

## **Entrepreneurial Financing: How global and regional export intentions affect financial and non-financial choices for small and mid-sized enterprises in Low-Income Countries**

**Structured Abstract:** Research Paper

**Purpose:** The study explores how the intention to export affects financing and non-financing variables for small and medium-sized enterprises (SMEs) in a low-income country (LIC). The objectives of this study are (1) to discern between regional and global exporting and (2) to evaluate its policy-making implications.

**Design/methodology/approach:** Primary survey data were collected from 330 Rwandan SMEs and were analysed using ordered logistic models as an application of the Expectation-Maximisation Iterating Algorithm, which was tested for robustness using a Sampling Model Variation.

**Results:** Alternative sources of finance are the predominant choice to finance the intention to export within and outside Africa. As the scope of export intentions broadened from regional to global, there was a shift in preferences from less formal to more formal lending technologies, moving from methods like factoring to lines of credit. Moreover, reliance on bank officers became more significant, with increasing marginal effects. Finally, the study determined that government financing schemes were not relevant for SMEs pursuing either regional or global exporting.

**Originality:** This study accentuates how export distance alters SME financing priorities. The results also contribute to understanding how the value of relationship lending changes when less familiar markets (i.e. global exporting) are the objective. Moreover, the study offers a new perspective on how institutional voids affect entrepreneurial financing decisions in LICs.

**Implications:** While alternative sources of finance predominate the export intentions of Rwandan SMEs, establishing a robust banking relationship becomes crucial for global exporting. Despite this implication, the intention to export should prompt more transparent communication regarding government financial support programs. There is an opportunity for increased usage of relationship lending to customise support for SMEs involved in exporting, benefiting both the private and public sectors.

**Keywords:** SMEs; Exports; Low-Income Country; Formal and Informal Financing; Firm Opacity; Lending Strategies

## Introduction

While most governments create policies that target support for both export activity and small and medium-sized enterprises (SMEs), persistent barriers to access finance hinder entrepreneurs from greater market participation (Chandra *et al.*, 2020). Moreover, the share of global exports from Low-Income Countries (LICs), including Rwanda, dropped from 0.85% to 0.28% from the great financial crisis of 2008-2009 until the post-COVID-19 pandemic period (UNCTAD, 2020). Africa experienced declining exports between 2010-2020, directly affecting economic growth (World Bank Open Data, 2021). Hence, the importance of government strategies to overcome barriers to SME internationalisation cannot be understated.

Small businesses are a vital source of economic growth in Africa (Endris and Kassegn, 2022; Manzoor *et al.*, 2021; Quartey *et al.*, 2017). Despite this, 2020 SME lending on the continent only reached 28% of growth with respect to gross domestic product (GDP) (UNCTAD, 2022). The next lowest region was Latin America and the Caribbean at 59.8%, while the highest was 171.6% for the Asia-Pacific region. This ranking places Africa lowest, even though seven of the ten fastest-growing economies in 2020 – driven by SMEs and entrepreneurial start-ups – were in Africa (Wazir, 2021), pointing to funding gaps between development goals and realising entrepreneurial growth (Fraser *et al.*, 2015).

Exporting is an indicator of SME growth, and prior research shows that access to finance is a critical determinant (Roy *et al.*, 2016). However, SMEs exhibit informational opacity, which complicates lending decisions for banks (Berger and Black, 2011). In LICs, SMEs must also manage institutional voids (Garrone *et al.*, 2019), necessitating a trade-off between formal and informal financing (Turkson *et al.*, 2022). Entrepreneurial finance includes the entrepreneurial firm, the financing infrastructure, market conditions, and institutional contexts (Cumming *et al.*, 2019). It differs from traditional corporate finance due to the information asymmetries between SMEs and banks (Hirsch and Walz, 2019).

This study's primary assertion is that SME export intentions affect how entrepreneurs engage with various lending technologies in their home market.<sup>1</sup> In Africa, state and regional policies emphasise regional and global trade, yet few studies examine how export distance impacts financing preferences. Therefore, this study's primary contribution is differentiating the relationship between regional (within Africa) and global (outside of Africa) export intentions and SME financing. Recognising these gaps, this paper addresses the following research questions:

RQ1: Do SMEs prefer formal or informal financing when they express intentions to export regionally and globally?

RQ2: Does the intention to export trigger the pursuit of government support for SMEs?

RQ3: Do export intentions generate more robust relationships with bank officers?

RQ4: How do regional and global export intentions catalyse a firm's internal attributes?

The study contributes to understanding export behaviour in LICs. First, as SMEs intended to export regionally, they prioritised alternative sources of finance, factoring, and existing regional operations. When there was an intention to export globally, alternative sources of finance, factoring, lines of credit, and relationship lending were robust and manifested increasing marginal effects. Furthermore, government support was not statistically significant. Lastly, relationship lending became more important when there was an intention to export to markets outside Africa. The remaining sections include a literature review, research questions, model specification, and research design, followed by results, analysis, discussion, and conclusion.

## **Literature review**

In addition to access to finance and relationship lending literature, institutional voids and the resource-based view of the firm are discussed to understand private sector growth in LICs, which, in turn, contributes to

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<sup>1</sup> The study adopts Berger and Udell's (2006, p. 2946) definition of lending technologies to refer to the: "unique combination of primary information source, screening and underwriting policies/procedures, loan contract structure, and monitoring strategies/mechanisms."

understanding informal strategies used by SMEs that exacerbate information asymmetries and increase firm opacity. The authors adopt Berger and Udell's (1995) definition of firm opacity as an enterprise's inability or unwillingness to produce hard information (i.e. financial statements) to facilitate compliance with external evaluations for transaction-based lending.

### *Institutional context and institutional voids*

The institutional environment is a critical component of entrepreneurial finance, shaping the scope of the firm's strategy and actions. SMEs in LICs experience (financial) resource poverty (Chandra *et al.*, 2020); however, the underlying conditions and processes that reduce the availability of resources require further attention (Dekel-Dachs *et al.*, 2021). Institutional voids predominate LICs and hinder the development and function of the market, which produces higher transaction costs (Mair and Marti, 2009). Gao *et al.* (2017) pointed out that banks lose credibility as intermediaries when they cannot guarantee access to credit. In addition, market failures complicate auditors' ability to certify the firm's financial information.

The institutional context is also composed of informal institutions, which Roland (2008) described as less codified, more localised, and more resistant to change. They provide an alternative structuring of society in LICs and facilitate monitoring through self-enforcing mechanisms and informal controls based on established interpersonal relationships (Nkakleu and Biboum, 2019; North, 1990). Omeihe *et al.* (2021) argued that to resolve problems that arise from exporting activities, West African entrepreneurs often turn to trade associations, for example, that span multiple neighbouring markets and operate outside of the legal institutions. These indigenous institutions are based on trust in a network of family, religion, and other pre-existing cultural infrastructures. Entrepreneurs might seek out these lending infrastructures, perceiving them as "reasonably" dependable (Webb *et al.*, 2020). However, voids can also occur in informal institutions by "unjustly manipulating" informal financing, resulting in greater market inefficiencies (Webb *et al.*, 2020, p. 505).

Policies that institutionalise informal lending can reduce transaction uncertainty (Gao *et al.*, 2017) and alter the financial infrastructure in both formal and informal credit markets (Cheng *et al.*, 2023;

Mertzanis, 2019). Moreover, the growth of formal financial institutions can either encourage (crowding in) or discourage (crowding out) the use of informal finance for SMEs (Cheng *et al.*, 2023). However, reducing institutional voids can complement or reduce informal finance, depending on country, region, and sector characteristics. The question is how effectiveness could be measured when these systems coexist.

#### *Financial variables in exporting*

*SME financing in LICs.* The path to exporting is more difficult for SMEs in LICs because of working capital requirements and sunk fixed costs that must be financed *from the start* (Petrovito and Pozzolo, 2021). The underdeveloped institutional setting also creates a hostile domestic environment, adversely affecting export performance (Al-Hyari *et al.*, 2012). Moreover, the informationally opaque nature of SMEs subjects them to greater bank scrutiny, which increases credit rationing (Bartoli *et al.*, 2013; Ferri and Murro, 2015). Although financial ratios can indicate effective financial management and signal creditworthiness (Abiodun Eniola and Entebang, 2015), SMEs are not able to consistently present audited financial information (Berger and Udell, 1995; Simba *et al.*, 2023; Turkson *et al.*, 2022).

*Relevant lending technologies.* This study tested several formal lending technologies. Credit lines and factoring became relevant. SMEs use credit lines to meet medium-term liquidity needs, where banks provide capital when needed at favourable terms (Schwert, 2020). Greenwald *et al.* (2020) showed that firms rely on credit lines more than other types of credit after a fall in cash flow. However, if the bank or the firm show financial deterioration, the agreement can be jeopardised (Acharya *et al.*, 2020; Colonnello *et al.*, 2021).

Pacheco (2016) conducted one of the few studies investigating the connection between regional and global export activities and financing choices, revealing that exporting to riskier markets (beyond the European Union (EU)) was not negatively associated with leverage. Moreover, exporting to less risky markets (within the EU) was not found to have a positive association with leverage, contrary to expectations. Notwithstanding, Petrovito and Pozzolo (2021) established that finance-constrained firms

were 3% less likely to penetrate foreign markets, which led to a 17% decrease in the overall share of sales exported, while Abor *et al.* (2014) found a positive relationship between access to bank finance and exporting.

Factoring is a transactions-based form of lending where a third party acts as a warranter based on the quality of the accounts receivable rather than the firm's creditworthiness (Berger and Udell, 2006). It is used when the firm has a project contract but insufficient working capital. This technology is more prevalent in countries with institutional voids and high economic growth rates (Mol-Gómez-Vázquez *et al.*, 2018). It gives the impression of a stronger firm capital structure and better protects against bankruptcy versus traditional finance (Bilgin and Dinc, 2019). Albeit riskier, factoring manages currency risk more effectively than credit lines for exporting (Abgaryan and Rosenthal, 2017).

*Government funding support.* African governments actively promote export activity both regionally and globally, most recently through the AfCFTA (Obeng-Odoom, 2020). Governments implement guarantee schemes to support SMEs, which are multilateral agreements between lenders, guarantors (government), and borrowers. In theory, this mechanism considers the business ecosystem context and entrepreneurs' orientation, motivations, and competencies (Mamman *et al.*, 2019). This technology is less risky than private funding and should directly affect enterprise growth (Adhikary *et al.*, 2021). Gozzi and Schumkler (2016) argued that credit guarantee schemes can promote financial and economic additionalities, improving credit rates and firm performance. Moreover, Malca *et al.* (2020) found that government-sponsored trade mobility-related programmes helped SMEs develop critical experiential knowledge, further advancing exporting efforts. Arrieta-Paredes *et al.* (2020) found that government grants lessened the impact of the 2008-09 Great Financial Crisis (GFC) on SMEs.

Success in these efforts depends on many factors, including refinancing the government's external debt in convenient terms (Edo *et al.*, 2020) and the timing and type of government support (Tinits and Fey, 2022). Moreover, resource misallocation and a lack of risk-assessment management make the guarantee more likely to fail (Luo *et al.*, 2020; van der Schans, 2015). Beck *et al.* (2010) found that different partial

credit guarantee schemes were practical for funding and management but less for risk assessment and recovery. Although research shows inconsistent findings about its effectiveness, guarantee schemes remain the primary policy tool in LICs to assist distressed SMEs (Cusmano, 2018).

*Alternative sources of finance.* Alternative financing strategies can include using only internal funding, only formal financing, only informal (i.e. non-intermediated) financing, or a combination of formal and informal. Informal lenders often charge high interest rates that limit the resources available for firm growth (Mutsonziwa and Fanta, 2020; Song *et al.*, 2018), constituting an informal institutional void (Webb *et al.*, 2020).

Turkson *et al.* (2022) argued that the superior performance of formal finance is attributable to the bank's additional services, including training about markets and business strategy. Wellalage and Fernandez (2019) showed that there is not necessarily an association between SME success and access to either formal or informal finance. However, Hou *et al.* (2020) attributed this ambiguous relationship to firm opacity. The high cost of capital in LICs complicates risk management and diminishes the effectiveness of long-term planning. Despite this, Mpofu and Sibindi (2022) purported that African SMEs seek informal finance because of low financial literacy, simplified procedures, and the absence of credit bureaus.

*Banque Lambert* is an informal financing scheme in Rwanda and other African countries with “weak/dysfunctional” formal institutions (Menya, 2023; Omeihe *et al.*, 2021). It is akin to loan shark agreements, with interest rates between 25% and 50% (Akonkwa *et al.*, 2022). There is limited academic literature on *Banque Lambert*; however, Akonkwa *et al.* (2022) argued that it is collateral lending based on affinity links between the parties, and the “contract” is a verbal agreement made in front of witnesses. This illustrates how social networks can regulate informal finance (Mertzanis, 2019). However, if the borrower defaults, he or she not only loses the collateral but also forfeits additional assets due to the extortionate interest rates.

Small businesses favour internal over external funding and informal rather than formal finance for exporting (Nguyen and Canh, 2021). Moreover, Pangarkar and Elango (2021) found that informal finance

had a small but significant effect on SME exports. While Zhou *et al.* (2017) established a decline in pawnbroking in China post-GFC owing to defaults by export-oriented SMEs, underlining a ripple effect of informal finance on firm survival. Lastly, Amornkitvikai and Harvie (2018) showed that while unlicensed money lenders had no significant effect on exporting, funding from friends and family was negative and significant. Given these mixed results, further research on this lending form is needed.

### **Non-financial variables of exporting**

*Relationship lending and external evaluation.* Relationship lending is based on long-term bank-borrower relationships where qualitative information about the borrower is used to assess creditworthiness (Berger and Udell, 1995). Information asymmetries distort an SME's performance and make standard screening devices less effective. Indeed, Rwandan SMEs often maintain a second (falsified) financial statement to minimise taxable earnings (van.Klyton and Rutabayiro-Ngoga, 2018), complicating creditworthiness assessments based solely on hard information.

In relationship lending, a bank officer maintains social interactions with the entrepreneur and oversees the processing of soft information as it circulates through the bank to avoid distortion (Berger and Udell, 2006; Brighi *et al.*, 2019). Therefore, a low turnover of loan officers and frequent contact with clients generates better soft information (Uchida *et al.*, 2012). This technology can reduce the productivity gap between SMEs and large firms during crises (Chen and Lee, 2023). Furthermore, the length of time of the relationship reduces informational asymmetries and adverse selection problems and mitigates export contraction during market downturns (Brighi *et al.*, 2019; Ferri *et al.*, 2019).

Analogously, relationship lending has positive effects on exporting entrepreneurs. For example, Mancusi *et al.* (2018) found that the higher the concentration of debt held by the bank, the higher the export probability and intensity. Frazzoni *et al.* (2014) established that a firm's decision to export increases its financial need, which increases dependence on relationship lending. Export aspirations are incentivised when the bank has a presence in the destination market because it can transfer critical knowledge back to



the SME (Bronzini and D'Ignazio, 2017). However, relationship lending can restrict entrepreneurs to a single bank, diminishing their capacity to explore alternative options and increasing opportunity costs (Lončarski and Marinč, 2020). Likewise, Beck *et al.* (2018) contended that relationship lending imposes an “exogenous geographic limitation” on the client, potentially hampering SME internationalisation.

*Managerial ability and regional expansion.* Managerial ability is enhanced as SMEs process critical information about the market. It also develops market-oriented capabilities (i.e. the ability to learn from various stakeholders, including the bank officer) (He *et al.*, 2013), which can be “transferred, deployed, and exploited across borders” (Verbeke and Asmussen, 2016, p. 1053). Chandra *et al.* (2020) found managerial capability to be a moderating variable for the internal and external factors affecting SME internationalisation. However, Krammer *et al.* (2018) specified that a skilled workforce and access to technology, rather than managerial experience, had a significant positive export intensity.

Regional expansion reflects an increasing commitment of resources in nearby countries that typically have less institutional distance (Verbeke and Asmussen, 2016). He *et al.* (2013) demonstrated that export performance improved when entrepreneurs took the institutional distance and their market-oriented capabilities into consideration; in essence, “learning-by-exporting” (Freixanet *et al.*, 2020). Moreover, accumulating tacit knowledge about market idiosyncrasies increases the likelihood of successful expansion in LICs (Liedong *et al.*, 2020; Luiz and Ruplal, 2013).

Exporting beyond the region necessitates a grasp of global markets and the adept conversion of firm-specific resources to enhance competitive advantages (Verbeke and Asmussen, 2016). The resource-based view (RBV) helps to analyse how export intentions interact with non-financial variables. RBV focuses on a firm's internal attributes that contribute to developing and sustaining competitive advantages (Barney, 1991). It is increasingly applied in export literature as export performance is tied to a firm's ability to “cultivate resources for export-related consequences” (İpek, 2018, p. 3), particularly given that firms cannot disassociate themselves from the external environment. Indeed, Keskin *et al.* (2021) affirmed that a firm's unique informational and relational capabilities positively impact exporting when resource

heterogeneity exists. However, RBV has limitations as it overlooks external relationships, such as partnerships with government agencies, financial institutions, or supporting institutions in different markets. In addition, Malca *et al.* (2020, p. 844) established that firms that export “comparative advantage-intensive products and low value-added and intermediate goods” (typical of African markets) do not require as many firm-specific resources. Furthermore, RBV tends to view the firm’s resources as static rather than dynamic and does not account for changes in resources and capabilities over time or in the external environment.

The preceding discussion about the relationship between SME export intentions and financial and non-financial variables points to the following research questions:

RQ1: When SMEs express intentions to export regionally and globally, what is their preference for seeking financing—formal or informal?

RQ2: Does the intention to export trigger the pursuit of government support for SMEs?

RQ3: Do export intentions generate more robust relationships with bank officers?

RQ4: How do a firm’s internal attributes catalyse regional and global export intention?

To address these gaps, the paper hypothesises that firms that experience high institutional voids are less likely to employ formal finance when there is an intention to export. Firms can choose to do this through factoring for regional (H1a) or global exports (H1b), or through lines of credit for regional (H1c) or global exporting (H1d). Moreover, when firms face high institutional voids and the export intention is regional (H2a) or global (H2b), they are more likely to seek informal finance. Furthermore, government grants are less likely to be pursued in a high institutional void context when firms intend to export regionally (H3a) or globally (H3b).

On the other hand, the paper hypothesises that managerial ability, as an internal attribute of the firm, would have a significant impact when there is an intention to export regionally (H4a) and globally (H4b). Regional expansion was seen in the literature as a requirement for strengthening the intention to export regionally (H5a) and globally (H5b). The authors argue that the lack of external evaluation of the

firm's financial statements in both regional (H7a) and global (H7b) export intentions necessitates the practice of relationship lending in emerging economies and, therefore, the paper can further hypothesise that when firms intend to export regionally (H6a) and globally (H6b), the bank officer's friendship becomes more salient. Based on these hypotheses, the following conceptual model is presented (Fig. 1):

*Insert Figure 1: Conceptual Model*

## **Methodology**

This paper analyses how export intentions influence eight financial and non-financial response variables for Rwandan SMEs. The models distinguish between medium-term (three years) and long-term (five years) export intention and between regional (medium-term within Africa) and global (long-term outside Africa) markets.

### *Sample design*

Rwanda is a small country in eastern Africa with a population of about 13.5 million as of 2021 (World Bank, 2023). Its political and commercial capital is Kigali, with a population of about 1.2 million. The concentration of industry, high-skilled labour, and economic activity in Kigali constitutes it as a primate city; that is, it is disproportionately larger than other cities in the country (for more on primate cities, see Shi *et al.*, 2020). This growth pattern is typical of LICs. The vast majority of firms are in Kigali and registered in its three main district offices: Gasabo District: 3,097, Kicukiro District: 17,765, and Nyarugenge District: 26,183.

Microenterprises and branches of large companies were eliminated from the dataset provided by the district offices to focus on SMEs, as they are the target group for government exporting aspirations (Rwanda Development Board, 2020). This sampling frame afforded a population of over 7,300 SMEs.

To generate normalised statistics based on a pseudo-population different from where the data originated, inverse probability weighting was applied, a statistical approach for using a sample within a

target population (Robins *et al.*, 1994). Consequently, over 800 SMEs were randomly sampled and contacted (200 via phone and 600 in-person visits) over three months in 2019. Some completed the questionnaire via Google Forms or WhatsApp on the spot, while others sent responses later, resulting in 330 completed questionnaires, a response rate of 47.38% (for more on sampling, see Barnett, 1991; Lohr, 2021).

*Econometric Models: Multivariate Ordered Logistic Regressions and the Expectation-Maximisation Iterating Algorithm*

Based on the conceptual framework developed from the literature review, two Multivariate Ordered Logistic Regressions were fitted in section 4: The regional exporting model in table II and the global exporting model in table III. This approach aligns with earlier studies of SME finance that apply Qualitative Dependent Variable Models, such as Beck *et al.* (2005, 2008) and Petersen and Rajan (1994), among others.

The response variable is represented on the non-linear model of equation (1) as  $y_j$ , which is a Likert scale ranging from “1” ‘strongly disagree’ to “5” ‘strongly agree’– equivalent to optimising outcomes between “1” and “5”. Next, a maximum likelihood estimation is calculated using iterative reweighted least-squares, applying a Multivariate Ordered Logistic Regression, identified as the vector  $Y^\circ$ :

$$Y^\circ = \begin{cases} y_{ij}^1 = x_{ij}\beta + a_{ij} & k = 1, \dots, K; \\ \vdots \\ \vdots \\ \vdots \\ y_{ij}^K = x_{ij}\beta + a_{ij} & k = 1, \dots, K \end{cases} \quad (1)$$

$y_j$  is represented in tables II and III by:

- i. Managerial Ability
- ii. Firm's external evaluation

- iii. Regional operation expansion
- iv. Bank officer's friendship
- v. Line of credit
- vi. Factoring
- vii. Alternative sources of finance
- viii. Government Funds

According to McFadden (cited in Wooldridge, 2010, p. 510), the logarithms of the odds in equation (1) are characterised by the following underlying process:

$$y_{ij}^* = x_i\beta + a_{ij} \quad j = 0, \dots, J \quad (2)$$

Where

$y_{ij}^*$ : Random draw of SME  $I$  from the sample, ranking  $j$  in the Likert scale;

$a_{ij}, j = 0, \dots, J$  : Unobservable affecting preferences;

$x_i$ : Intention to export across the sample of SMEs

$\beta$ : The effect of the intention to export on  $y_{ij}^*$

Assume that while  $y_{ij}^*$  cannot be observed, the authors instead can observe the categories of response.

$$y = \begin{cases} 0 & \text{if } y^* \leq \mu_1, \\ 1 & \text{if } \mu_1 < y^* \leq \mu_2, \\ 2 & \text{if } \mu_2 < y^* \leq \mu_3, \\ \vdots & \vdots \\ N & \text{if } \mu_N < y^* \end{cases} \quad (3)$$

Where

$\mu_j$  : The externally imposed endpoints of the observable categories in the Likert scale applied.

In circumstances when equation (2) cannot be explicitly solved, which is the case when fitting equation (2), the Expectation-Maximisation iterating algorithm can find the (local) greatest likelihood parameters (Dempster *et al.*, 1977). This algorithm assumes that equations (1) to (3) can be employed to solve the models in tables (II) and (III) by applying latent variables to optimise simulations based on  $a_{ij}$ .

Seeking consistency in the interpretation of results, econometric evaluations were made at 10% significance– the “strongly agreed” intention to export (Likert scale’s response ‘5’)– read as a marginal effect, namely, the percentage of expected outcomes in the ordered responses of equation (1) ( $E[y_j|x]$ ), which are essentially the most likely outcomes in each case and overall (Wooldridge, 2010). Hence, to distinguish between the “agreed” intention to export (Likert scale’s response ‘4’) and “strongly agreed”, any change from “4” to “5” is considered as an Increasing Marginal Effect (IME) (Wooldridge, 2010), thus more impactful. The goodness of fit of the models in Tables II and III is expressed in % through the coefficient of variation (CV), according to which the fewer the residuals in comparison to the expected value of the model, the more satisfactory the model fit (UCLA SAS, 2006).

Finally, to ensure the robustness of results, model variation tests were applied, which are of use to discern data-generating processes. A frequent test for the robustness of model variation is splitting the sample at a specific point (Neumayer and Plümper, 2017), which was done by testing a Sub-Sample (SS) as part of the Full-Sample (FS). Therefore, in Tables 2 and 3, eight models are shown with FS and SS results.

### *Contextual background of the study*

This section offers distinctive characteristics unique to Rwanda and, to some extent, applicable to LICs. It details the efforts made to support the country's export intentions, particularly at the macro level. Rwanda is an attractive, if controversial, case because it represents a new model for economic growth in Africa (The Economist, 2021). The small, landlocked country has high cost barriers to creating an export economy (Redifer *et al.*, 2020). The government established the Business Development Fund (BDF) in 2011 to

provide credit guarantees to facilitate access to external sources of finances, and the 2015 National Export Strategy II and the 2016 Export Growth Fund were implemented to ease export financing constraints for key industries (Redifer *et al.*, 2020).

In 2017, the National Export Development Board was created to provide cost-effective support services to foster international competitiveness through exporting (Rwanda Development Board, 2020). In 2019, the country joined the AfCFTA in Kigali, demonstrating a commitment to address distortions in financial services that affect SME competitiveness and to increase their participation in the global value chain (The World Bank Group, 2020). Finally, in 2020, the government signed an agreement with the African Import-Export Bank to boost equity funding for export-facing industries.

### **Analysis and interpretation**

Table I contains sixteen potential response variables: Six relate to relationship lending, four represent financial lending technologies, three pertain to external evaluation, and three to internal resources. The median of the mean scores is 1.73, which suggests a bias towards disagreeing about the importance of these variables. It can be observed that, of the top five response variables, interaction with bank officers predominates SME preferences. In fact, at the top of this ranking is the notion of dealing with more than one bank, with a mean score of 2.32. Notably, access to alternative sources of finance holds fifth place behind three variables that pertain to relationship lending, emphasising the priority SME owners give to this lending modality. The mode for all variables is “1” (“strongly disagree”, Table I), which reflects a skewed distribution of responses. However, since this is the most frequent value, “1” is justified as the reference group to estimate the ordered logistic models. Furthermore, Cronbach's alphas in the last column are reliable since these all scored above 0.75 (MacKenzie *et al.*, 2011). Therefore, the quality of these variables is deemed appropriate to study the SMEs in this sample.

### *Regional export intention*

The econometric model in Table II shows the resulting responses concerning the intention to export

regionally. The study found that access to alternative sources of finance (ASF) is the most likely resource entrepreneurs turn to when there is a decisive intention to export regionally. Moreover, the results showed an IME of 17.45% for this variable, which is robust at the SS (H2a). Furthermore, factoring (FAC) manifested an IME of 26.51% (H1a), line of credit (LOC) has a coefficient of 42.08% (H1c), and regional expansion (ROEX) with an IME of 23.08% (H5a). There was robustness for FAC and ROEX but not for LOC. Furthermore, managerial ability (MANAB) (H4a) and bank officer knows me well (BOKMW) (H6a) were statistically significant without an IME. For MANAB, the marginal effect of the intention to export within Africa was 16.47%. Even though BOKMW did not manifest an IME, it was marginally influenced by the intention to export at around 49.62%, which shows an important degree of association with respect to relationship lending (H6a). It is likely (even without an IME) that the SME owner will turn to the loan officer relationship for support. Moreover, BOKMW was found to be robust but not MANAB. Neither the external evaluation/audit (FEEV) (H7a) nor government credit schemes (GCG) (H3a) were statistically significant. Finally, although BOKMW is significant at levels 4 and 5, no IME exists. (See Table IV). According to Table IV, support was found for H1a, H1b, H1d, H2a, H2b, H5a, and H6b; partial support for H4b and H6a; and H1c, H3a, H3b, H4a, H5b, H7a and H7b were not supported (see table IV).

**Table I: Descriptive Statistics**

**Table II. The effects of the Intention level to export within Africa in the next three years: Ordered Logistic Margins**

*Global export intention*

Several response variables manifested an IME for global export intention (See Table III). First, a strong intention to export yielded an increasing marginal effect of 33.80% for ASF (H2b), closely followed by FAC with an IME of 47.2% (H1b). LOC was the third source of finance– with an IME–at 33.14% (H1d). All were found to be robust. In contrast, GCG was not found to be supported (H3b).



For non-financing variables, BOKMW was noticeably impacted by global export intention and had robustness. Moreover, entrepreneurs would seek to strengthen their relationship with the loan officer, represented by an IME of 17.67% (H6b). MANAB was significant with a coefficient of 19.19%, but it neither had an IME nor was it robust (H4b); thus, it was partially supported. Finally, FEEV (H7b) and ROEX (H5b) were not supported (see Table IV)

**Table III. The effects of the Intention level to export outside Africa in the next five years: Ordered Logistic Margins**

**Table IV: Working Hypotheses Outcomes**

*Comparison of regional and global export intention models*

The results show that entrepreneurs do not feel the need for external evaluation (i.e. an audit) or support of a government credit guarantee for regional or global export intentions (see Table IV). On the other hand, although ROEX is influenced by the intention to export regionally and is robust, it ceases to be influenced by global export intent. This result implies that when entrepreneurs engage in regional exporting, they will likely consider higher levels of capital investment and a longer-term commitment to a regional strategy.

In the regional models, two out of four financing response variables exhibit an IME, whereas in the global models, only three variables do so (see Table IV). Interestingly, LOC only becomes relevant (i.e. supported) for global export intention, with a likelihood of 33.14%. On the other hand, FAC increased in likelihood by 20.69% from regional to global intention. This result suggests that SMEs consider LOC only for global expansion, which, in theory, is more challenging to acquire than the more fluid FAC. Moreover, ASF increased by 16.35% from regional to global export intention. Lastly, it can be observed that FAC predominates when moving from regional to global export intentions.

BOKMW becomes significantly more relevant as entrepreneurs move toward global export intentions, increasing by 38.02% in absolute terms. Consequently, it is highly probable that they will rely

on some form of relationship with the bank for global exporting. Note that out of the working hypotheses in Table IV, only relationship lending (BOKMW) becomes more supported for global than regional intentions. Even though ASF remains critical for both export strategies, FAC is more influenced than other response variables in both settings.

## **Discussion**

### *The financing of regional and global export intentions*

In answering the first research question, factoring became the leading response variable for regional and global exporting intentions, supported by robustness results. This result aligns with Abgaryan and Rosenthal (2017), who underscored the protection factoring offers against exchange rate fluctuations in less developed economies. The regional effect suggests that in African markets, where institutional voids can adversely affect economic stability, SMEs may want to shift as much risk as possible to third parties. Notably, as SMEs move into global markets, they prefer lines of credit in addition to factoring to secure the financing of working capital, potentially reflecting the perception that trading partners outside Africa are less exposed to institutional voids. This finding differs from Pacheco's (2016) study, which indicated that neither regional nor global exports influenced the capital structure composition of EU firms. The disparity is likely attributable to variations in the development of financial institutions in these regions, coupled with higher firm opacity and the absence of regional economic integration in Africa.

When regional and global export intentions were very strong, the variation on IME for alternative sources of finance, such as *Banque Lambert*, was smaller than for FAC. These results contradict the findings of Amornkivitkai and Harvie (2018), who established that SMEs using informal finance were less likely to export. Not only is informal finance the preferred lending technology, but it is even more likely to be pursued when exporting globally. Indeed, by quantitatively demonstrating the relevance of *Banque Lambert*, this result extends Akonkwa *et al.*'s (2022) study of this lending activity in the region. Lastly, Pangarkar and Elongo (2021) found a positive but small effect of informal finance on exports. However, a strong tendency for informal finance when exporting regionally was established in the results, which

strengthened when global export intentions arose.

The prominence of alternative sources of finance correlates with Mporu and Sibindi's (2022) assertion that, despite associated risks, African SMEs favour informal finance due to institutional voids. Additionally, SME owners displayed an even greater propensity for alternative sources of finances when exporting globally, which aligns with Omeihe *et al.* (2021), who established that informal finance in Africa became customary and coexisting financial institutions, indicating ongoing institutional voids. Hence, while the respondents had access to lines of credit, they did not systematically seek mainstream banking financing, which means that disintermediation remains persistent via alternative sources of finance. This preference corresponds with Mporu and Sibindi (2022), who reasoned that African SMEs seek informal finance, even if they qualify for traditional finance due to flexible terms. The likelihood is higher for SMEs to use factoring for long-term capital investments and ASF for short-term working capital. In addressing the first research question, the observed trend leans towards disintermediated lending technologies, encompassing both formal and informal financing.

#### *Government support and SME exporting*

The second research question pertained to government support schemes in Rwanda. They are administered through the financial system, which is a formal policy implementation intermediary (Development Bank of Rwanda, 2023). While the schemes aim to support SMEs' access to finance for strategic economic growth (Jayeola *et al.*, 2022; van der Schans, 2015) and crowd out informal finance (Cheng *et al.*, 2023), the study's results show that when SMEs had strong intentions to export regionally and globally, government support was not pursued. This result indicates a potential lack of trust in the banking system and/or governmental institutions (Mporu and Sibindi, 2022; Omeihe *et al.*, 2021), and potentially a misalignment between government objectives and SME export financing needs, a notable outcome given that the Rwandan government initiated new schemes to boost exports every year from 2015 to 2017 aimed (Redifer *et al.*, 2020).

This result also reflects that the policy fails to capture the interplay between the "existing power

structure, legacy institutions, and recently introduced institutional practices” (Mair and Marti, 2009, p. 420), and thus did not crowd out alternative sources of finance (see also, The East African, 2015). Therefore, with respect to research question two, regional and global export intentions do not cause SMEs to pursue government financial support.

#### *Relationship lending and intention to export*

When addressing the third research question, it was found that SMEs depend on the bank officer. This reliance was consistent in regional and global models, but only global intentions manifested an increasing marginal effect. In addition to supporting the literature on relationship lending and exporting (Ferri *et al.*, 2019; Frazzoni *et al.*, 2014; Mancusi *et al.*, 2018), the results extend the literature by differentiating how geographical distance affects the relationship.

The study contributes to understanding how SMEs use relationship lending as a low-cost information source (Hennart, 2014), particularly for non-exporters firms who need more knowledge about potential markets (Pinho and Martins, 2010). Indeed, a stronger intention to export globally triggers the SME to seek information, which concurs with Turkson *et al.*'s (2022) argument that financial institutions offer more than just financing to SMEs. Additionally, African banks usually operate regionally and can thus provide critical knowledge (and financial management skills), which would encourage regional expansion.

Although relationship lending is crucial, SMEs still resort to alternative financing sources for global export intentions, underscoring the significance of informal networks in African business (Favre *et al.*, 2015; Nkakleu and Biboum, 2019). Nevertheless, there is still an increasingly greater preference for relationship lending for exporting to global markets. Moreover, the study found that external evaluation was not seen as beneficial at the regional or global level, which adds salience to relationship lending. Given the opacity that characterises SMEs, this is an expected result (Mpofu and Sibindi, 2022; Omeihe *et al.*, 2021; van.Klyton and Rutabayiro-Ngoga, 2018).

### *The resource-based view and the intention to export*

Regarding the fourth research question, the results revealed that regional operation expansion was significant for regional exporting only. This suggests that firms already operating in a region tend to deepen their resource commitments, aligning with RBV. Another factor is a firm's ability to navigate institutional voids in its home market, which could be leveraged for regional expansion in markets with similar voids (Luiz and Ruplal, 2013). The results may also reflect the impact of regional trade relationships that reduce transaction costs and institutional distance (Jackson *et al.*, 2008; Luiz and Ruplal, 2013; Verbeke and Asmussen, 2016). The limited explanatory power of RBV was also apparent in that regional operation expansion was only significant for regional export intention.

Moreover, this limitation of RBV was also apparent for managerial ability, which was not statistically robust for exporting. Notably, an increase in the line of credit and a strong rapport with the bank officer may enhance managerial capacity when pursuing global exports. A pairwise test showed a 14.56% correlation at the 1% significance level between ability and friendship with bank officers. While some interaction was detected, the impact appears moderate.

### **Conclusion, implications, limitations, and future research**

This paper offers some critical contributions to theory and practice. First, this is one of the few studies to differentiate export distance as a critical determinant of financing preferences. Second, unlike traditional entrepreneurial finance research, the authors compared financial and non-financial response variables to understand SME financing decision-making better. Third, it is often difficult to collect reliable primary data in LICs, so the study offers new insights into the design of SME studies.

The potential distrust of formal institutions manifested in the preference for informal over formal finance for regional exporting despite the greater risk. For formal financing, that factoring had a larger outcome than lines of credit for global export intentions, which could be linked to SME perceptions of a

higher level of financial development in the economies of overseas trading partners. Notably, when the intent to export globally was present, SMEs continued to pursue informal finance, which indicates that they still perceived financial intermediation as problematic.

This study reveals how SMEs employ relationship lending, using soft information as a low-cost strategy for information gathering. Namely, SMEs increasingly rely on the benefits of relationship lending as they move toward global export intention— a relatively new finding in the literature. The pursuit of alternative sources of finance alongside relationship lending for regional and global export intention is symptomatic of their complementary nature, indicating a gap in the institutional infrastructure to serve SME financing needs. Regarding regulation, if the view is that the interaction between formal and informal finance crowds out informal finance, which reduces firm opacity, this study suggests that SMEs resisted this crowding-out effect. Such resistance was also evident in bank financing for regional expansion. Therefore, new institutional practices should focus on “crowding in” rather than “crowding out” (Cheng *et al.*, 2023; Gozzi and Schmukler, 2016). The legacy institution, i.e., informal finance (e.g. *Banque Lambert*), should also be considered. Otherwise, the perception of institutional voids may be bolstered, strengthening informal finance.

The study showed that the presence of institutional voids has implications for exporting. Neither regional nor global export intentions triggered a pursuit of government funding schemes. Therefore, if SMEs continue to prefer alternative sources of finance for export activities, public policy should be revised to address the needs of this significant sector better, thus strengthening economic development through export promotion.

### *Theoretical implications*

The primary theoretical contribution of the paper lies in its distinction between the financing of exports to regional and global markets. The paper further elaborates on Pacheco’s (2016) work by distinguishing between formal and informal sources of finance, which determine credit risk management and,

consequently, the long-term survival of SMEs. The study also contributes to relationship lending by establishing that SMEs intensify their use of relationship lending when expanding from regional to global exports. The authors thus posit that SMEs gain some advantages in the relationship because they can continue to seek regional and global market information from the bank officer to mitigate uncertainty.

The preference for alternative sources of finance for global exporting nuances the role of institutional voids for SME export intention and contributes to institutional theory as articulated by Liedong *et al.* (2020) and Gao *et al.* (2017). Global markets present greater uncertainty because of the institutional distance and lack of market knowledge. Therefore, the main inference is that institutional failures can be so profound in the home market that SMEs are willing to use the more costly external sources of financing to enter markets that are, in fact, more uncertain.

Lastly, the paper posits that institutional voids have implications for RBV, thus extending the call by İpek (2018) to identify and conceptualise the role of RBV in exporting activity by empirically testing these relationships. Three contributions are offered with respect to RBV. First, the paper illustrated how the prevalence of institutional voids compelled entrepreneurs to rely not only on non-intermediated financing but also on firm-specific resources and capabilities, particularly for regional exporting. Second, it highlighted that SMEs could leverage experiential knowledge to navigate institutional voids at home and integrate soft information gained through relationship lending to facilitate further regional expansion, which aligns with RBV. Third, it elucidated the limited explanatory power of RBV for global exporting, namely, that it overlooks external relationships and the dynamic nature of firm resources and capabilities.

#### *Implications for practice and policy*

In Rwanda, banks monopolise the bulk of external financing sources, which limits the financial lending pool. Hence, it may be necessary to implement policies that promote more diverse financial institutions. It is widely known that African governments prioritise the creation of export-led economies; for example, the ratification of the East African Community (EAC), which Rwanda joined in 2007, and the formation of the AfCFTA in 2020. In addition, the EAC established an economic partnership agreement for exports to the

European Union in 2016 (European Commission, 2016). However, the persistent lack of access to finance through bank-intermediated financing technologies, historical institutional voids, and the presence of indigenous informal institutions may reduce SME participation in international trade. Therefore, it is recommended that more focus be given to creating inclusive policies that generate “crowding in” effects—integrating private and public stakeholders and informal legacy institutions— to support SME exporting better. Banks can use soft information derived through relationship lending to assist in improving government credit guarantee schemes. Moreover, relationship lending can be used to identify high-potential entrepreneurs to participate in various training programmes for international expansion, which could be diffused across the region through the bank’s network.

#### *Limitations and future research*

A limitation of this study is that it utilises cross-sectional data, and, therefore, the longer-term impact of the analysis cannot be known. Consequently, this work would constitute a preamble to a longitudinal study and more fluid econometric models of these themes, particularly concerning recent policy changes in Rwanda to support the financing, stabilisation, and maturation of an export economy. Additionally, the focus of the current authors is on a single country context; therefore, more studies should be conducted in different contexts, such as emerging and developed economies, to test the robustness of the results and validate or extend the results of this study.



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**Table 1: Descriptive Statistics**

TYPE	RESPONSE VARIABLE	ABBREVIATION	MEAN SCORE						ALPHA
				1	2	3	4	5	
				STRONGLY DISAGREE	DISAGREE	NEITHER AGREE OR DISAGREE	AGREE	STRONGLY AGREE	
EXTERNAL EVALUATION	Bank loan based on the quality of the contract	BLBQC	1.4	87.50%	0.30%	4.27%	0.61%	7.32%	88.20%
	Bank loan based on the quality of my non-audited financial statement	BLBQNFS	1.58	83.23%	0.61%	3.35%	0.61%	12.20%	88.14%
	Firm's external evaluation	FEEV	1.19	93.87%	0.31%	2.15%	0.61%	3.07%	88.41%
FINANCIAL TECHNOLOGIES	Line of Credit	LOC	1.3	89.30%	0.31%	4.59%	2.45%	3.36%	87.60%
	Factoring	FAC	1.31	89.36%	0.30%	4.56%	1.82%	3.95%	87.58%
	Alternative Sources of Finance	ASF	2.17	67.27%	0.61%	5.45%	1.52%	25.15%	87.85%
	Government Credit Guarantees	GCG	1.29	90.30%	0.61%	2.73%	1.82%	4.24%	88.42%
INTERNAL RESOURCES	Managerial Ability	MANAB	1.27	91.74%	0.00%	2.45%	0.92%	4.89%	88.44%
	Number of Employees	NOE	1.74	87.80%	0.00%	5.79%	2.13%	4.27%	89.11%
	Regional operation expansion	ROEX	1.12	95.73%	0.61%	1.82%	0.30%	1.83%	88.84%
RELATIONSHIP LENDING	Advantage when dealing with more than one bank	AMTOB	2.32	63.83%	0.91%	4.86%	0.61%	29.79%	87.91%
	Bank informs me of new financing opportunities through officers	BINFOO	2.24	67.07%	0.91%	2.44%	2.44%	27.13%	87.53%
	Bank informs me of new financing opportunities through social media	BINFOSM	1.93	74.69%	0.62%	3.09%	0.62%	20.99%	87.57%
	Bank organizes different training programmes/workshops	BODTP	1.93	74.70%	0.30%	3.35%	0.61%	21.04%	87.91%
	Bank officer knows me well	BOKMW	2.25	66.46%	0.91%	2.44%	1.83%	28.35%	87.59%
	Financial and management advice from the loan officer	FAFLO	2.22	67.27%	0.30%	3.33%	1.52%	27.58%	87.62%



Table II. The effects of the Intention level to export within Africa in the next three years: Ordered Logistic Margins

Intention level to export	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	Managerial Ability (MANAB)		Firm's External Evaluation (FEEV)		Regional Operation Expansion (ROEX)		Bank Officer's Friendship (BOKMW)		Line of Credit (LOC)		Factoring (FAC)		Alternative Sources of Finance (ASF)		Government Credit Guarantees (GCG)	
	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS
5	0.1647 (0.0858)*	0.0562 (0.0593)	0.102 (0.0657)	0.0448 (0.0508)	0.2308 <sup>+</sup> (0.1363)*	0.3804 <sup>+</sup> (0.1826)**	0.4962 (0.1225)***	0.3842 (0.1474)***	0.4208 <sup>+</sup> (0.1902)**	0.321 (0.2186)	0.5587 <sup>+</sup> (0.1562)***	0.5081 <sup>+</sup> (0.1829)***	0.7032 <sup>+</sup> (0.1048)***	0.6172 <sup>+</sup> (0.1213)***	0.0945 (0.0614)	0.0411 (0.0467)
4	0.0902 (0.0971)	0.1006 (0.106)	0.0772 (0.0878)	0.0818 (0.0936)	0.0000 (0.0000)**	0.0008 (0.0008)**	0.6997 (0.1850)***	0.7012 (0.1840)***	0.3098 (0.0676)***	0.2843 (0.0697)***	0.2936 (0.1229)**	0.2705 (0.1281)**	0.5287 (0.2117)**	0.5336 (0.2089)**	0.1338 (0.0944)	0.1409 (0.1001)
3	0.2232 (0.1120)**	0.2680 (0.1246)**	0.2007 (0.1114)*	0.2343 (0.1261)*	0.0864 (0.0400)**	0.0683 (0.0391)*	0.5773 (0.1176)***	0.5585 (0.1403)***	0.1571 (0.0628)**	0.1082 (0.0610)*	0.1648 (0.0614)***	0.1243 (0.0660)*	0.1117 (0.0628)***	0.5757 (0.1287)***	0.1095 (0.0625)*	0.0902 (0.0667)
2	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.4419 (0.0127)***	0.4486 (0.0139)	0.0000 (0.0000)	0.0000 (0.0000)
1	0.0353 (0.0095)**	0.0314 (0.0010)***	0.0195 (0.0063)***	0.0142 (0.0054)***	0.0061 (0.0023)***	0.0062 (0.0024)***	0.2507 (0.0255)***	0.2215 (0.0261)***	0.0012 (0.0011)	0.0002 (0.0003)	0.0012 (0.0012)	0.0002 (0.0003)	0.2028 (0.0239)***	0.1711 (0.0244)	0.0349 (0.001)***	0.0225 (0.0083)***
CV (%)	8.58	9.77	8.81	9.99	9.14	10.91	13.94	13.2	11.98	18.38	13.32	18.74	12.32	11.78	8.82	10.16

FS: Full sample

SS: Small sample

SE in parentheses

\* p < 0.10    \*\* p < 0.05    \*\*\* p < 0.01

<sup>+</sup> Increasing Marginal Effect (IME)

Table III. The effects of the Intention level to export outside Africa in the next five years: Ordered Logistic Margins

Intention level to export	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
	Managerial Ability (MANAB)		Firm's external evaluation (FEEV)		Regional operation expansion (ROEX)		Bank officer's friendship (BOKMW)		Line of credit (LOC)		Factoring (FAC)		Alternative sources of finance (ASF)		Government Credit Guarantees (GCG)	
	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS	FS	SS
5	0.1919 (0.0986)**	0.077 (0.0810)	0.1187 (0.0763)	0.0625 (0.0708)	0.2181 (0.1381)	0.4509 (0.2159)**	0.6448 <sup>+</sup> (0.1247)***	0.5305 <sup>+</sup> (0.1775)***	0.6091 <sup>+</sup> (0.2180)***	0.7153 <sup>+</sup> (0.2266)***	0.7414 <sup>+</sup> (0.1551)***	0.8777 (0.1253)***	0.7872 <sup>+</sup> (0.1076)***	0.6771 <sup>+</sup> (0.1462)***	0.1097 (0.0714)	0.0000 (0.0000)**
4	0.0773 (0.0832)	0.0875 (0.0920)	0.0658 (0.0746)	0.0714 (0.0810)	0.0537 (0.0655)	0.0552 (0.0685)	0.4681 (0.1885)**	0.4714 (0.1870)**	0.2777 (0.0730)***	0.1762 (0.0963)*	0.2694 (0.1110)**	0.1811 (0.1175)	0.4492 (0.1953)**	0.4557 (0.1931)**	0.1144 (0.0818)	0.1213 (0.0874)
3	0.1751 (0.0769)**	0.2060 (0.1003)**	0.1556 (0.0755)**	0.1767 (0.0991)**	0.0788 (0.0308)**	0.0536 (0.0319)*	0.5156 (0.0980)***	0.5768 (0.1273)***	0.0802 (0.0581)	0.0188 (0.0295)	0.086 (0.0542)	0.0192 (0.0252)	0.4723 (0.0809)	0.5516 (0.1084)***	0.1295 (0.0591)**	0.1122 (0.0734)
2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	0.0334 (0.0095)***	0.0314 (0.0099)***	0.0179 (0.0063)***	0.0144 (0.0054)***	0.0051 (0.0023)**	0.0061 (0.0024)**	0.2441 (0.0254)***	0.216 (0.0260)***	0.0001 (0.0002)	0.0000 (0.0000)	0.0001 (0.0002)	0.0000 (0.0000)	0.2025 (0.0241)***	0.1766 (0.0243)***	0.0316 (0.0093)***	0.0222 (0.0082)***
CV(%)	8.69	9.71	8.92	9.92	10.22	10.98	13.64	12.87	18.00	3.17	7.01	3.59	12.38	11.81	8.79	10.14

FS: Full sample

SS: Small sample

SE in parentheses

\* p < 0.10      \*\* p < 0.05      \*\*\* p < 0.01

<sup>+</sup> Increasing Marginal Effect (IME)

**Table IV: Hypothesised relationships**

Variable Type	Associated Research Questions	Hypotheses	Variation in IME from Regional to Global	Outcomes
Financial Response Variables	RQ1	H1a: Regional Export Intention → Factoring	20.69%	Supported
		H1b: Global Export Intention → Factoring		Supported
		H1c: Regional Export Intention → Lines of Credit	22.04%	Not Supported
		H1d: Global Export Intention → Lines of Credit		Supported
		H2a: Regional Export Intention → Alternative Sources of Finance	16.35%	Supported
		H2b: Global Export Intention → Alternative Sources of Finance		Supported
	RQ2	H3a: Regional Export Intention → Government Credit Schemes	3.46%	Not Supported
		H3b: Global Export Intention → Government Credit Schemes		Not Supported
Non-Financial Variables	RQ4	H4a: Regional Export Intention → Managerial Ability	4.01%	Not Supported
		H4b: Global Export Intention → Managerial Ability		Partially Supported
		H5a: Regional Export Intention → Regional Operation Expansion	-6.64%	Supported
		H5b: Global Export Intention → Regional Operation Expansion		Not Supported
	RQ3	H6a: Regional Export Intention → Relationship Lending	38.02%	Partially Supported
		H6b: Global Export Intention → Relationship Lending		Supported
		H7a: Regional Export Intention → External Evaluation	2.81%	Not Supported
		H7b: Global Export Intention → External Evaluation		Not Supported

**Legend:**

**Supported:** Statistically significant and increasing IME

**Partially supported:** Statistically significant, or partially robust and/or no IME

**Not Supported:** Not statistically significant or robust

