Impact of Globalization on the Competitiveness and Sustainability of Small and Medium-Sized Enterprises (SMEs) in Nepal

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Abstract

This study examines the impact of globalization on the competitiveness and sustainability of Small and Medium-sized Enterprises (SMEs) in Nepal. Business competitiveness and business sustainability are the dependent variables. The independent variables are access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition. The primary source of data is used to assess the opinion of respondents regarding access to international markets, technological adoption, foreign direct investment, government policy measures, brand recognition, business competitiveness and business sustainability. The study is based on primary data of 145 respondents. To achieve the purpose of the study, structured questionnaire is prepared. The correlation and multiple regression models are estimated to test the significance and importance of the impact of globalization on the competitiveness and sustainability of Small and Medium-sized Enterprises (SMEs) in Nepal.

The study showed a positive impact of access to international markets on business competitiveness and business sustainability. It indicates that higher the access to international markets, higher would be the business competitiveness and business sustainability. Similarly, the study showed a positive impact of technological adoption on business competitiveness and business sustainability. It indicates that use of updated technology leads to increase in business competitiveness and business sustainability. Likewise, the study showed a positive impact of foreign direct investment on business competitiveness and business sustainability. It indicates that increase in foreign direct investments lead to increase in business competitiveness and business sustainability. Further, the study showed a positive impact of brand recognition on business competitiveness and business sustainability. It indicates that a strong brand attracts trust and long-term market position that leads to increase in business competitiveness and business sustainability. In addition, the study showed a positive impact of government policy measures on business competitiveness and business sustainability. It indicates that supportive policies foster stability and development for businesses to thrive.

Keywords: access to international markets, technological adoption, foreign direct investment, government policy measures, brand recognition, business competitiveness, business sustainability

1. Introduction

Globalization and businesses' deployment are closely connected. Especially small countries are increasingly dependent on global knowledge flows. Globalization can be defined as the worldwide drive towards an economic system dominated by supranational corporate trade and banking institutions that are not accountable to the democratic process (Robinson, 2016). Globalization and its processes within the markets will give large and small firms many challenges (Kaplinsky and Morris, 2019). Competition influences all entities, from long-standing industrial clusters and massive corporations to economically strong nation-states, affecting their strategies, growth, and overall market positions (Zastempowski and Cyfert, 2023). For individuals, SMEs often represent the first job, the first step in the career. They are also a first step to the world of entrepreneurs. So, globalization drives SMEs and startups to innovate thus forming strategic alliances to compete in evolving marketplaces (Lee *et al.,* 2012). Jianguo (2017) stated that globalization is an irreversible force, and this force is imposed on the world by some countries and institutions to increase the free flow of goods, services, people, ideas, and capital so that it can lead to economic and social integration.

Today, SMEs face a unique challenge where governments struggle with debt, while global corporations dominate economies with abundant resources (Paulet *et al.,* 2014). Over

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half of the world's 100 largest economies are now corporations, making it difficult for SMEs to compete, grow, and sustain themselves in an increasingly corporate-driven environment (Thorgren and Williams, 2020). In many SMEs cases, capital may be limited, while labor is plentiful. To support the shortage of capital caused by economic growth, the impact of globalization on international trade and investments becomes increasingly important (Mosho *et al.,* 2022). In times of global competition, more enterprises start to consider whether their current corporate structure can achieve the business objectives set, and whether it will be able to achieve them in the future (Rosli, 2012). In its contemporary form, globalization is influenced by various factors. Jahanger *et al.* (2022) stated that the movement of financial and economic resources, particularly regarding the exchange of goods and services, as well as labor, technology, transportation, communication, and information technology. Globalization has expanded market opportunities for SMEs, enabling them to connect with international customers, embrace advanced technologies, and implement innovative business strategies (Fernandes *et al.*, 2020). However, it has also brought challenges, including heightened competition from global firms, the pressure to meet international standards, and obstacles in securing adequate capital and resources. While some have successfully tapped into global supply chains, others struggle to compete due to limited infrastructure, outdated technologies, and a lack of skilled labor (McMillan *et al.*, 2020).

Felicio *et al.* (2016) examined the global mindset, cultural context, and the internationalization of SMEs. The study asserted that globalization includes sharing culture globally, spreading religions and ideas, and expanding business interests for companies in diverse markets. Similarly, Young *et al.* (2018) assessed how can academic-policy collaboration be more effective? A stewardship approach to engaged scholarship in the case of SME internationalization on globalization cases. The study found that globalization has transformed SMEs, compelling them to innovate, internationalize, and rethink their business strategies to stay relevant in an interconnected world. Likewise, Scherer and Palazzo (2011) analyzed the new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. The study found that globalization does not hinder the movement of free markets; however, it would have a negative impact if applied to a fragile economy and small enterprises.

Herve *et al.* (2021) investigated the role of globalization and how SMEs still failed to enhance market opportunities. The study found that strategic mastery significantly enhances SMEs' competitive advantage, emphasizing globalization's role in shaping resilience, agility, and digital transformation. Similarly, Omar *et al.* (2017) examined how clusters and networks can have relations with the economic development of SMEs, in the era of globalization. The study depicted that clusters and networks significantly boost SMEs' competitiveness, innovation, and market access, facilitating their adaptation to global market challenges and opportunities. Likewise, Dewi *et al.* (2020) assessed the challenges faced by micro, small, and medium enterprises (MSMEs) due to globalization. The study revealed that globalization negatively impacts on MSMEs resilience and sustainability by increasing competition, widening technological gaps, and limiting resources.

Polkowski *et al.* (2017) investigated the emerging technology trends in globalized era and their impacts on SMEs regarding operational efficiency and competitiveness. The study found that embracing innovative technologies greatly enhances SMEs operational efficiency, market expansion, and adaptability, leading to a stronger competitive position in the market. Similarly, Biru and Amentie (2024) examined how firms in developing countries navigate the opportunities and challenges presented by globalization. The study showed that developing countries firms fostering innovation and adaptation can build strong relationships for sustainable growth via strategic partnerships. Likewise, Akdogan (2018) analyzed the impact of globalization on the operational efficiency of Turkish SMEs through a comparative study. The study concluded that globalization boosts Turkish SMEs' operational efficiency by providing international market access, improving competitive practices, and enhancing resource management. Further, Asgary *et al.* (2020) assessed the impact of global risks on small and medium enterprises in Turkey's manufacturing sector. The study revealed that global economic risks and geopolitical risks are of major concern for SMEs, and environmental risks are at the bottom of their ranking. In addition, Iqbal and Khan (2023) assessed the cases of globalization and its impact on SMEs. The study concluded that medium-sized firms increasingly outsource their non-core activities for cost savings but see diminishing returns from R&D outsourcing.

Sener *et al.* (2014) examined the potential of e-commerce for small and medium-sized enterprises (SMEs) in the context of a globalizing business environment. The study revealed that e-commerce for small and medium enterprises in a global marketplace has a positive impact on market expansion, cost reduction, and enhanced competitiveness. Similarly, Child *et al.* (2022) analyzed the context, models, and implementation strategies related to the internationalization of SMEs. The study concluded that factors like market conditions, firm characteristics, and strategic models, emphasizing the importance of adaptability and innovation for success plays a significant role for SMEs' internationalization. Likewise, Haddad *et al.* (2020) assessed the strategies for implementation of innovation in SMEs. The study showed that successful innovation in SMEs relies on leadership commitment, resource optimization, collaborative networks, and adaptive strategies to address challenges. Further, Kunday and Şenguler (2015) analyzed the factors influencing the internationalization of SMEs and their implications for business growth. The study found that key factors, such as managerial competencies, market conditions, and organizational structure have a significant impact on SMEs' internationalization efforts and overall success. In addition, Miroshnychenko *et al.* (2021) examined how business model globalization influences the innovativeness of SMEs over time. The study concluded that globalization positively impacts SMEs' innovativeness by facilitating knowledge transfer and collaboration.

Mutalemwa (2015) examined the impact of globalization on the development and performance of SMEs in Africa. The result showed that globalization positively influences SMEs development through access to new markets, resources, and technology. Likewise, Utami *et al.* (2022) assessed the challenges faced by SMEs due to globalization in Indonesia. The study revealed that SMEs are faced with challenges such as increased competition, market accessibility, and the need for technological adaptation, significantly affecting their growth and sustainability. Further, Umadia and Kasztelnik (2020) examined the innovative financial strategies used by SMEs in developing countries and their impact on global economic performance and growth. The study showed that SMEs' financial strategies positively impacts on its efficiency, market reach, and competitiveness, contributing significantly to economic stability and driving global economic development. In addition, Coldwell *et al.* (2022) investigated the tension between SMEs' growth and sustainability during internationalization. The study found that there is a positive relationship between balancing growth and sustainability for SMEs. Moreover, Stouraitis *et al.* (2017) assessed the conceptions of SMEs and entrepreneurship in the era of globalization in the case of UK. The study concluded that globalization offer SMEs vast international opportunities, but cognitive biases and limited awareness may restrict their full potential to capitalize on these opportunities.

In the context of Nepal, Adhikari and Malla (2024) analyzed the impact of technological adoption on management practices in SMEs of Nepal. The study found that adopting technology improves SME management, boosting efficiency and competitiveness, while globalization pushes SMEs to adapt digitally to stay competitive in growing international markets. Similarly, Ghimire *et al.* (2022) examined the role of tourism-oriented SMEs in promoting socio-economic development around Pashupati, a UNESCO World Heritage site. The study revealed that SMEs enhance local employment and preserve cultural values, with globalization driving an influx of international tourists and market access. Likewise, Dhungana (2024) investigated the challenges and opportunities of e-commerce adoption in SMEs of Birendranagar, Surkhet. The study found that technological adoption boosts SME competitiveness, but challenges like poor infrastructure and low digital literacy persist, with globalization driving e-commerce adoption. Further, Lamichhane *et al.* (2023) analyzed the challenges and prospects for microfinance programs in Nepal. The study showed that limited resources, unhealthy competition, political unawareness, missing opportunities through lack of innovation, high rate of employee turnover and loan overdue negatively impact on entrepreneurial and SMEs centric programs in Nepal.

The above discussion shows that empirical evidence vary greatly across the studies on the impact of globalization on the competitiveness and sustainability of small and medium-sized enterprises (SMEs). Though there are above mentioned empirical evidence in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the impact of globalization on the competitiveness and sustainability of small and medium-sized enterprises (SMEs) in Nepal. Specifically, it examines the relationship of access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition with competitiveness and sustainability of small and medium-sized enterprises (SMEs) in Nepal.

The remainder of this study is organized as follows: section two describes the sample, data, and methodology. Section three presents the empirical results and final section draws the conclusion.

2. Methodological aspects

The study is based on the primary data which were collected from 145 respondents through questionnaires. The study employed convenience sampling method. The respondents' views were collected on access to international markets, technological adoption, foreign direct investment, government policy measures, brand recognition, business competitiveness and business sustainability. This study is based on descriptive as well as causal comparative research designs.

The model

The model used in this study assumes that business competitiveness and business sustainability depend upon access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition. Therefore, the model takes the following form:

Business competitiveness and business sustainability = *f* (access to international markets, technological adoption, foreign direct investment, government policy measures, brand recognition).

More specifically,

$BC = \beta_0 + \beta_1 AIM + \beta_2 TA + \beta_3 FDI + \beta_4 GPM + \beta_5 BR + e$

$BS = \beta_0 + \beta_1 AIM + \beta_2 TA + \beta_3 FDI + \beta_4 GPM + \beta_5 BR + e$

Where,

BC = Business Competitiveness

BS = Business Sustainability

AIM = Access to International Markets

TA = Technological Adoption

FDI = Foreign Direct Investment

GPM = Government Policy Measures

BR = Brand Recognition

Business competitiveness was measured using a 5-point Likert scale where the SMEs owners and managers were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include "Business competitiveness depends upon access to international markets", "Government policy measures affect the business competitiveness and sustainability in globalized economy" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.876$).

Business sustainability was measured using a 5-point Likert scale where the SMEs owners and managers were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include "Business sustainability depends upon foreign direct investment", "Brand recognition affect the business competitiveness in globalized economy" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.853$).

Access to international markets was measured using a 5-point Likert scale where the SMEs owners and managers were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include "International markets have made SMEs in Nepal more competitive", "Exporting globally has increased profits for SMEs in Nepal" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.901$).

Technological adoption was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include "High costs have made it hard for SMEs to adopt new technology", "Adopting modern technology has helped SMEs compete globally" and so on. The reliability of the items was measured by computing the Cronbach's alpha ($\alpha = 0.893$).

Foreign direct investment was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “FDI provides SMEs with access to better resources and technology”, “FDI has helped SMEs in Nepal by improving product quality” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.888$).

Government policy was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Government support has helped SMEs to grow and stay sustainable”, “Government policies have helped SMEs to compete globally” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.871$).

Brand recognition was measure using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “A recognized brand attracts more customers for long term growth”, “A good brand majorly attracts partnerships with international firms” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.849$).

The following section describes the independent variables used in this study along with the hypothesis formulation.

Access to international markets

Access to international markets is the ability to trade goods and services globally. Access to international markets enhances competitiveness through sustainable practices. Global market access drives firms to adopt sustainable practices, boosting competitiveness (Moore and Manring, 2009). Likewise, Camisón and López (2010) concluded that access to international markets has a positive impact on the performance and competitiveness of SMEs, as it provides opportunities for growth, and access to new resources. Similarly, Rua *et al.* (2018) found that the access to international markets has a robust and significant positive impact on SMEs sustainability and competitiveness. In additional, Stoian (2007) concluded that factors like market knowledge, regulatory support, resources, and innovation typically enhance access to international markets for SMEs. Based on it, this study develops the following hypothesis:

H_1: Access to international markets have positive relationship with business competitiveness and sustainability.

Technological adoption

Technological adoption is crucial for SMEs aiming to thrive competitively while embracing sustainable practices. Ali Qalati *et al.* (2020) found that SMEs adopting technologies can better meet customer needs, improve efficiency, and create new business models, leading to enhanced competitiveness and sustainable practice with strategic alignment, improving efficiency and performance. Further, Ghobakhloo and Ching (2019) showed that technological adoption relates positively to resource efficiency, waste reduction, regulatory compliance, innovation, competitive advantage, and stakeholder engagement. Technological adoption correlates positively with decision-making, competitive advantage and sustainable business practices (Jovane *et al.* 2017). In addition, Yaacob *et al.* (2016) showed that technological adoption has a positive relationship with adaptability, competitive advantage and long-term sustainability in SMEs. Based on it, this study develops the following hypothesis:

H_2: Technological adoption has a positive relationship with business competitiveness and sustainability.

Foreign direct investment

Foreign direct investment refers to investment made by a company in one country in business interests in another country. According to Wasiuzzaman (2019), foreign direct investment enhances competitive advantage through resource access and responsible practices promoting sustainable development. Similarly, De Maeseneire and Claeys (2012) showed a positive relation between foreign direct investment and business competitiveness and sustainability. Likewise, Liu *et al.* (2001) concluded that foreign direct investment has a positive relationship with technology transfer, innovation, market access, economic growth, sustainable practices and globalization throughout China. Further, Yeung (2017) highlighted that foreign direct investment has a positive impact on SMEs sustainability. Based on it, this study develops the following hypothesis:

H_3: Foreign direct investment has a positive relationship with business competitiveness and sustainability.

Government policy measures

Government policy measures refer to actions and regulations implemented by authorities to influence economic activities, promote development, ensure compliance, and achieve specific social objectives. Alrabeei and Kasi (2014) revealed that regulatory burden, inconsistent policies, favoritism, high taxation, and barriers to entry have negative impact on both business competitiveness and sustainability in Bharain. Similarly, Lee and Cho (2014) highlighted that ICT SMEs performance and strategy alignment with sustainability goals positively correlates with government policy measures. Likewise, Kraja *et al.* (2014) showed that effective government policy measures have positive relation with sustainability practices in the Middle East region through enhanced resource efficiency approaches. Further, Akang (2024) concluded that ineffective policies, lack of enforcement, and bureaucratic hurdles have negative impacts on sustainable practices and competitiveness. Based on it, this study develops the following hypothesis:

H_4: Government policy measures have positive relationship with business competitiveness and sustainability.

Brand recognition

Musthofa and Rokhim (2021) showed that effective brand management has a positive impact towards product sustainability and boosting competitiveness through brand credibility, perceived internationalization, and localness. Similarly, Rehman *et al.* (2020) concluded that sustainable brand equity and marketing innovation plays a significant role in enhancing SMEs' market performance. Likewise, Vidic and Vadnjal (2013) found that brand recognition helps by improving customer trust, loyalty, and competitive positioning. Further, Couto and Ferreira (2017) concluded that eco-innovation integration with branding positively impacts SMEs' competitiveness, market positioning, and long-term sustainability. Based on it, this study develops the following hypothesis:

H_5: Brand recognition has a positive relationship with business competitiveness and sustainability.

3. Results and discussion

Correlation analysis

On analysis of data, correlation analysis has been undertaken first and for this purpose, Kendall's Tau correlation coefficients along with mean and standard deviation has been computed and the results are presented in Table 1.

Table 1

Kendall's Tau correlation coefficients matrix

This table presents Kendall's Tau coefficients between dependent variable and independent variables. The correlation coefficients are based on 145 observations. The dependent variables are BC (Business competitiveness) and BS (Business sustainability). The independent variables are AIM (Access to international markets), TA (Technological adoption), FDI (Foreign direct investment), GPM (Government policy measures) and BR (Brand recognition).

Variables	Mean	S.D.	BC	BS	AIM	TA	FDI	GPM	BR
BC	4.281	0.778	1						
BS	4.091	0.742	0.357**	1					
AIM	4.181	0.847	0.275**	0.243**	1				
TA	4.284	0.740	0.331**	0.243**	0.365**	1			
FDI	4.185	0.718	0.213**	0.261**	0.304**	0.270**	1		
GPM	4.017	0.826	0.367**	0.280**	0.256**	0.328**	0.257**	1	
BR	4.292	0.804	0.384**	0.347**	0.386**	0.170**	0.194**	0.226**	1

Notes: The asterisk signs (**) and (*) indicate that the result are significant at one percent and five percent levels respectively.

Table 1 shows the Kendall's Tau correlation coefficients of dependent and independent variables. The study shows that access to international markets is positively correlated to business competitiveness. It indicates that higher the access to international markets, higher would be the business competitiveness. Similarly, technological adoption is positively correlated to business competitiveness. It indicates that use of updated technology leads to increase in business competitiveness. Likewise, foreign direct investment is positively correlated to business competitiveness. It indicates that increase in foreign direct investments lead to increase in business competitiveness. Further, brand recognition is positively correlated to business competitiveness. It indicates that a strong brand attracts trust and long-term market position that leads to increase in business competitiveness. In addition, government policy measures is positively correlated to business competitiveness. It indicates that supportive policies foster stability and development for businesses to thrive.

Similarly, the study also shows that access to international markets is positively correlated to business sustainability. It indicates that higher the access to international markets, higher would be the business sustainability. Similarly, technological adoption is positively correlated to business sustainability. It indicates that use of updated technology leads to increase in business sustainability. Likewise, foreign direct investment is positively correlated to business sustainability. It indicates that increase in foreign direct investments lead to increase in business sustainability. Further, brand recognition is positively correlated to business sustainability. It indicates that a strong brand attracts trust and long-term market position that leads to increase in business sustainability. In addition, government policy measures is positively correlated to business sustainability. It indicates that supportive policies foster stability and development for businesses to thrive.

Regression analysis

Having indicated the Kendall's Tau correlation coefficients, the regression analysis has been carried out and the results are presented in Table 2. More specifically, it shows the regression results of access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition on business sustainability in Nepal.

Table 2

Estimated regression results of access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition on business sustainability

The results are based on 145 observations using linear regression model. The model is BS = $\beta_0 + \beta_1$AIM + β_2TA + β_3FDI + β_4GPM + β_5BR + e where the dependent variable is BS (Business sustainability). The independent variables are AIM (Access to international markets), TA (Technological adoption), FDI (Foreign direct investment), GPM (Government policy measures) and BR (Brand recognition).

Models	Intercepts	Regression coefficients of					Adj. R_bar^2	SEE	F- Value
		AIM	TA	FDI	GPM	BR			
1	1.787 (5.294)**	0.564 (8.007)**					0.376	0.496	45.583
2	1.367 (4.056)**		0.647 (6.752)**				0.460	0.462	64.116
3	1.188 (3.692)**			0.705 (8.951)**			0.517	0.437	80.123
4	1.189 (3.343)**				0.691 (8.084)**		0.465	0.459	65.358
5	0.276 (2.597)**					0.874 (8.170)**	0.470	0.457	66.742
6	0.789 (2.320)*	0.330 (3.977)**	0.469 (5.435)**				0.551	0.427	46.472
7	0.451 (1.395)	0.156 (1.761)	0.340 (3.960)**	0.387 (3.852)**			0.624	0.385	41.883
8	0.229 (2.701)**	0.102 (1.155)	0.288 (3.368)**	0.301 (2.901)**	0.242 (2.413)*		0.648	0.373	35.001
9	0.127 (2.335)*	0.091 (1.043)	0.246 (2.809)**	0.236 (2.174)*	0.205 (2.033)*	0.229 (1.756)	0.658	0.367	29.452

Notes:

i. Figures in parenthesis are t-values.
ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
iii. Business sustainability is the dependent variable.

Table 2 shows that the beta coefficients for access to international markets are positive with business sustainability. It indicates that access to international markets has a positive impact on business sustainability. This finding is consistent with the findings of Camisón and López (2010). Similarly, the beta coefficients for technological adoption are positive with business sustainability. It indicates that technological adoption has a positive impact on business sustainability. This finding is consistent with the findings of Ali Qalati *et al.* (2020). Likewise, the beta coefficients for foreign direct investment are positive with business sustainability. It indicates that foreign direct investment has a positive impact on business sustainability. This finding is consistent with the findings of De Maeseneire and Claeys (2012). Further, the beta coefficients for government policy measures are positive with business sustainability. It indicates that government policy measures have positive impact on business sustainability. This finding is consistent with the findings of Alrabeei and Kasi (2014). In addition, the beta coefficients for brand recognition are positive with business sustainability. It indicates that brand recognition has a positive impact on business sustainability. This finding is similar to the findings of Musthofa and Rokhim (2021).

Table 3

Estimated regression results of access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition on business competitiveness

The results are based on 145 observations using linear regression model. The model is BC = $\beta_0 + \beta_1$AIM + β_2TA + β_3FDI + β_4 GPM + β_5BR + e where the dependent variable is BC (Business competitiveness). The independent variables are AIM (Access to international markets), TA (Technological adoption), FDI (Foreign direct investment), GPM (Government policy measures) and BR (Brand recognition).

Models	Intercepts	Regression coefficients of					Adj. R_bar²	SEE	F- Value
		AIM	TA	FDI	GPM	BR			
1	1.498 (4.707)**	0.606 (7.496)**					0.385	0.562	56.193
2	1.593 (4.600)**		0.553 (6.410)**				0.397	0.687	41.088
3	1.231 (4.262)**			0.664 (8.987)**			0.401	0.612	80.768
4	1.505 (5.686)**				0.59 (8.787)**		0.39	0.6171	77.209
5	0.984 (3.016)**					0.697 (8.887)**	0.385	0.619	75.459
6	0.862 (2.621)**	0.525 (5.934)**	0.225 (2.395)*				0.42	0.602	44.108
7	0.602 (1.933)	0.413 (4.796)**	0.189 (1.996)*	0.434 (4.393)**			0.499	0.559	40.435
8	0.450 (1.504)	0.397 (4.850)**	0.170 (1.797)	0.244 (2.281)*	0.304 (2.304)*		0.547	0.532	36.884
9	0.352 (1.139)	0.387 (4.707)**	0.152 (1.405)	0.199 (2.752)**	0.258 (2.821)**	0.149 (1.206)	0.5485	0.531	29.915

Notes:

i. Figures in parenthesis are t-values.
ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
iii. Business competitiveness is the dependent variable.

Table 3 shows that the beta coefficients for access to international markets are positive with business competitiveness. It indicates that access to international markets has a positive impact on business competitiveness. This finding is consistent with the findings of Rua *et al.* (2018). Similarly, the beta coefficients for technological adoption are positive with business competitiveness. It indicates that technological adoption has a positive impact on business competitiveness. This finding is consistent with the findings of Ghobakhloo and Ching (2019). Likewise, the beta coefficients for foreign direct investment are positive with business competitiveness. It indicates that foreign direct investment has a positive impact on business competitiveness. This finding is consistent with the findings of Yeung (2017). Further, the beta coefficients for government policy measures are positive with business competitiveness. It indicates that government policy measures have positive impact on business sustainability. This finding is consistent with the findings of Kraja *et al.* (2014). In addition, the beta coefficients for brand recognition are positive with business competitiveness. It indicates that brand recognition has a positive impact on business competitiveness. This finding is similar to the findings of Vidic and Vadnjal (2013).

4. Summary and conclusion

Globalization significantly impacts the competitiveness and sustainability of small and medium-sized enterprises (SMEs) by offering access to new markets, technologies, and resources. This enables SMEs to expand their reach and improve operations. However, it also intensifies competition, requiring SMEs to innovate and adapt to changing demands. By tapping into global networks and trade opportunities, SMEs can grow their customer base and revenue. Additionally, adopting new technologies and efficient production methods boosts competitiveness. To thrive, SMEs must stay flexible, focus on innovation, and implement sustainable practices. Building strong relationships with customers and suppliers and staying informed about global trends is essential for long-term success in a globalized market.

This study attempts to examine the impact of globalization on the competitiveness and sustainability of small and medium-sized enterprises (SMEs) in Nepal. The study is based on primary data of 145 respondents.

The major conclusion of the study is that access to international markets, technological adoption, foreign direct investment, government policy measures and brand recognition have positive impact on business sustainability and business competitiveness. The study also concludes that foreign direct investment is the most significant factor followed by brand recognition that influence the business sustainability and competitiveness.

References

Adhikari, S. N., and N. Malla, 2024. Navigating the digital shift: Exploring the impact of technology on management practices in small and medium enterprises (SMEs) in Nepal. *Nepalese Journal of Management and Technology* 2(2), 91-109.

Akang, U. M., 2024. Policy adherence and business growth: Exploring the relationship in small and medium enterprises. *Zien Journal of Social Sciences and Humanities* 30(1), 1-12.

Akdogan, E. C., 2018. How globalization affects the operational efficiency of emerging market firms? A comparative analysis on Turkish SMEs. *Economics and Business Letters* 7(1), 9-17.

Ali Qalati, S. A., W. Li, N. Ahmed, M. A. Mirani, and A. Khan, 2020. Examining the factors affecting SME performance: the mediating role of social media adoption. *Sustainability* 13(1), 75-99.

Alrabeei, H., and B. R. Kasi, 2014. Barriers to growth: Key challenges facing Bahraini small and medium enterprises. *Arabian Journal of Business and Management Review* 4(3), 45-62.

Asgary, A., A. I. Ozdemir, and H. Özyürek, 2020. Small and medium enterprises and global risks: evidence from manufacturing SMEs in Turkey. *International Journal of Disaster Risk Science* 1(1), 59-73.

Biru, E. A., and C. Amentie, 2024. The impact of globalization on developing countries. *International Journal of Advances in Social Science and Humanities* 3(1), 1-16.

Camisón, C., and A. Villar-López, 2010. Effect of SMEs' international experience on foreign intensity and economic performance: the mediating role of internationally exploitable assets and competitive strategy. *Journal of Small Business Management* 48(2), 116-151.

Child, J., J. Karmowska, and O. Shenkar, 2022. The role of context in SME internationalization–A review. *Journal of World Business* 57(1), 101267-101374.

Coldwell, D., R. Venter, T. Joosub, and H. Duh, 2022. The tension between SMEs' growth and sustainability in emerging and developed countries' internationalization: towards a conceptual model. *Sustainability* 14(8), 4418-4437.

Couto, M., and J. J. Ferreira, 2017. Brand management as an internationalization strategy for SME: A multiple case study. *Journal of Global Marketing* 30(3), 192-206.

De Maeseneire, W., and T. Claeys, 2012. SMEs, foreign direct investment and financial constraints: the case of Belgium. *International Business Review* 21(3), 408-424.

Dewi, M. U., A. Mekaniwati, Y. Nurendah, P. Cakranegara, and A. S. Arief, 2020. Globalization challenges of micro small and medium enterprises. *European Journal of Molecular and Clinical Medicine* 7(11), 1909-1915.

Dhungana, D. P., 2024. An exploratory study on challenges of e-commerce adoption in SMEs of Birendranagar, Surkhet. *Journal of Entrepreneurship and Management Studies* 1(2), 78-90.

Felicio, J. A., I. Meidute, and O. Kyvik, 2016. Global mindset, cultural context, and the internationalization of SMEs. *Journal of Business Research* 69(11), 4924-4932.

Fernandes, C. I., C. A. Lobo, J. J. Ferreira, and M. Peris-Ortiz, 2020. Factors affecting SMEs' strategic decisions to approach international markets. *European Journal of International Management* 14(4), 617-639.

Ghimire, D. K., P. Gautam, S. K. Karki, J. Ghimire, and I. Takagi, 2022. Small business and livelihood: A study of Pashupatinath UNESCO heritage site of Nepal. *Sustainability* 15(1), 612-644.

Ghobakhloo, M., and N. T. Ching, 2019. Adoption of digital technologies of smart manufacturing in SMEs. *Journal of Industrial Information Integration* 16, 100-107.

Haddad, M. I., I. A. Williams, M. S. Hammoud, and R. J. Dwyer, 2020. Strategies for implementing innovation in small and medium-sized enterprises. *World Journal of Entrepreneurship, Management and Sustainable Development* 16(1), 12-29.

Herve, A., C. Schmitt, and R. Baldegger, 2021. Internationalization and digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technology Innovation Management* 10(7), 28-40.

Iqbal, S., and A. Khan, 2023. Globalization and its impact on small and medium-sized enterprises (SMEs): A longitudinal analysis. *Competitive Research Journal Archive* 1(2), 109-118.

Jahanger, A., M. Usman, M. Murshed, H. Mahmood, and D. Balsalobre-Lorente, 2022. The linkages between natural resources, human capital, globalization, economic growth, financial development, and ecological footprint: The moderating role of technological innovations. *Resources Policy* 76, 102-569.

Jianguo, H., 2017. Economic globalization is an irreversible trend. *J. WTO and China* 7, 3-12.

Jovane, F., G. Seliger, and T. Stock, 2017. Competitive sustainable globalization general considerations and perspectives. *Procedia Manufacturing* 8, 1-19.

Kaplinsky, R., and M. Morris, 2019. Trade and industrialization in Africa: SMEs, manufacturing and cluster dynamics. *Journal of African Trade* 6(1), 47-59.

Kraja, Y. B., E. Osmani, and F. Molla, 2014. The role of government policy for supporting SMEs. *Academic Journal of Interdisciplinary Studies* 3(2), 391-396.

Kunday, O., and E. P. Şenguler, 2015. A study on factors affecting the internationalization process of small and medium enterprises (SMEs). *Procedia-Social and Behavioral Sciences* 195, 972-981.

Lamichhane, B. D., and P. B. Lama, 2023. Challenges and prospects of Nepalese microfinance programs: A mini review. *Nepalese Journal of Management* 3, 41-62.

Lee, J., and I. Cho, 2014. Priority derivation of policy plans for ICT SMEs and ventures' globalization. *Journal of Digital Convergence* 12(6), 13-22.

Lee, Y., J. Shin, and Y. Park, 2012. The changing pattern of SMEs' innovativeness through business model globalization. *Technological Forecasting and Social Change* 79(5), 832-842.

Liu, X., X. Li, and D. Parker, 2001. Foreign direct investment and productivity spillovers in the Chinese manufacturing sector. *Economic Systems* 25(4), 305-321.

McMillan, M., D. Rodrik, and Í. Verduzco-Gallo, 2014. Globalization, structural change, and productivity growth, with an update on Africa. *World Development* 63, 11-32.

Miroshnychenko, I., A. Strobl, K. Matzler, and A. De Massis, 2021. Absorptive capacity, strategic flexibility, and business model innovation: Empirical evidence from Italian SMEs. *Journal of Business Research* 130, 670-682.

Moore, S. B., and S. L. Manring, 2009. Strategy development in small and medium-sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production* 17(2), 276-282.

Mosho, A. D., E. Farruk, and I. Canco, 2022. Globalization, social economic interdependence and opportunities. *Interdisciplinary Journal of Research and Development* 9(4), 8-18.

Musthofa, I., and R. Rokhim, 2022. Diversification, profitability, and bank financial stability in Indonesia. In *ICE-BEES 2021: Proceedings of the 4th International Conference on Economics, Business and Economic Education Science, ICE-BEES 2021, 27-28 July 2021, Semarang, Indonesia*, 10, 326-338.

Mutalemwa, D. K., 2015. Does globalization impact SME development in Africa? *African Journal of Economic and Management Studies* 6(2), 164-182.

Omar, R., B. Mahadi, and S. Foghani, 2017. Promoting clusters and networks for small and medium enterprises to economic development in the globalization era. *Sage Open* 7(1), 345-366.

Paulet, E., M. Parnaudeau, and T. Abdessemed, 2014. The SME struggle for financing: A clampdown in European banks post-crisis. *Journal of Business Strategy* 35(2), 36-45.

Polkowski, Z. D., T. A. Marambei, D. E. Niti, F. C. Chitu, and V. A. Ovadiuc, 2017. Improving business processes by cloud computing in SMEs. *Zeszyty Naukowe Uczelni Jana Wyżykowskiego. Studia z Nauk Technicznych* 4(6), 159-170.

Rehman, A., I. Hussain, M. Radulescu, H. Ma, V. Dagar, and M. K. Khan, 2021. The impact of globalization, energy use, and trade on ecological footprint in Pakistan: Does environmental sustainability exist? *Energies* 14(17), 5234-5250.

Robinson, W. I., 2016. Capitalist globalization and the transnationalization of the state. *Historical Materialism and Globalization* 1, 210-229.

Rosli, M. M., 2012. Competitive strategy of Malaysian small and medium enterprises: An exploratory investigation. *American International Journal of Contemporary Research* 2(1), 93-105.

Rua, O., A. França, and R. Fernández Ortiz, 2018. Key drivers of SMEs export performance: The mediating effect of competitive advantage. *Journal of Knowledge Management* 22(2), 257-279.

Scherer, A. G., and G. Palazzo, 2011. The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies* 48(4), 899-931.

Sener, S., A. Incekara, and M. Savrul, 2014. The potential of e-commerce for SMEs in a globalizing business environment. *Procedia-Social and Behavioral Sciences* 150, 35-45.

Stoian, M. C., J. Rialp, and P. Dimitratos, 2007. SMEs networks and international performance: Unveiling the significance of foreign market entry mode. *Journal of Small Business Management* 55(1), 128-148.

Stouraitis, V., P. Boonchoo, M. H. Mior Harun, and M. Kyritsis, 2017. Entrepreneurial perceptions and bias of SME exporting opportunities for manufacturing exporters: A UK study. *Journal of Small Business and Enterprise Development* 24(4), 906-927.

Thorgren, S., and T. A. Williams, 2020. Staying alive during an unfolding crisis: How SMEs ward off impending disaster. *Journal of Business Venturing Insights* 14, 819-845.

Umadia Sr, K., and K. Kasztelnik, 2020. The financial innovative business strategies of small to medium scale enterprises in developing countries and influence for the global economy performance. *Socio Economic Challenges* 4(3), 20-32.

Utami, R. B., S. M. Rahayu, M. G. W. E. N. Pamungkas, S. R. Handayani, and Z. Z. Abidin, 2022. Entrepreneurial knowledge, market orientation, digitalization, and entrepreneurial competencies: Evidence from SMEs in Indonesia. *Journal of Economics, Finance and Accounting Studies* 4(2), 91-103.

Vidic, F., and J. Vadnjal, 2013. The role of branding in SMEs: Different perspectives on the market. *China-USA Business Review* 12(1), 79-88.

Wasiuzzaman, S., 2019. Resource sharing in inter-firm alliances between SMEs and large firms and SME access to finance: A study of Malaysian SMEs. *Management Research Review* 42(12), 1375-1399.

Yaacob, Z., N. A. Rahman, and R. M. Radzi, 2016. An overview of technological innovation on SME survival: A conceptual paper. *Procedia-Social and Behavioral Sciences* 22(4), 508-515.

Yeung, H. W. C., 2017. Global production networks and foreign direct investment by small and medium enterprises in ASEAN. *Transnational Corporations* 24(2), 29-58.

Young, S., P. Dimitratos, and M. Fletcher, 2018. How can academic-policy collaboration be more effective? A stewardship approach to engaged scholarship in the case of SME internationalization on globalization cases. *Transnational Corporations* 25(1), 23-41.

Zastempowski, M., and S. Cyfert, 2023. A new angle on SMEs' competitiveness. How do agility capabilities affect a firm's competitive position? *Journal of Organizational Change Management* 36(4), 635-662.