

SSIRC 2024-085

BUSINESS CHARACTERISTICS AND SME FUNDING IN DEVELOPED AND EMERGING ECONOMIES

K. Jeje

North-West University, South Africa

A. Henrico

North-West University, South Africa

L. van Staden

North-West University, South Africa

Abstract

Access to finance is one of the major challenges faced by small and medium-sized enterprises in developing economies. Literature suggests that SME characteristics can contribute to SME funding. Nevertheless, there is limited research on whether business age, business size, sector, and gender composition have significant relationships with SME funding in developed and emerging economies. Although the micro- and macro-environment factors differ among economies, it is expected that lessons from the developed and emerging economies will enlighten SMEs from developing countries to devise financing strategies that are intertwined with their firm characteristics. This study analyses the role of business age, business size, sector, and gender composition in influencing SME funding (family, loan, remittances, savings, state programmes, venture capital) in developed and emerging economies. The linear regression analyses employing data from the ‘Future of Business Survey – a collaboration between Facebook, the OECD, and the World Bank’, have established the relationships between business characteristics and sources of SME funding. We argue that the policy development initiatives in developed, emerging, and developing economies may focus on establishing favourable environments that enhance the interaction of business characteristics and SME funding.

Keywords: Small and medium-sized enterprises, business characteristics, SME funding, developed economies, emerging economies, developing economies

INTRODUCTION

SMEs are the major drivers of socioeconomic development in all forms of economies (Karadag, 2017). To a great extent, SMEs have always faced difficulty in accessing financial capital for their development (Yildirim, Akci, & Eksi, 2013). The inability to access finance has been regarded as one of the key challenges faced by SMEs (Karadag, 2017). It has been realised that SME funding can be accessed when relevant factors influencing funding are understood (Yildirim, Akci, & Eksi,

2013). Literature suggests that SME characteristics such as gender composition (Rahman, Rahman, & Belas, 2017), other demographics of owners and managers (Esho & Verhoef, 2022), and firm size and age (Chowdhury & Alam, 2017) can contribute to SME funding. Nevertheless, there is limited research on whether business age, business size, sector, and gender composition have significant relationships with SME funding in developed and emerging economies. Although the micro- and macro-environment factors differ among economies, it is expected that lessons from the developed and emerging economies will enlighten SMEs from developing countries to devise financing strategies that are intertwined with their firm characteristics. We therefore seek to analyse the drivers of SME funding in developed and emerging economies in order to understand the role of business age, business size, sector, and gender composition.

LITERATURE REVIEW

Sources of SME Funding

In both developed and emerging economies, SMEs have been seeking funds from different sources. For example, in Pakistan, due to a lack of knowledge, SMEs have been preferring informal to formal financing (Rasheed & Siddiqui, 2019). Indian SMEs have also been relying on informal financing sources such as ‘trade credit, funds from family, friends, and relatives as well as funds from money lenders’ (Baker, Kumar, & Rao, 2020, p. 14).

It has been revealed that SMEs prefer bank loans (Rossi, Lombardi, Siggia, & Oliva, 2016) although they are required by financial institutions to provide collateral as a criterion to access finance. Many SMEs are incapable of producing collaterals, and this hinders their financing (Osano & Languitane, 2016). In South Africa, female entrepreneurs are also faced with lack of collateral. They need to own assets that can be used as collaterals (Garwe & Fatoki, 2012). Therefore, to a great extent, the failure to access finance is mainly contributed to by their inability to comply with the relevant requirements (Baker, Kumar, & Rao, 2020). This is why financial institutions such as banks are largely preferring older and larger businesses since they are able to provide relevant and updated information, and can take big loans. However, they need to provide low-cost funds to SMEs in order to drive sustainable development and ultimately enhance their relationships with SMEs (Yildirim, Akci, & Eksi, 2013).

Venture capital is also a key source of SME funding. Venture capital funds are ‘funds that invest in companies in exchange for a share in the property’ (Đalić, Terzić, & Novarlić, 2017, p. 60). Venture capital plays a vital role in influencing innovation, creating employment opportunities, and stimulating socioeconomic development (Greene, Brush, Hart, & Saporito, 2001).

Government support is another key SME funding source. For instance, the survival of Korean SMEs largely depends on the funds received from the government. This improves their operational flexibility that ultimately influences their survival (Park, Lee, & Kim, 2020). However, SMEs from various economies are still facing challenges to access finance from the government. Indian SMEs,

for example, are still struggling to utilise formal financing sources including the funds from the government and financial institutions (Baker, Kumar, & Rao, 2020). In Mozambique, many SMEs are not aware of government and private sector funding programmes. SMEs need to be informed about government and private sector funding programmes in order to enhance their financing (Osano & Languitane, 2016). However, government support in terms of low-cost funds can only yield significant results if SMEs' financial management practices are enhanced. Therefore, the support from government should also encompass financial management training to SME owner/managers (Karadag, 2017).

Remittances are also crucial for enterprise development and ultimately for socioeconomic development, job creation, and poverty reduction. They enable SMEs to establish new trade opportunities and eventually increase their competitiveness. Countries receiving remittances need to create favourable environments that attract migrants to invest in home SMEs and subsequently create jobs and economic growth. In order to increase the contribution of remittances on SME development, there is a great need of employing innovative techniques in transforming individuals receiving remittance to become banked individuals (Afsar, 2014).

Business Characteristics and SME Funding

Entrepreneurial characteristics significantly influence business performance (Mayr, Mitter, Kücher, & Duller, 2021). Several factors have been regarded as drivers of firm failure. They include firm size, age, assets, performance, employees, business location, nature of business, government support, the external environment, and the sector (Zaridis & Mousiolis, 2014). The business sector is one of the major factors influencing a business to seek external assistance (Mole, North, & Baldock, 2017). In Indian SMEs, for instance, financing preferences are also driven by the business sector. In terms of the business sector, SMEs in the manufacturing sector prefer long-term financing and other forms of financing, while those operating in the service sector prefer short-term financing (Baker, Kumar, & Rao, 2020).

The firm size, particularly in terms of employment, is one of the major factors influencing a business to seek external assistance (Mole, North, & Baldock, 2017). The firm size relates to SME funding (Yildirim, Akci, & Eksi, 2013). It has been found that SMEs tend to seek finance from multiple sources when their sizes increase (Rossi, Lombardi, Siggia, & Oliva, 2016). For example, in the UK, unlike low-growth SMEs, high-growth SMEs tend to access funding from more sources. In the US, the loan applications from high-growth SMEs are bigger than those from low-growth SMEs (Vos, Yeh, Carter, & Tagg, 2007). Nevertheless, as firm size increases, an entrepreneurial firm embraces bureaucracy, making it challenging to manage (Zaridis & Mousiolis, 2014). The size of the SMEs may be defined in terms of number of employees, whereby the size of micro-enterprises is mostly fewer than ten employees, while small enterprises have fewer than 50 employees. Medium-sized enterprises have fewer than 250 employees, and large enterprises may be considered to have at least 250 employees (Đalić, Terzić, & Novarlić, 2017).

The firm age plays a vital role in SME funding (Yildirim, Akci, & Eksi, 2013). Also, the relationship between firm age and financial management practices is eminent. Although younger firms appear to be more resilient and significantly contributing to the economic growth, particularly during a recession (Cowling, Liu, & Zhang, 2018), mostly, younger SMEs exhibit weak financial management practices (Karadag, 2017). This is why, in most cases, literature has dwelt on the fact that businesses fail at a young age, particularly in first five years (Zaridis & Mousiolis, 2014). Conversely, in most cases, older SMEs, particularly with above five years of existence, exhibit strong financial management practices. As the age of the firm increases, SME performance increases due to an increased competency of owner/managers. This competency is also characterised by their increased ability to efficiently manage relevant financial management practices (Karadag, 2017). They also show ‘signs of increasing financial contentment with firm age’ (Vos, Yeh, Carter, & Tagg, 2007, p. 2668).

The performance and survival of both younger and older SMEs are essential to economic growth. Although, in most cases, the performance of older SMEs seems to be satisfactory, the survival of SMEs needs to be guaranteed in the early years, particularly three to five years, in which SMEs face many challenges that need immediate and practical solutions. The solutions required by SMEs in the early years include business training and the ability to access finance in order to forge their competitiveness (Karadag, 2017).

Gender is one of the major drivers influencing a business to seek external assistance (Mole, North, & Baldock, 2017). The gender of owner-managers is one of the business characteristics that significantly influences SME funding (Eniola, 2018). Understanding the role of business characteristics such as gender in firm performance enables entrepreneurs to raise their awareness on potential risks and benefits in business (Mayr, Mitter, Kücher, & Duller, 2021). Therefore, the need to study business characteristics including the female-owned SMEs in accessing finance is of paramount importance (Garwe & Fatoki, 2012). This is because women are active contributors of socioeconomic development in various economies (Greene, Brush, Hart, & Saporito, 2001).

Women face difficulty in accessing capital (Paglia & Harjoto, 2014). For years, they have also been struggling to access venture capital investments (Greene, Brush, Hart, & Saporito, 2001). Unlike female owners, male owners face little difficulty in accessing external financing. They also spend a great deal of finance in starting their businesses (Na & Erogul, 2021). Females are considered to have weak bargaining power when bargaining with key business stakeholders, and are also ‘more social- rather than profit-oriented’, behaviours that cause their firms to face bankruptcy (Mayr, Mitter, Kücher, & Duller, 2021, p. 14). Also, in Australia, for example, it was reported that the low number of bank loan applications from females is likely to be influenced by ‘the widespread belief that banks discriminate against females’ (Watson, 2006, p. 43). Therefore, they should be provided with entrepreneurship and funding application trainings run by financial institutions, government, and nongovernmental organisations (Garwe & Fatoki, 2012). This will influence them to establish mechanisms that help them to access technical and financial support

from various sources, including public sources. In England, for example, women-led businesses preferred seeking assistance from public sources (Mole, North, & Baldock, 2017).

METHODOLOGY

We use data from the ‘Future of Business Survey – a collaboration between Facebook, the OECD, and the World Bank’ in our quantitative analysis that involves business characteristics such as shares of SMEs with different age categories, number of employees, shares of SMEs operating in both manufacturing and services sectors, and the analysis of gender based on single and multiple ownership. Our SME funding sources include family, loans, remittances, own savings, state programmes, and venture capital. This analysis is only based on monthly data from the ‘Future of Business Survey’ involving 42 countries as shown in Table 1. Other data that is not monthly (such as biannual) is excluded from this study. Although the survey collected monthly data from February 2016 to April 2018, the data for SME funding is available for December 2017, January 2018, February 2018, and April 2018. Since regression analyses have been preferred in similar studies (i.e Amadasun & Mutezo, 2022; Bongomin, Ntayi, Munene, & Malinga, 2017; McMahon, 2001; Hall, Hutchinson, & Michaelas, 2004), we therefore run linear regression analyses based on latest data obtained from December 2017 to April 2018.

Dependent variables are SME funding using money from spousal funds, relatives or friends (Family); SME funding using money from a bank loan or a micro-finance institution (Loan); SME funding using money from remittances (Remittances); SME funding using their own savings (Savings); SME funding using money from state programmes (State); and SME funding using money from venture capital (VentureCapital).

Independent variables are businesses that are less than 1 year old (Age1); businesses that are one to three years old (Age2); businesses that are four to five years old (Age3); businesses that are six to 10 years old (Age4); businesses that are more than 10 years old (Age5); non-employer businesses (Size1); businesses with two to nine employees (Size2); businesses with 10 to 49 employees (Size3); businesses with 50 to 249 employees (Size4); and businesses with 250 employees or more (Size5). Other independent variables are: just-me entrepreneurs, women (JustWomen); just-me entrepreneurs, men (JustMen); businesses owned/managed mainly by women (MainlyWomen); businesses owned/managed mainly by men (MainlyMen); businesses with gender-balanced ownership/management (Gender-balanced); businesses operating in the manufacturing sector (ManufSector); and businesses operating in the services sector (ServSector).

Table 1: Countries participating in the survey

Australia	Germany	Korea	Türkiye	Egypt	Philippines
Belgium	Greece	Mexico	United Kingdom	India	Romania
Canada	Hungary	Netherlands	United States	Indonesia	Russia
Chile	Ireland	Poland	Argentina	Malaysia	South Africa
Colombia	Israel	Portugal	Bangladesh	Nigeria	Chinese Taipei
Czechia	Italy	Spain	Brazil	Pakistan	Thailand
France	Japan	Sweden	Ecuador	Peru	Viet Nam

FINDINGS

Business Characteristics and SME Funding: Family

As shown in Table 2, a linear regression established that businesses that are less than one year old statistically significantly predicted SME funding using money from spousal funds, relatives or friends. These results are similar to businesses that are one to three years old; businesses with 10 to 49 employees; businesses with 50 to 249 employees; businesses with 250 employees or more; businesses with gender-balanced ownership/management; and businesses operating in the manufacturing sector. On the other hand, it was found that businesses that are four to five years old did not statistically significantly predict SME funding using money from spousal funds, relatives or friends. These results are similar to businesses that are six to 10 years old; and businesses that are owned/managed mainly by men. We did not consider a negative coefficient (Age5, Size1, Sex_JustWomen, Sex_MainlyWomen), and/or an insignificant constant (Size2, Sex_JustMen, Sector_ServSector) to statistically significantly predict SME funding using money from spousal funds.

Business Characteristics and SME Funding: Loan

A linear regression established that businesses that are six to 10 years old statistically significantly predicted SME funding using money from a bank loan or a micro-finance institution as shown in Table 3. These results are similar to businesses that are owned/managed mainly by men. On the other hand, it was found that businesses that are more than 10 years old did not statistically significantly predict SME funding using money from a bank loan or a micro-finance institution. These results are similar to non-employer businesses; businesses with two to nine employees; businesses with 10 to 49 employees; businesses with 50 to 249 employees; businesses with 250 employees or more; just-me entrepreneurs, women; just-me entrepreneurs, men; businesses owned/managed mainly by women; businesses with gender-balanced ownership/management; businesses operating in the manufacturing sector; and businesses operating in the services sector. We did not consider a negative coefficient (Age1, Age2, Age3) to statistically significantly predict SME funding using money from a bank loan or a micro-finance institution.

Table 2: Business characteristics and family

DV_Family		B	95% CI for B		SE B	β	R ²	ΔR ²	F (1,166)	Constant			
			B	95% CI for B						SE B			
				LL	UL			LL	UL				
Model	Age1	.313*	.062	.564	.127	.188*	.035	.030*	6.078	21.642***	17.410	25.874	2.143
	Age2	.350**	.132	.567	.110	.239**	.057	.051**	10.043	17.048***	10.921	23.175	3.103
	Age3	.169	-.359	.697	.267	.049	.002	-.004	.401	24.357***	17.127	31.587	3.662
	Age4	-.398	-.859	.062	.233	-.131	.017	.011	2.913	31.934***	25.644	38.225	3.186
	Age5	-.259***	-.389	-.128	.066	-.291***	.085	.079***	15.387	33.658***	29.872	37.443	1.917
	Size1	-.474***	-.568	-.379	.048	-.608***	.370	.366***	97.565	41.942***	38.683	45.202	1.651
	Size2	.459***	.292	.627	.085	.387***	.150	.145***	29.273	4.739	-3.356	12.834	4.100
	Size3	1.038***	.779	1.297	.131	.523***	.273	.269***	62.456	15.300***	12.222	18.377	1.559
	Size4	1.421**	.558	2.284	.437	.245**	.060	.054**	10.567	22.866***	20.198	25.533	1.351
	Size5	1.487**	.415	2.559	.543	.208**	.043	.037**	7.502	23.935***	21.548	26.322	1.209
	Sex JustWomen	-.377***	-.478	-.276	.051	-.497***	.247	.243***	54.524	39.406***	35.777	43.035	1.838
	Sex JustMen	.357***	.259	.456	.050	.486***	.236	.231***	51.241	3.984	-2.385	10.352	3.225
	Sex MainlyWomen	-.584***	-.702	-.465	.060	-.603***	.364	.360***	94.974	39.126***	36.355	41.897	1.404
	Sex MainlyMen	.039	-.151	.228	.096	.031	.001	-.005	.161	25.246***	18.279	32.214	3.529
	Sex Gender balanced	.376*	.040	.712	.170	.169*	.029	.023*	4.874	19.867***	13.658	26.076	3.145
	Sector ManufSector	1.392***	.782	2.003	.309	.330***	.109	.104***	20.303	21.212***	18.487	23.937	1.380
	Sector ServSector	.534**	.202	.865	.168	.239**	.057	.052**	10.089	-15.662	-41.987	10.663	13.334

Note. N = 168. *p < .05, **p < .01, ***p < .001

Table 3: Business characteristics and loan

DV_Loan		B	95% CI for B		SE B	β	R ²	ΔR^2	F (1,166)	Constant								
										B	95% CI for B		SE B					
			LL	UL												LL	UL	
Model	Age1	-.692***	-.919	-.465	.115	-.424***	.180	.175***	36.342	33.607***	29.785	37.428	1.936					
	Age2	-.506***	-.712	-.301	.104	-.353***	.125	.120***	23.670	36.467***	30.686	42.249	2.928					
	Age3	-.600*	-1.109	-.090	.258	-.177*	.031	.026*	5.397	30.635***	23.658	37.612	3.534					
	Age4	.955***	.524	1.386	.218	.322***	.103	.098***	19.155	9.868**	3.983	15.752	2.980					
	Age5	.381	.261	.501	.061	.438	.192	.187	39.504	12.228	8.744	15.711	1.764					
	Size1	.027	-.089	.144	.059	.036	.001	-.005	.215	21.699***	17.679	25.718	2.036					
	Size2	.096	-.082	.273	.090	.083	.007	.001	1.138	18.014***	9.445	26.583	4.340					
	Size3	-.240	-.536	.055	.150	-.124	.015	.009	2.576	25.208***	21.699	28.716	1.777					
	Size4	.305	-.566	1.175	.441	.054	.003	-.003	.477	21.776***	19.086	24.467	1.363					

DV_Loan		B	95% CI for B		SE B	β	R ²	ΔR ²	F (1,166)	Constant			
										B	95% CI for B	SE B	
			LL	UL							LL	UL	
	Size5	.849	-.216	1.915	.540	.121	.015	.009	2.476	21.043***	18.671	23.415	1.202
	Sex_JustWomen	-.004	-.118	.110	.058	-.005	.000	-.006	.005	22.720***	18.623	26.816	2.075
	Sex_JustMen	.015	-.095	.126	.056	.022	.000	-.006	.077	21.602***	14.469	28.735	3.613
	Sex_MainlyWomen	-.004	-.149	.142	.074	-.004	.000	-.006	.002	22.660***	19.257	26.063	1.723
	Sex_MainlyMen	.194*	.010	.377	.093	.160*	.025	.020*	4.343	15.618***	8.879	22.358	3.413
	Sex_Gender balanced	.186	-.147	.518	.169	.085	.007	.001	1.212	19.244***	13.096	25.391	3.113
	Sector_ManufSector	.494	-.134	1.123	.318	.120	.014	.008	2.409	20.661***	17.854	23.467	1.422
	Sector_ServSector	.185	-.148	.518	.169	.085	.007	.001	1.199	7.931	-18.527	34.389	13.401

Note. $N = 168$. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4: Business characteristics and remittances

DV_Remittances		B	95% CI for B		SE B	β	R ²	ΔR ²	F (1,166)	Constant			
										B	95% CI for B	SE B	
				LL	UL								LL
Model	Age1	.134***	.088	.181	.024	.403***	.162	.157***	32.161	-.629	-1.418	.161	.400
	Age2	.081***	.038	.124	.022	.278***	.077	.072***	13.868	-.717	-1.931	.496	.614
	Age3	.025	-.081	.131	.054	.036	.001	-.005	.216	1.179	-.269	2.626	.733
	Age4	-.211***	-.298	-.123	.044	-.347***	.120	.115***	22.743	4.317***	3.126	5.508	.603
	Age5	-.070***	-.095	-.045	.013	-.394***	.155	.150***	30.481	3.414***	2.686	4.142	.369
	Size1	-.042***	-.065	-.019	.012	-.269***	.072	.067***	12.965	2.868***	2.077	3.660	.401
	Size2	.029	-.007	.065	.018	.124	.015	.009	2.586	.111	-1.633	1.855	.883
	Size3	.086**	.026	.145	.030	.215**	.046	.041**	8.074	.578	-.127	1.284	.357
	Size4	.014	-.164	.192	.090	.012	.000	-.006	.023	1.476***	.926	2.027	.279
	Size5	.091	-.128	.310	.111	.063	.004	-.002	.669	1.348***	.861	1.836	.247
	Sex_JustWomen	-.048***	-.070	-.026	.011	-.314***	.099	.093***	18.146	3.127***	2.332	3.921	.403
	Sex_JustMen	.044***	.022	.065	.011	.296***	.088	.082***	15.946	-1.250	-2.643	.142	.705
	Sex_MainlyWomen	-.066***	-.094	-.038	.014	-.340***	.115	.110***	21.649	2.921***	2.267	3.575	.331
	Sex_MainlyMen	.007	-.031	.045	.019	.030	.001	-.005	.148	1.246	-.148	2.641	.706
	Sex_Gender balanced	-.033	-.101	.035	.034	-.074	.005	-.001	.913	2.106**	.848	3.363	.637
	Sector_ManufSector	.138*	.010	.265	.065	.163*	.027	.021*	4.541	.976**	.406	1.546	.289
	Sector_ServSector	.001	-.068	.069	.035	.002	.000	-.006	.001	1.446	-3.981	6.872	2.748

Note. $N = 168$. * $p < .05$, ** $p < .01$, *** $p < .001$

Business Characteristics and SME Funding: Remittances

As shown in Table 4, a linear regression established that businesses operating in the manufacturing sector statistically significantly predicted SME funding using money from remittances. On the other hand, it was found that businesses that are four to five years old did not statistically significantly predict SME funding using money from remittances. These results are similar to businesses with two to nine employees; businesses with 10 to 49 employees; businesses with 50 to 249 employees; businesses with 250 employees or more; businesses owned/managed mainly by men; businesses with gender-balanced ownership/management; and businesses operating in the services sector. We did not consider a negative coefficient (Age4, Age5, Size1, Sex_JustWomen, Sex_MainlyWomen), and/or an insignificant constant (Age1, Age2, Sex_JustMen) to statistically significantly predict SME funding using money from remittances.

Business Characteristics and SME Funding: Savings

A linear regression established that businesses that are six to 10 years old statistically significantly predicted SME funding using their own savings as shown in Table 5. These results are similar to businesses that are non-employer businesses; just-me entrepreneurs, women; and businesses owned/managed mainly by women. On the other hand, it was found that businesses that are less than one year old did not statistically significantly predict SME funding using their own savings. These results are similar to businesses that are one to three years old; businesses that are four to five years old; businesses that are more than 10 years old; businesses with 10 to 49 employees; businesses with 50 to 249 employees; businesses with 250 employees or more; businesses owned/managed mainly by men; businesses with gender-balanced ownership/management; and businesses operating in the services sector. We did not consider a negative coefficient (Size2, Sex_JustMen, Sector_ManufSector), to statistically significantly predict SME funding using their own savings.

Table 5: Business characteristics and savings

DV_Savings		B	95% CI for B		SE B	β	R ²	ΔR^2	F (1,166)	Constant			
										B	95% CI for B	SE B	
				LL	UL								LL
Model	Age1	-.187	-.421	.048	.119	-.121	.015	.009	2.464	73.853***	69.898	77.808	2.003
	Age2	.011	-.197	.218	.105	.008	.000	-.006	.010	70.589***	64.754	76.424	2.955
	Age3	.238	-.249	.726	.247	.075	.006	.000	.930	67.686***	61.010	74.362	3.381
	Age4	.439*	.015	.864	.215	.157*	.025	.019*	4.181	65.032***	59.236	70.828	2.936
	Age5	.023	-.103	.149	.064	.028	.001	-.005	.130	70.260***	66.602	73.919	1.853
	Size1	.134*	.026	.243	.055	.186*	.035	.029*	5.980	66.544***	62.812	70.275	1.890
	Size2	-.237**	-.401	-.073	.083	-.216**	.047	.041**	8.128	82.181***	74.254	90.109	4.015
	Size3	-.073	-.354	.208	.142	-.040	.002	-.004	.264	71.681***	68.345	75.017	1.690
	Size4	-.146	-.968	.677	.417	-.027	.001	-.005	.122	71.269***	68.726	73.813	1.288
	Size5	-.215	-.1228	.798	.513	-.033	.001	-.005	.176	71.274***	69.018	73.529	1.142
	Sex_JustWomen	.215***	.113	.317	.052	.306***	.094	.088***	17.192	63.606***	59.923	67.288	1.865
	Sex_JustMen	-.211***	-.310	-.112	.050	-.311***	.097	.091***	17.736	84.283***	77.879	90.686	3.243
	Sex_MainlyWomen	.264***	.133	.395	.066	.295***	.087	.082***	15.846	65.230***	62.160	68.299	1.555
	Sex_MainlyMen	-.162	-.336	.012	.088	-.142	.020	.014	3.395	76.714***	70.333	83.096	3.232
	Sex_Gender balanced	-.097	-.412	.218	.160	-.047	.002	-.004	.372	72.635***	66.815	78.454	2.947
	Sector_ManufSector	-.623*	-.1213	.033	.299	-.160*	.026	.020*	4.350	73.310***	70.675	75.945	1.335
	Sector_ServSector	-.030	-.346	.286	.160	-.015	.000	-.006	.036	73.278***	48.206	98.349	12.698

Note. N = 168. *p < .05, **p < .01, ***p < .001

Business Characteristics and SME Funding: State Programmes

As shown in Table 6, a linear regression established that businesses with 50 to 249 employees statistically significantly predicted SME funding using money from state programmes. These results are similar to businesses that are operating in the manufacturing sector. On the other hand, it was found that non-employer businesses did not statistically significantly predict SME funding using money from state programmes. These results are similar to businesses with two to nine employees; businesses with 10 to 49 employees; businesses with 250 employees or more; just-me entrepreneurs, women; just-me entrepreneurs, men; businesses owned/managed mainly by women; and businesses operating in the services sector. We did not consider a negative coefficient (Age1, Age2, Age3, Sex_Gender_balanced), and/or an insignificant constant (Age4, Age5, Sex_MainlyMen) to statistically significantly predict SME funding using money from state programmes.

Business Characteristics and SME Funding: Venture Capital

A linear regression established that businesses with two to nine employees statistically significantly predicted SME funding using money from venture capital as shown in Table 7. These results are similar to businesses with 10 to 49 employees; just-me entrepreneurs, men; and businesses operating in the manufacturing sector. On the other hand, it was found that businesses that are one to three years old did not statistically significantly predict SME funding using money from venture capital. These results are similar to businesses that are four to five years old; businesses with 50 to 249 employees; businesses with 250 employees or more; businesses owned/managed mainly by men; businesses with gender-balanced ownership/management; and businesses operating in the services sector. We did not consider a negative coefficient (Age4, Age5, Size1, Sex_JustWomen, Sex_MainlyWomen), and/or an insignificant constant (Age1) to statistically significantly predict SME funding using money from venture capital.

Table 6: Business Characteristics and state programmes

DV_State		B	95% CI for B		SE B	β	R^2	ΔR^2	F (1,166)	Constant			
			LL	UL						B	95% CI for B		SE B
Model	Age1	-.190***	-.285	-.095	.048	-.294***	.086	.081***	15.651	6.900***	5.300	8.501	.811
	Age2	-.196***	-.278	-.114	.041	-.345***	.119	.114***	22.418	9.251***	6.949	11.552	1.166
	Age3	-.209*	-.412	-.006	.103	-.156*	.024	.018*	4.140	6.679***	3.900	9.458	1.408
	Age4	.225*	.048	.403	.090	.191*	.037	.031*	6.303	.870	-1.551	3.290	1.226
	Age5	.134***	.085	.183	.025	.388***	.150	.145***	29.355	.237	-1.181	1.655	.718
	Size1	.000	-.046	.047	.023	.000	.000	-.006	.000	3.866***	2.269	5.462	.809
	Size2	-.023	-.093	.048	.036	-.049	.002	-.004	.408	4.958**	1.550	8.367	1.726
	Size3	.035	-.083	.153	.060	.045	.002	-.004	.341	3.489***	2.087	4.891	.710
	Size4	.524**	.187	.860	.170	.232**	.054	.048**	9.452	2.481***	1.441	3.521	.527
	Size5	.307	-.117	.730	.214	.110	.012	.006	2.046	3.314***	2.371	4.257	.477
	Sex_JustWomen	-.037	-.082	.008	.023	-.126	.016	.010	2.680	5.129***	3.516	6.742	.817
	Sex_JustMen	.036	-.007	.080	.022	.127	.016	.010	2.721	1.568	-1.240	4.377	1.423
	Sex_MainlyWomen	-.036	-.094	.021	.029	-.097	.009	.003	1.565	4.649***	3.304	5.993	.681
	Sex_MainlyMen	.169***	.100	.238	.035	.351***	.123	.118***	23.366	-2.211	-4.748	.326	1.285
	Sex_Gender balanced	-.133*	-.264	-.002	.066	-.154*	.024	.018*	4.036	6.269***	3.850	8.689	1.225
	Sector_ManufSector	.366**	.121	.611	.124	.223**	.050	.044**	8.714	2.445***	1.352	3.539	.554
	Sector_ServSector	.117	-.014	.249	.067	.135	.018	.012	3.093	-5.418	-15.859	5.024	5.289

Note. $N = 168$. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7: Business characteristics and venture capital

DV_VentureCapital		B	95% CI for B		SE B	β	R ²	ΔR ²	F (1,166)	Constant			
			B	95% CI for B						SE B			
			LL	UL							LL	UL	
Model	Age1	.146*	.026	.267	.061	.183*	.033	.028*	5.745	1.555	-.480	3.589	1.030
	Age2	.069	-.038	.176	.054	.098	.010	.004	1.618	1.994	-1.022	5.010	1.528
	Age3	.185	-.067	.438	.128	.112	.013	.007	2.102	1.399	-2.056	4.854	1.750
	Age4	-.259*	-.479	-.040	.111	-.178*	.032	.026*	5.431	7.339***	4.340	10.338	1.519
	Age5	-.072*	-.137	-.008	.033	-.169*	.029	.023*	4.886	5.847***	3.973	7.720	.949
	Size1	-.148***	-.200	-.095	.027	-.395***	.156	.151***	30.733	8.665***	6.853	10.477	.918
	Size2	.204***	.122	.285	.041	.358***	.128	.123***	24.368	-5.829**	-9.767	-1.892	1.995
	Size3	.189*	.045	.332	.073	.198*	.039	.033*	6.768	1.827*	.127	3.527	.861
	Size4	.380	-.043	.804	.214	.136	.019	.013	3.145	2.879***	1.570	4.188	.663
	Size5	.390	-.133	.913	.265	.113	.013	.007	2.166	3.180***	2.016	4.345	.590
	Sex_JustWomen	-.136***	-.188	-.084	.026	-.373***	.139	.134***	26.909	8.496***	6.632	10.360	.944
	Sex_JustMen	.129***	.079	.180	.025	.367***	.134	.129***	25.770	-4.324*	-7.579	-1.068	1.649
	Sex_MainlyWomen	-.179***	-.245	-.114	.033	-.386***	.149	.144***	29.092	7.729***	6.190	9.268	.780
	Sex_MainlyMen	.035	-.056	.126	.046	.058	.003	-.003	.566	2.641	-.702	5.983	1.693
	Sex_Gender balanced	.124	-.038	.287	.082	.116	.014	.008	2.274	1.651	-1.354	4.656	1.522
	Sector_ManufSector	.646***	.352	.941	.149	.319***	.102	.096***	18.804	1.372*	.058	2.686	.666
	Sector_ServSector	-.162	-.324	.000	.082	-.151	.023	.017	3.876	16.708*	3.834	29.581	6.520

Note. $N = 168$. * $p < .05$, ** $p < .01$, *** $p < .001$

DISCUSSION

The relationships between business characteristics and sources of business funding have been revealed. The findings have revealed that young businesses (up to three years), as well as those with a small to large size (from ten to more than 250 employees) access finance from spousal funds, relatives or friends. This is likely to be influenced by the fact that during the start-up phase, the owner is expected to rely heavily on his/her family and/or business angels' financial support (Rossi, Lombardi, Siggia, & Oliva, 2016). The findings have also revealed that mature businesses (six to 10 years), as well as those owned/managed mainly by men access finance from bank loans or a micro-finance institution. These findings support Watson's (2006) claim that SMEs that are controlled by men particularly in older SMEs access finance from the financial institutions (banks) more than those controlled by females.

It has been realised that businesses operating in the manufacturing sector access finance from remittances. Afsar (2014) argues that the use of remittances in developing SMEs is a driver of significant and sustainable business outcomes. The findings have also revealed that businesses that are six to 10 years old, non-employer businesses, businesses that are owned/managed by a woman as a sole entrepreneur, and businesses owned/managed mainly by women access finance from their own savings. Accessing finance from financial institutions has been a challenge for most female entrepreneurs. This is why, even in mature SMEs (six to 10 years), own savings are still a preferred source of finance. Na and Erogul (2021, p. 76) argue that 'as women entrepreneurs are older, they depend more on the informal investors'.

We have also realised that medium-sized businesses (50 to 249 employees), and businesses that are operating in the manufacturing sector access finance from state programmes. Financing through state programmes has been regarded as a key driver of SMEs' growth and survival. However, state financing has a tendency to prevent the deaths of weak-performing SMEs instead of improving their performance (Park, Lee, & Kim, 2020). There is a great need to devise state programmes that focus on enhancing SMEs' market performance and sustainability.

The findings have also revealed that micro-businesses (two to nine employees), small-sized businesses (10 to 49 employees), businesses that are owned/managed by a man as a sole entrepreneur, and businesses operating in the manufacturing sector access finance from venture capital. Venture capital funds play a vital role in SME development, particularly the early-stage businesses (Đalić, Terzić, & Novarlić, 2017). The findings have confirmed that men-owned/managed enterprises access venture capital funds. However, women are less likely to access venture capital funds (Paglia & Harjoto, 2014). There is a great need to devise and implement policies that focus on enhancing the involvement of women-owned/managed SMEs in accessing venture capital funds.

CONCLUSION

The findings on the interaction between business characteristics and sources of SME funding enlighten the policy development community, and SMEs from other developing economies on workable funding strategies. The study has revealed that young and small to large-sized businesses access finance from spousal funds, relatives or friends. It has also revealed that mature businesses (six to 10 years), as well

as those owned/managed mainly by men access finance from a bank or a micro-finance institution. The study has also revealed that businesses operating in the manufacturing sector access finance from remittances.

The study has also found that mature (six to 10 years), non-employer businesses, businesses that are owned/managed by a woman as a sole entrepreneur, and businesses owned/managed mainly by women access finance from their own savings. The study has revealed that medium-sized businesses (50-249 employees), and businesses that are operating in the manufacturing sector access finance from state programmes. The study has also found that micro-businesses (two to nine employees), small-sized businesses (10 to 49 employees), businesses that are owned/managed by a man as a sole entrepreneur, and businesses operating in the manufacturing sector access finance from venture capital.

We argue that policy development initiatives in developed, emerging, and developing economies should focus on establishing favourable environments that enable businesses to access finance from spousal funds, relatives or friends. They may also enable businesses that are owned/managed mainly by men or females to access finance from a bank or a micro-finance institution. The policy development initiatives may also focus on establishing favourable mechanisms that attract remittances that are invested in the development of SMEs.

Favourable environments that enable businesses and entrepreneurs to increase their own savings should also be established. Nevertheless, businesses that are owned/managed by a woman as a sole entrepreneur, and businesses owned/managed mainly by women should be empowered in order to increase their ability to raise external finance. We also argue that policymakers from both the private and public sectors need to devise state programmes that focus on enhancing SMEs' market performance and sustainability. They also need to focus on establishing favourable environments that enhance the involvement of women-owned/managed SMEs in accessing venture capital funds.

A limitation of this study is related to the unavailability of relevant monthly data beyond April 2018. We argue that the analysis of such data could provide new findings on the relationship between SME characteristics and sources of SME funding after COVID-19. Future studies may focus on analysing this relationship in developed, emerging, and developing economies.

REFERENCES

- Afsar, R. (2014). Remittances and SME Development: Reflections from South Asia. In M. M. Rahman, T. T. Yong, & A. K. Ullah (Eds.), *Migrant Remittances in South Asia*, 135–157). London: International Political Economy Series (IPES), Palgrave Macmillan. https://doi.org/10.1057/9781137350800_7
- Amadasun, D. O., & Mutezo, A. T. (2022). Influence of Access to Finance on the Competitive Growth of SMEs in Lesotho. *Journal of Innovation and Entrepreneurship*, 11, Article 56. <https://doi.org/10.1186/s13731-022-00244-1>
- Baker, H. K., Kumar, S., & Rao, P. (2020). Financing Preferences and Practices of Indian SMEs. *Global Finance Journal*, 43, Article 100388. <https://doi.org/10.1016/j.gfj.2017.10.003>
- Bongomin, G. O., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2017). The Relationship between

- Access to Finance and Growth of SMEs in Developing Economies: Financial Literacy as a Moderator. *Review of International Business and Strategy*, 27(4), 520–538. <https://doi.org/10.1108/RIBS-04-2017-0037>
- Chowdhury, M., & Alam, Z. (2017). Factors Affecting Access to Finance of Small and Medium Enterprises (SMEs) of Bangladesh. *USV Annals of Economics and Public Administration*, 17(2/26), 55–68.
- Cowling, M., Liu, W., & Zhang, N. (2018). Did Firm Age, Experience, and Access to Finance Count? SME Performance after the Global Financial Crisis. *Journal of Evolutionary Economics*, 28, 77–100. <https://doi.org/10.1007/s00191-017-0502-z>
- Đalić, I., Terzić, S., & Novarić, B. (2017). The Role of Venture Capital in the Development of the SME Sector. *The European Journal of Applied Economics*, 14(2), 58–69. <https://doi.org/10.5937/ejae14-14391>
- Eniola, A. A. (2018). Entrepreneur-SME Manager Traits and Sources of Financing. In L. P. Dana, V. Ratten, & B. Honyenuga (Eds.), *African Entrepreneurship. Palgrave Studies of Entrepreneurship in Africa* (pp. 223–259). Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-73700-3_10
- Esho, E., & Verhoef, G. (2022). SME Funding-gap and Financing: A Comprehensive Literature Review. *International Journal of Globalisation and Small Business*, 13(2), 164–191. <https://doi.org/10.1504/IJGSB.2022.127226>
- Garwe, D. K., & Fatoki, O. (2012). The Impact of Gender on SME Characteristics and Access to Debt Finance in South Africa. *Development Southern Africa*, 29(3), 448–461. <https://doi.org/10.1080/0376835X.2012.706040>
- Greene, P. G., Brush, C. G., Hart, M. M., & Saporito, P. (2001). Patterns of Venture Capital Funding: Is Gender a Factor? *Venture Capital*, 3(1), 63–83. <https://doi.org/10.1080/13691060118175>
- Hall, G. C., Hutchinson, P. J., & Michaelas, N. (2004). Determinants of the Capital Structures of European SMEs. *Journal of Business Finance & Accounting*, 31(5–6), 711–728. <https://doi.org/10.1111/j.0306-686X.2004.00554.x>
- Karadag, H. (2017). The Impact of Industry, Firm Age and Education Level on Financial Management Performance in Small and Medium-sized Enterprises (SMEs), Evidence from Turkey. *Journal of Entrepreneurship in Emerging Economies*, 9(3), 300–314. <https://doi.org/10.1108/JEEE-09-2016-0037>
- Mayr, S., Mitter, C., Kücher, A., & Duller, C. (2021). Entrepreneur Characteristics and Differences in Reasons for Business Failure: Evidence from Bankrupt Austrian SMEs. *Journal of Small Business & Entrepreneurship*, 33(5), 539–558. <https://doi.org/10.1080/08276331.2020.1786647>
- Mcmahon, R. G. (2001). Growth and Performance of Manufacturing SMEs: The Influence of Financial Management Characteristics. *International Small Business Journal*, 19(3), 10–28. <https://doi.org/10.1177/0266242601193001>
- Mole, K., North, D., & Baldock, R. (2017). Which SMEs Seek External Support? Business Characteristics, Management Behaviour and External Influences in a Contingency Approach. *Environment and Planning C: Politics and Space*, 35(3), 476–499. <https://doi.org/10.1177/0263774X16665362>

- Na, H., & Eroglu, M. S. (2021). A Global Review of Female Entrepreneurial Finance. *International Journal of Globalisation and Small Business*, 12(1), 59–82. <https://doi.org/10.1504/IJGSB.2021.113880>
- Osano, H. M., & Languitane, H. (2016). Factors Influencing Access to Finance by SMEs in Mozambique: Case of SMEs in Maputo Central Business District. *Journal of Innovation and Entrepreneurship*, 5, Article 13. <https://doi.org/10.1186/s13731-016-0041-0>
- Paglia, J. K., & Harjoto, M. A. (2014). The Effects of Private Equity and Venture Capital on Sales and Employment Growth in Small and Medium-sized Businesses. *Journal of Banking & Finance*, 47, 177–197. <https://doi.org/10.1016/j.jbankfin.2014.06.023>
- Park, S., Lee, I. H., & Kim, J. E. (2020). Government Support and Small- and Medium-sized Enterprise (SME) Performance: The Moderating Effects of Diagnostic and Support Services. *Asian Business & Management*, 19, 213–238. <https://doi.org/10.1057/s41291-019-00061-7>
- Rahman, A., Rahman, M. T., & Belas, J. (2017). Determinants of SME Finance: Evidence from Three Central European Countries. *Review of Economic Perspectives*, 17(3), 263–285. <https://doi.org/10.1515/revecp-2017-0014>
- Rasheed, R., & Siddiqui, S. H. (2019). Attitude for inclusive finance: Influence of owner-managers' and firms' characteristics on SMEs Financial decision making. *Journal of Economic and Administrative Sciences*, 35(3), 158–171. <https://doi.org/10.1108/JEAS-05-2018-0057>
- Rossi, M., Lombardi, R., Siggia, D., & Oliva, N. (2016). The Impact of Corporate Characteristics on the Financial Decisions of Companies: Evidence on Funding Decisions by Italian SMEs. *Journal of Innovation and Entrepreneurship*, 5, Article 2. <https://doi.org/10.1186/s13731-015-0031-7>
- Vos, E., Yeh, A. J.-Y., Carter, S., & Tagg, S. (2007). The Happy Story of Small Business Financing. *Journal of Banking & Finance*, 31(9), 2648–2672. <https://doi.org/10.1016/j.jbankfin.2006.09.011>
- Watson, J. (2006). External Funding and Firm Growth: Comparing Female- and Male-controlled SMEs. *Venture Capital*, 8(1), 33–49. <https://doi.org/10.1080/13691060500433512>
- Yildirim, H. S., Akci, Y., & Eksi, I. H. (2013). The Effect of Firm Characteristics in Accessing Credit for SMEs. *Journal of Financial Services Marketing*, 18, 40–52. <https://doi.org/10.1057/fsm.2012.28>
- Zaridis, A. D., & Mousiolis, D. T. (2014). Entrepreneurship and SME's Organizational Structure. Elements of a Successful Business. *Procedia - Social and Behavioral Sciences*, 148, 463–467. <https://doi.org/10.1016/j.sbspro.2014.07.066>