2013	786	Low-income (transitional economy, CIS)
Lao PDR	2009, 2016, 2018	1108	Least developed country
Latvia	2009, 2013, 2019	821	High-income
Lebanon	2013	480	Upper middle income
Lesotho	2009, 2016	315	Lower middle income
Liberia	2009, 2017	295	Low-income
Lithuania	2009, 2013, 2019	882	High-income
Madagascar	2009	367	Low-income
Malawi	2009, 2014	531	Low-income
Malaysia	2015	915	Upper middle income

Country	Year	No. of businesses in data sample	Economies by per capita GNI ( 2012)
Mali	2007, 2010, 2016	437	Low-income
Malta	2019	228	High-income
Mauritania	2014	104	Lower middle income (heavily indebted)
Mauritius	2009	342	Upper middle income
Mexico	2006, 2010	1547	Upper middle income
Micronesia	2009	58	Small island developing State
Moldova	2009, 2013, 2019	762	Lower middle income (transitional economy, CIS)
Mongolia	2009, 2013, 2019	1145	Landlocked developing state
Morocco	2013, 2019	1350	Lower middle income
Mozambique	2007, 2018	725	Low-income (heavily indebted)
Myanmar	2014, 2016	1180	Low-income
Namibia	2014	373	Upper middle income
Nepal	2009, 2013	989	Low-income
Nicaragua	2006, 2010, 2016	716	Lower middle income (heavily indebted)
Niger	2009, 2017	249	Low-income (heavily indebted)
Nigeria	2014	2134	Lower middle income
North Macedonia	2009, 2013, 2019	1028	Upper middle income (transitional economy, SE Europe)
Pakistan	2013	557	Lower middle income
Panama	2006, 2010	210	Upper middle income
Papua New Guinea	2015	62	Lower middle income
Paraguay	2006, 2010, 2017	688	Lower middle income
Peru	2006, 2010, 2017	1839	Upper middle income
Philippines	2009, 2015	2395	Lower middle income
Poland	2009, 2013, 2019	1290	High-income
Portugal	2019	1005	High-income
Romania	2009, 2013	816	Upper middle income
Russia	2009, 2012, 2019	5473	High-income (transitional economy, CIS)
Rwanda	2011	205	Heavily indebted poor country (heavily indebted)
Samoa	2009	74	Least developed country
Senegal	2007, 2014	558	Lower middle income (heavily indebted)
Sierra Leone	2009, 2017	324	Low-income (heavily indebted)
Slovak Republic	2009, 2013	392	High-income
Slovenia	2009, 2013, 2019	925	High-income
Solomon Islands	2015	168	Least developed country
South Africa	2007	79	Upper middle income
Sudan	2014	957	Heavily indebted poor country (heavily indebted)
Sri Lanka	2011	556	Lower middle income
St Kitts and Nevis	2010	137	Small island developing State
St Lucia	2010	157	Small island developing State
St Vincent and Grenadines	2010	141	Small island developing State
Suriname	2010, 2018	341	Small island developing State
Tajikistan	2008, 2013, 2019	809	Low-income (transitional economy, CIS)
Tanzania	2013	536	Low-income (heavily indebted)
Thailand	2016	971	Upper middle income
Timor-Leste	2009, 2015	242	Least developed country
Togo	2009, 2016	282	Low-income (heavily indebted)
Tonga	2009	131	Small island developing State
Trinidad and Tobago	2010	350	High-income

Country	Year	No. of businesses in data sample	Economies by per capita GNI ( 2012)
Tunisia	2013	606	Upper middle income
Turkey	2008, 2013, 2019	3165	Upper middle income
Uganda	2013	512	Low-income (heavily indebted)
Ukraine	2008, 2013, 2019	2501	Lower middle income (transitional economy, CIS)
Uruguay	2006, 2010, 2017	752	High-income
Uzbekistan	2008, 2013, 2019	1934	Lower middle income (transitional economy, CIS)
Vanuatu	2009	110	Least developed country
Venezuela	2006, 2010	198	Upper middle income
Vietnam	2009, 2015	2113	Lower middle income
West Bank and Gaza	2013, 2019	748	
Yemen	2010, 2013	605	Lower middle income
Zambia	2007, 2013	669	Lower middle income
Zimbabwe	2011, 2016	1208	Low-income

Source: <https://www.enterprisesurveys.org/en/survey-datasets>