

SME Lending: Do Lending Technologies Matter? Sample Evidence from Zimbabwe

Davis Nyangara *

This paper examines and tests the claim that bank lending technologies are responsible for the low volume of lending to SMEs in Zimbabwe. Based on a survey of directors of SMEs and bank lending officers, tests are conducted to determine if there is any evidence of discrimination against SMEs based on age, management, size, and information attributes. The study reveals that application of uniform lending criteria to SMEs and large corporates does not result in discrimination against SMEs based on age, size, management, or information attributes. Based on this evidence, the study submits that differences in SME lending between foreign and indigenous banks are due to factors other than their lending technologies. The study further provides rationale for collateral-based lending in the SMEs sector in Zimbabwe. The study however questions the static nature of lending technologies used by banks in Zimbabwe, in the wake of high nonperforming loans.

Field of Research: Banking

1. Introduction

Black empowerment and indigenization policies implemented by the Zimbabwean government since independence in 1980 have resulted in the sprouting of a number of SMEs across virtually all sectors of the economy. However, more than 20 years after adopting sweeping financial sector reforms at the instigation of the IMF and World Bank in the early 90s, lending to the small business sector remains miserably low.

This is despite government intervention through setting up of development finance institutions such as the Small Enterprise Development Corporation (SEDCO), Zimbabwe Development Bank (ZDB), and the Venture Capital Company of Zimbabwe (VCCZ). Commercial banks have also set up SME units to focus on the needs of SMEs and the Reserve Bank of Zimbabwe has availed concessionary facilities for SMEs in the past through FISCORP (Pvt) Ltd.

Whereas Chigumira and Masiyandima (2003) observe that the financial sector reforms, that involved the general decontrolling and deregulation of the Zimbabwean economy have had some positive effect on the level of financing for SMEs, SMEs continue to highlight inadequate funding as the major constraint to their growth. The contention is that commercial banks in Zimbabwe are not keen to finance SMEs, preferring to deal with large corporations which are ordinarily regarded as low risk, professionally-run

*Davis Nyangara, Department of Finance, National University of Science and Technology, Bulawayo, Zimbabwe. Email: dvsnyangara@gmail.com

Nyangara

and properly constituted legal entities. This becomes even more important under credit rationing conditions prevailing in Zimbabwe since the adoption of currency reforms in 2009.

Zimbabwe adopted a number of currencies as legal tender in February 2009, among them the US dollar, South African rand, Botswana pula, British pound, and the Euro. Having retired the Zimbabwean dollar as legal tender, the economy has faced serious liquidity challenges for the past four years due to loss of monetary autonomy, and this has resulted in stiff competition for limited loanable funds across all sectors of the economy. As a result, there is an outcry against commercial banks who are accused of seeking to reverse the gains of the country's indigenization and empowerment programmes by applying lending criteria that discriminate against SMEs. In the past, government had been at the forefront in supporting SMEs financially but it has, involuntarily, since taken a back seat, opting instead to use moral suasion to get private banks to fund SMEs. While some commercial banks have taken the initiative to establish strategic business units to support SMEs, the same lending criteria are applied to SMEs and large corporates.

The motivation of this study arises from the fact that, having failed to mobilize commercial banks to meaningfully support SMEs, the government of Zimbabwe is now pushing for the indigenization of foreign banks as part of an on-going indigenization drive. The contention has been that foreign banks are not willing to support small businesses in Zimbabwe, yet they account for a significant share of local deposits. The government is also pushing for the consolidation of banks by increasing minimum capital requirements to \$100 million, an amount most banks will obviously fail to raise, leading to involuntary consolidation. The government appears to be pursuing two policies that have, a priori, opposite effects on SME financing. Beck et al (2008) find that foreign banks are associated with less SME financing, thus indigenization would be expected to marginally improve SME lending. However, there is also a traditional body of literature that suggests that smaller banks are more likely to engage in SME lending than larger banks (e.g. Berger et al 1995, Keeton 1995, Berger & Udell 1996, Strahan & Weston 1996, Stein 2002, Berger & Udell 2002), implying that bank consolidation hurts SME lending. Thus, pursuing both the indigenization and consolidation policies may not yield the desired increase in SME financing. If it is shown that indigenization of foreign banks does not improve SME lending, then SME financing may decrease due to bank consolidation.

The question that begs an answer, therefore, is whether the indigenization of foreign banks results in a significant increase in SME lending. Before dollarization, local banks were responsible for credit analysis before recommending disbursement of funds under government-sponsored concessionary facilities, yet there was still an outcry over access to funding by SMEs. The extant literature documents that SMEs do not maintain reliable financial records, are not diversified, lack management depth, have poor corporate governance structures and lack concrete succession planning, and cannot provide acceptable collateral. Yet, despite all this, and especially based on their economic significance in terms of employment and contribution to a country's gross domestic

Nyangara

product (GDP), SMEs remain an irresistible bait for governments and multilateral finance institutions.

This paper contributes to the literature in three ways. Firstly, it provides empirical evidence on the contribution of lending technologies to the SME financing gap. In fact, very little documented research exists that directly tackles the issue of lending technologies and SME funding. Research focus has largely been on constraints to SME growth, impact of financial liberalization on SME financing, and the impact of SMEs on economic growth and poverty reduction. This is the first documented piece of research that examines the impact of lending technologies on SME funding in Zimbabwe. Secondly, it sheds light on the potential impact of financial sector reforms in Zimbabwe and Africa in general, particularly those reforms directed at improving finance to SMEs by placing the financial sector in local hands. Lastly, it points towards possible reasons why most SME lending is collateral-based, by demonstrating that bank lending processes accommodate SMEs despite the fact that they are known to be generally riskier than large firms.

This study departs from previous research in that it tests for SME discrimination based on SME attributes that have been documented in the extant literature as key factors that hinder access to finance. These include management quality, quality of financial information, size (and therefore bargaining power), and age (track record). Contrary to previous studies, the study finds that the application of uniform screening criteria to small and large firms does not discriminate against small firms, a result that dismisses the view that foreign banks shun SMEs. While the results of this study are limited by the small localized sample, it is hoped that they motivate further research into this subject, not only in Zimbabwe, but also in the rest of the continent. The study is quite significant in view of the on-going debate on the indigenization of foreign banks in Zimbabwe, partly premised on the allegation that their lending processes and practices are anti-SME. Any empirical evidence that affirms or refutes this allegation certainly contributes to an important debate that is likely to permanently transform Zimbabwe's financial landscape.

The rest of the paper is organized as follows: Section 2 provides a brief review of relevant literature; Section 3 gives an outline of the methodology; Section 4 presents the findings of the study; and Section 5 concludes the paper with policy recommendations and suggestions for further research.

2. Literature Review

The economic and social significance of SMEs cannot be overemphasized. While there is no clear-cut definition of what constitutes an SME, empirical literature documents that most countries define an SME as any business that employs less than 250 people, where any business employing less than 100 is small, and between 100 and 250 is medium (Beck et al 2003). The new definition adopted by the European Commission however uses 10, 50, and 250 as thresholds for defining micro, small, and medium enterprises by head-count respectively (European Commission 2003). A micro enterprise employs less than 10 employees, a small enterprise employs between 10 and 50, and a

Nyangara

medium enterprise employs between 50 and 250. However, the definition as per European Commission also incorporates turnover thresholds in addition to head-count.

Data collected by Ayyagari et al (2007) for 76 developed and developing countries shows that SMEs employ about 60% of people working in the manufacturing sector. In Zimbabwe, SMEs contribute more than 50% of GDP and are responsible for the livelihood of about 80% of the population (Reserve Bank of Zimbabwe 2007). The general view around the world is that supporting the growth of SMEs, especially in developing economies, contributes immensely to poverty reduction. As a result, the international community channels a large and growing amount of aid into subsidizing SMEs. However, most empirical studies question the efficacy of this pro-SME policy (Beck et al 2003). Beck et al (2003) also find no evidence that SMEs reduce poverty. Nevertheless, policy-makers are less likely to accept this kind of empirical evidence due to the political sensitivities involved. We are likely to see more attention being given to SMEs in the road to the Millennium Development Goals (MDGs), and moreso given the efforts world-wide to economically empower women.

While several studies have shown that SMEs consider access to and the cost of finance as greater obstacles to growth for smaller compared to larger firms (Schiffer & Weder 2001, IADB 2004, Beck et al 2005), the question on whether lending technologies are responsible for these differences has received limited attention in the literature (e.g. De la Torre et al 2008, 2009, Beck et al 2008, 2009, Berger & Udell 2005, D'Auria et al 2007, Cole 1998, Slotty 2009).

Until quite recently, most studies had argued that small banks are more likely to engage in SMEs financing because they are better suited to use relationship lending (e.g. Berger et al 1995, Keeton 1995, Berger & Udell 1996, Strahan & Weston 1996, Stein 2002, Berger & Udell 2002, Berger et al 2005). Relationship lending is a lending technology that relies on soft information collected by a loan officer as a result of continuous, personalized, and direct contacts with SMEs, their owners and managers, and the local community in which they operate, to mitigate information asymmetry problems. However, there is some recent evidence that questions this traditional view (e.g. Berger & Udell 2006, Berger et al 2007, De la Torre et al 2008), suggesting instead that larger banks can have a comparative advantage at financing SMEs through transactional lending technologies (e.g. asset-based lending, factoring, leasing, fixed-asset lending, credit scoring, etc.) instead of relationship lending. Ryo et al (2011) however argue that transactional lending technology should be used to complement relationship lending rather than merely for cost-saving.

Therefore, while there is evidence in support of the view that strong relationships between firms and banks increase access to long-term capital (see D'Auria et al 2007, Cole 1998, Slotty 2009), other recent studies show that lending technologies do not exert a significant impact on the level of financing to SMEs (Beck et al 2008, 2009, Berger & Udell 2005). The latter view accommodates the involvement of different banks, using different lending technologies, in supporting SMEs.

Nyangara

Related to the issue of lending technologies and bank size, is the question of ownership type. There is empirical evidence that foreign banks are more likely to use transactional lending technology (for example credit scoring) than local banks (Beck et al 2008). Beck et al (2008) therefore associate foreign ownership with less SME funding, although they conclude that the effect is not significant. On the contrary, Berger and Udell (2005) argue that foreign ownership boosts SME lending due to better lending technologies, noting that some of the transactional lending technologies are well-adapted to lending to opaque SMEs. They further contend that there is no reason to believe that a large number of small banks will deliver more support to SMEs than a few large banks; that is they support bank consolidation initiatives in developing countries.

The evidence on lending technologies so far is still tentative and inconclusive. There is no consensus in the literature on the best lending technology for SME lending, nor is there an appropriate bank size or bank ownership type that would boost SME funding in developing countries. In view thereof, this study attempts to narrow this knowledge gap by generating more evidence that sheds more light on the threat posed by the existence of large foreign-owned banks to the growth of SME financing in developing countries.

3. Methodology

The paper is based on a survey of directors of 24 SMEs and 30 bank lending officers from 6 major commercial banks in Bulawayo metropolitan province, Zimbabwe. SMEs included in the study were randomly selected so that both borrowing and non-borrowing groups were represented. Structured questionnaires were administered to the SMEs sample and personal interviews were conducted with the bank lending officers. In some cases, panel interviews were preferred in order to get a richer understanding of lending processes and practices in the banks.

Questionnaires focused on getting data on the size, age, management, and information attributes of SMEs, along with their success or failure in accessing bank credit. In following with the literature, the size of the workforce was used as a proxy for firm size. The age of a business was taken as the time the business has been in operation, while management attributes were measured by the experience of the management team and the frequency of management meetings. The availability of audited or unaudited financial statements was used to measure the information attributes of the business. SMEs were also asked to provide information on whether banks asked for collateral when lending to them.

Interviews were conducted with bank officials to ascertain the range of lending technologies in use in different banks. Having established that almost all commercial banks in Zimbabwe use the CAMPARI (a mnemonic for Character, Ability, Margin, Purpose, Repayment, and Insurance) model for evaluating loan applications by both SMEs and large corporates, the study therefore focuses on whether application of the CAMPARI model discriminates against SMEs.

Nyangara

The hypotheses of the study are stated as follows:

H₀: The CAMPARI model discriminates against SMEs

H₁: The CAMPARI model does not discriminate against SMEs

The null hypothesis (H₀) is taken to represent the view that transactional lending technologies are not well-suited for lending to SMEs. If H₀ is not rejected by the data, then it is concluded that lending technology is not responsible for the low support to SMEs, suggesting that there are other factors responsible for low levels of financing to SMEs. Based on the review of literature however, bank size and ownership type have a negligible impact on SME financing.

To operationalize the testing of H₀, the study tests for association between firm size, age, management quality, and information attributes and the success or failure of a loan application. Using data from the SME sample, the Pearson Chi-Square test is used to test for associations between the four business attributes and the success/failure in obtaining funding by SMEs studied within a binary framework. The T-Test is also used to determine the most significant problems faced by SMEs based on the sample data.

4. Findings

4.1 Findings on SME Attributes

It emerged from the survey that a slight majority (54%) of respondents had a board of directors, about 70% of them having less than four directors. This result is not surprising as most SMEs are family-owned and therefore the usual directors are husband and wife, brothers, sisters or parents and children. The directors are usually the shareholders of the company. The spread of directorship is therefore expected to be consistent with the spread of ownership such that the fewer the number of directors, the more concentrated the ownership structure. The question of ownership and management concentration is a key source of succession and management risk within the CAMPARI Model framework.

The experience of management in SMEs is correlated to the age of the business (assuming the managers started the business). It emerged from the study that 92% of businesses surveyed had been operating for more than 5 years and 50% had been operating for more than 10 years. This indicates that the management of SMEs is quite experienced and this would be expected to strengthen their management rating, which is the single largest component of the CAMPARI risk rating framework. Therefore, whilst SMEs management may have average education, the experience effect would tend to compensate for the lack of educational depth. Management considerations would then not be expected to prejudice SMEs under the CAMPARI framework.

The study revealed a relative balance in the proportions of SMEs that have audited financials and those that do not. The assertion that SMEs are not able to submit proper financials due to poor record keeping and accounting practices (Cook and Nixon, 2000) would at face value seem to be refuted by the findings of this research. Evidence from

Nyangara

interviews with bank officials indicated that the growth of relationship banking in the Zimbabwean market has resulted in relationship managers acting as consultants for SMEs, advising them on the importance of proper record-keeping and accounting practices. This view is further supported by the finding that only 20% of the respondents who failed to access funding from their banks cited lack of financial information as a reason for their failure. Consistent with literature on information asymmetry, the study shows that banks rely heavily on collateral for SMEs lending, with 80% of unsuccessful applicants indicating failure due to lack of collateral. This is further confirmed by the findings from the survey of bank officials, which indicated that between 76% and 100% of SMEs advances are collateral-backed.

The study also revealed that about 92% of the SMEs surveyed employed less than 50 employees, with 40% employing less than 10 employees. Smaller businesses (size assumed to be measured by size of workforce) are generally regarded as possessing relatively less bargaining power relative to both buyers and suppliers. This therefore puts them at a competitive disadvantage in terms of pricing and terms in cases where they have a relative concentration towards larger customers and suppliers. Smaller SMEs therefore would be expected to be rated lowly on competitive and concentration risk aspects under the CAMPARI risk rating framework. The expectation would therefore be that there is an association between size and the success/failure of a loan application.

T-Tests performed on the sample data on SMEs confirmed that access to financing was one of the major challenges facing SMEs in Zimbabwe alongside government policy inconsistencies and input shortages. In addition, 75% of respondents did not have alternative sources of finance and relied heavily on bank funding. This means that without bank funding these SMEs either fold or remain small.

4.2 Hypothesis Testing

One-sample Chi-Square Tests were performed at the 5% significance level to determine whether there is an association between a particular SME attribute and the success/failure of a loan application. Table 1 below shows results of Chi-Square tests for association between information attributes of SMEs and the success/failure of a loan application.

Table 1: Chi-Square Test for Application failure/information attributes.

Crosstab

			Q14		Total
			Yes	No	
Q23	Yes	Count	4	2	6
		Expected Count	3.4	2.6	6.0
	No	Count	8	7	15
		Expected Count	8.6	6.4	15.0
Total	Count		12	9	21
	Expected Count		12.0	9.0	21.0

Nyangara

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.311 ^b	1	.577		
Continuity Correction ^a	.005	1	.944		
Likelihood Ratio	.316	1	.574		
Fisher's Exact Test				.659	.477
Linear-by-Linear Association	.296	1	.586		
N of Valid Cases	21				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.57.

From Table 1 above, we observe that since the Pearson Chi-Square p-value (0.577) is greater than 0.05 at the 5% level of significance, it can be concluded that the failure of a loan application is independent of the information attributes of the SME.

Table 2 below shows results of Chi-Square tests for the association between firm size and the success/failure of a loan application.

Table 2: Chi-Square Test for Application failure/size attributes

Crosstab

			8. How many people are employed by your company?				Total
			Less than 10 employees	Between 11 - 20 employees	Between 21 - 50 employees	Over 100 employees	
23. Have you ever been refused or denied to borrow money from Bank?	Yes	Count	4	2	0	0	6
		Expected Count	2.5	.8	2.3	.5	6.0
	No	Count	6	1	9	2	18
		Expected Count	7.5	2.3	6.8	1.5	18.0
Total		Count	10	3	9	2	24
		Expected Count	10.0	3.0	9.0	2.0	24.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.644 ^a	3	.054
Likelihood Ratio	9.713	3	.021
Linear-by-Linear Association	3.918	1	.048
N of Valid Cases	24		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .50.

Since the Pearson Chi-Square p-value (0.054) is greater than 0.05 at the 5% level of significance, it can be concluded that the refusal of a loan application by an SME is independent of the size attributes of the SME.

Nyangara

Start-up businesses are generally perceived as high credit risks largely to inexperienced management, lack of customer and supplier goodwill, limited bargaining power, as well as poor internal risk controls. Table 3 below shows the results of Chi-Square tests performed at the 5% level of significance to ascertain the existence of association between firm age and the success/failure of a loan application.

Table 3: Chi-Square Test for Application failure/age

Crosstab

			4. How long have you been in operation?				Total
			Less than 5 years	Between 5 & 10 years	Between 11 & 15 years	Over 15 years	
23. Have you ever been refused or denied to borrow money from Bank?	Yes	Count	1	2	3	0	6
		Expected Count	.5	2.0	2.8	.8	6.0
	No	Count	1	6	8	3	18
		Expected Count	1.5	6.0	8.3	2.3	18.0
Total		Count	2	8	11	3	24
		Expected Count	2.0	8.0	11.0	3.0	24.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.697 ^a	3	.638
Likelihood Ratio	2.331	3	.507
Linear-by-Linear Association	1.002	1	.317
N of Valid Cases	24		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .50.

Since the Pearson Chi-Square p-value (0.638) is greater than 0.05 at the 5% level of significance, it can be concluded that the failure of a loan application by an SME is independent of the age of the SME. These results are further used to infer that the CAMPARI model does not discriminate SMEs based on management experience in managing a small business. To further test the latter, Chi-Square tests are performed for association between the frequency of management meetings and success/failure of a loan application. The results are presented in Table 4 below.

Nyangara

Table 4: Chi-Square Test for Application failure/management attributes.

Crosstab

			9. How of ten does your company hold management meetings?			Total
			Occasionally	Weekly	Irregular	
23. Have you ever been refused or denied to borrow money from Bank?	Yes	Count	5	1	0	6
		Expected Count	4.5	1.0	.5	6.0
	No	Count	13	3	2	18
		Expected Count	13.5	3.0	1.5	18.0
Total	Count	18	4	2	24	
	Expected Count	18.0	4.0	2.0	24.0	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.741 ^a	2	.690
Likelihood Ratio	1.223	2	.543
Linear-by-Linear Association	.548	1	.459
N of Valid Cases	24		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .50.

Since the Pearson Chi-Square p-value (0.690) is greater than 0.05 at the 5% level of significance, it can be concluded again that the refusal of a loan application by an SME is independent of the management attributes of the SME.

5. Conclusion, Recommendations, and Areas for Further Research

Consistent with De la Torre et al (2008), this study concludes that the claim that large foreign banks employ screening tools that exclude SMEs is misplaced. Instead, the low support to SMEs by banks in Zimbabwe is not explained by the lending technologies used by the banks, but by lack of collateral by SMEs to support their borrowings. The popular lending model in Zimbabwe is a mixed model that combines both soft and hard information in credit analysis and approval. This also confirms the assertion by Ryo et al (2011) that transactional lending technology complements relationship lending.

Over-reliance on relationship lending, as appears to have been the case soon after dollarization in 2009, results in over-lending to underserving clients. Currency reforms have restructured the Zimbabwean economy in ways that make previous portfolio 'stars' today's portfolio 'dogs', and banks have paid the price via high non-performing loans. While relationship lending is argued to be well-suited for SME lending due to the paucity of information problem, this study argues that, if not complemented by a dynamic transactional lending technology, relationship lending may fail to deliver the desired credit outcome.

Nyangara

The question on whether indigenization of foreign banks will improve lending to SMEs remains largely unanswered and needing further research. However, thin bank capitalization, weak contract enforcement, and an uncertain political outlook appear to be important factors requiring urgent attention in Zimbabwe. In view thereof, the study concludes in favour of mixed lending technologies, bank consolidation, and enhancement of the legal and regulatory framework in order to expand the range of acceptable securities for advances, and reduce the cost of perfecting and realizing security. Despite the evidence suggesting that smaller banks are more likely to engage in SME lending than larger banks, this study recommends bank consolidation on the basis that the small indigenous banks currently operating in Zimbabwe lack loan underwriting capacity due to thin capitalization. Due to the small, localized sample used in this study, the results of this study need to be interpreted cautiously. Further research utilizing a national sample will provide more insightful evidence. More research is also encouraged on how bank organizational culture affects lending to SMEs, and how market power due to bank consolidation affects the volume and cost of credit to SMEs.

References

- Ayyagari, M, Beck, T & Demirgüç-Kunt, A 2007, 'Small and Medium Enterprises across the Globe', *Small Business Economics*, vol. 29, pp. 415-434.
- Beck, T, Demirgüç-Kunt, A & Levine, R 2003, 'Small and Medium Enterprises, Growth, and Poverty: Cross-Country Evidence', *World Bank Policy Research Working Paper* 3178
- Beck, T, Demirgüç-Kunt, A & Maksimovic, V 2005, 'Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?' *Journal of Finance*, vol. 60, pp.137-177.
- Beck, T, Demirgüç-Kunt, A & Pería, MSM 2008, 'Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices', *World Bank Policy Research Working Paper* 4785
- Beck, T, Demirgüç-Kunt, A & Pería, MSM 2009, 'Bank Financing for SMEs: Evidence across Countries and Bank-Ownership Types', *European Banking Centre Discussion Paper No. 2009-20*, Available from: <http://ssrn.com/abstract=1471331>
- Berger, AN & Udell, GF 1996, 'Universal Banking and the Future of Small Business Lending', in Saunders, A, Walter I., (Eds.), *Financial System Design: The Case for Universal Banking*, Irwin (Richard D), Burr Ridge, IL, pp. 559-627.
- Berger, AN & Udell, GF 2002, 'Small Business Credit Availability and Relationship Lending: The Importance of Bank Organizational Structure', *Economic Journal*, vol. 112, pp. F32-F53.
- Berger, AN & Udell, GF 2006, 'A More Complete Conceptual Framework for SME Finance', *Journal of Banking and Finance*, vol. 30, pp. 2945-2966.
- Berger, AN & Udell, GF 2005, 'A More Complete Conceptual Framework for Financing of Small and Medium Enterprises', *World Bank Policy Research Working Paper* 3795.
- Berger, AN, Kayshap, AK & Scalise, JM 1995, 'The Transformation of the U.S. Banking Industry: What a Long Strange Trip It's Been', *Brookings Papers on Economic Activity*, vol. 2, pp. 155-219.
- Berger, AN, Rosen, RJ & Udell GF 2007, 'Does Market Size Structure Affect Competition? The Case of Small Business Lending', *Journal of Banking and Finance*, vol. 31, pp. 11-33.

Nyangara

- Berger, AN, Miller, H, Peterson, MA, Rajan, RG & Stein, J 2005, 'Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks', *Journal of Financial Economics*, vol. 76, pp. 237-269.
- Chigumira, G & Masiyandima, N 2003, 'Did Financial Sector Reform Result in Increased Savings and Lending to SMEs and the Poor?' International Labour Office, Geneva, Switzerland.
- Cole, RA 1998, 'The Importance of Relationships to the Availability of Credit', *Journal of Banking and Finance* vol. 22, pp. 959-977.
- Cook, P & Nixon, F 2000, 'Finance and Small and Medium-Sized Enterprise Development', *Finance and Development Research Programme Working Paper No. 14*, Institute for Development Policy and Management, University of Manchester, Manchester.
- D'Auria, C, Foglia, A & Reedtz, PM 2007, 'Bank Interest Rates and Credit Relationships in Italy', *Journal of Banking and Finance*, vol. 23, pp. 1067-1093.
- De la Torre, A, Pería, MSM & Schmukler, SL 2008, 'Bank Involvement with SMEs: Beyond Relationship Lending', World Bank, Mimeo.
- De La Torre, A, Pería, MSM & Schmukler, SL 2009, 'Drivers and obstacles to Banking SMEs: The Role of Competition and the Institutional Framework', *CESifo Working Paper No. 2651*.
- European Commission 2003, 'Definition of Micro, Small, and Medium Enterprises Adopted by the Commission', Commission Recommendation 2003/361/EC, *Official Journal of the European Union* L 124, pp. 36-40
- IADB 2004, *Unlocking Credit: The Quest for Deep and Stable Lending*, The Johns Hopkins University Press.
- Keeton, W 1995, 'Multi-Office Bank Lending to Small Businesses: Some New Evidence', Federal Reserve Bank of Kansas City, *Economic Review*, vol. 80, pp. 45-57.
- Reserve Bank of Zimbabwe 2007, *Rural Banking, Financial Inclusion, and Empowerment of Small to Medium Enterprises*, Available from: http://www.rbz.co.zw/pdfs/2007%20rural/cover_contents.pdf
- Ryo, H, Hideaki, H & Arito, O 2011, 'Differentiated Use of Small Business Credit Scoring by Relationship Lenders and Transactional Lenders: Evidence from firm-bank matched data in Japan', *The Research Institute of Economy, Trade and Industry Discussion Paper Series* 11-E-070.
- Schiffer, M & Weder, B 2001, 'Firm Size and the Business Environment: Worldwide Survey Results', *International Finance Corporation Discussion Paper* 43.
- Slotty, CF 2009, 'Does relationship lending promote growth? Savings banks and SME financing', Available from: <http://ssrn.com/abstract=1376251>
- Stein, JC 2002, 'Information production and Capital Allocation: Decentralized versus Hierarchical Firms', *Journal of Finance*, vol. 57, pp. 1891-1921.
- Strahan, PE & Weston, J 1996, 'Small Business Lending and Bank Consolidation: Is There Cause for Concern?' *Current Issues in Economics and Finance*, Federal Reserve Bank of New York, vol. 2, pp. 1-6.