SME Financing in Africa: Collateral Lending vs Cash Flow Lending

Ben Amoako-Adu¹ & Joseph P. Eshun²

¹ Lazaridis School of Business and Economics, Wilfrid Laurier University, Canada

² Department of Business Management, East Stroudsburg University, USA

Correspondence: Ben Amoako-Adu, Economical Insurance Professor of Finance, Lazaridis School of Business and Economics, Wilfrid Laurier University, Waterloo, Ontario, N2L 3C5 Canada. E-mail: bamoako@wlu.ca

Received: March 27, 2018	Accepted: May 13, 2018	Online Published: May 15, 2018
doi:10.5539/ijef.v10n6p151	URL: https://doi.org/10.5539/ijef.v10)n6p151

Abstract

It is argued that economic growth in Africa will be enhanced by the expansion of small and medium-sized enterprises (SMEs) but these businesses face financing constraints which tend to hinder their business success. Starting from a discussion of the various sources of financing for SMEs in Africa, it is established that the most effective and cheapest source of capital for the SMEs is debt financing from banking and other microfinance institutions because of lender monitoring and the tax-deductibility of the interest expense. However, collateral requirement which tends to be a major significant factor for mitigating the credit risk of the SMEs presents a problem to lending institutions because of market illiquidity, legal, administrative, and valuation difficulties. SMEs tend to be owned by low income entrepreneurs and families who normally do not have tangible, valuable and liquid collaterals, and even when collaterals are offered, it is a challenge to determine their market value. Often these problems result in the rejection of SME loan applications. As a solution to this problem, the paper introduces a concept of cash flow lending as a better alternative to the traditional asset-backed lending. While asset-backed or collateral lending emphasizes loan default and recovery from collaterals, cash flow lending is based on projected corporate positive cash flows, the required return of equity, equity valuation of the business, and finally, on the risk-sharing principle between the lender and borrower. For the loan application to be approved, the requested loan and all existing debts of the SME should be less than the equity value of the company as estimated from the free cash flow model.

Keywords: SME financing, Africa, collateral, equity, cash flow lending

1. Introduction

Economic growth is generally enhanced by expansion in the private sector (Hubbard & Duggan, 2007). In Africa, like most economies around world, the private sector is dominated by small and medium-sized enterprises (SMEs). According to economic development practitioners and researchers, in Africa, the private sector accounts for 90% of employment, two-thirds of investment, and 70% of economic output (African Development Bank, 2013, p. 34). In addition to their importance in the private sector, a significant proportion of SMEs also operate in the 'informal economy' which refers to an economic activity that is conducted by unregistered firms or by registered firms but hidden from taxation (Castells & Portes, 1989, p. 12). Such informal economic activity is typically depicted by either illicit practices (products or processes) or illicit exchanges (Venkatesh, 2006). The informal economy plays a significant role in Africa (Bruton, Ireland, & Ketchen, 2012; Godfrey, 2011; Khavul, Bruton, & Wood, 2009) by providing self-employment to the rural and less educated workers. For example, in some rural areas, barter systems typify informal economic institutions (Nel & Binns, 2000). The implication is that the informal economy is extensive in scale and scope. This indicates that keeping financial records in developing economies presents a difficult problem to both the government and bankers when it comes to gathering financial information for corporate tax payment and credit rik analysis.

The policy implications are obvious: Africa's economic growth can be significantly enhanced and accelerated by enabling policies and interventions aimed at supporting or incentivizing the growth and expansion of SMEs. This is important considering the finding by McKinsey Global Institute (2016) that there are no African companies in the Fortune 500 but Africa needs more large companies to power growth and provide skilled jobs. For the private sector to generate sustainable growth, SMEs need to raise enough long term capital to invest in fixed assets and employ workers to produce goods and services. A recent World Bank study reported in Beck and Cull (2014),

found that the biggest constraints facing SMEs in sub-Saharan African countries are access to financing and its attendant problem of high borrowing interest rate.

In an OECD study, summarized in 2004/2005 African Outlook, Kauffmann (2005) shows that SMEs flourish in South Africa, Mauritius, and North Africa because of the enabling economic policies of the governments, whereas in the oil and natural resource countries, such as Democratic Republic of Congo, Equatorial Guinea, Gabon, and Chad, SMEs perform poorly because the governments pay more attention to competing extractive industries. Lending policies which remove some of the financing constraints will help grow the SMEs to become larger companies and help create more professional and skilled jobs. As shown in Kaufmann (2014), except for some North African countries and South Africa, in most African countries the proportion of loans given to the private sector is less than 20% of GDP. Thus, bank loans normally go to finance government and parastatal companies instead of the private sector and SMEs.

The objective of the research is to develop a free cash flow valuation model which can be used to value the equity base of the company upon which the lender can grant the loan without asking for a collateral. The lending institution will then establish the corporate policy as to what proportion of the equity base can be given as a loan. This cash flow lending model can be used as a substitute for the traditional asset-based lending which usually requires a collateral. The collaterals tend to be illiquid, difficult to value, and administratively and legally too complex to seize and liquidate. For good lending practices, cash flow lending should be combined with site visit, periodic monitoring, past re-payment records, and good corporate governance information. Though the absence of traditional collateral requirement makes such loans unsecured, the valuation of the market value of the business can be considered as a form of collateral and, hence, the cash flow lending model can also be considered as secured loan financing method.

The rest of the paper is organized as follows. Section 2 discusses the scope of the problems facing SMEs in Africa. In Section 3, we discuss the alternative sources of financing for SMEs and start-up businesses in Africa. Collateral requirement and credit risk analysis, together with the weaknesses of such asset-based lending practices are discussed in Section 4. Cash flow lending as an alternative to the asset-backed or collateral lending to SMEs, and the equity valuation model are also discussed in Section 5. The application of equity valuation process and numerical illustration of the model are shown in Section 6, and finally, Section 7 presents the conclusions of the paper.

2. Scope of SME Problems

One major problem associated with the discussion of policy issues with SME is the establishment of the exact definition of SME. As discussed extensively in Abor and Quartey (2010), Ayyagari et al. (2007), and Beck et al. (2011), the definition of SME is not uniform and may be country and industry specific. The definition is at times tied to the size of SME, the number of employees, the size of the loan, or the type of industry. Despite the difficulty with the definition of SME, the businesses tend to have bigger credit risk, little equity, managerial difficulties and limited access to capital. In a 16 East African country study reported in Calice et al. (2012), the lending banks indicate that since small businesses are more unstable, harder to value, and much more informal, higher collateral requirements are needed for a business loan. As shown in Appendixes B, the most significant risk factors when evaluating SME for a loan are the difficulty with which the loan default can be evaluated and how informal the business is. In Ghana, a study by Kadri et al. (2013) indicates that rural banks consider collateral security as the most important factor in granting loans to small scale farm businesses.

The above discussion indicates that SMEs in Africa extensively need bank and microfinance loans to grow their business. However, collateral requirements are a hindrance in getting their loans approved. The relevance of SMEs in the economic development and growth of African GDP is highlighted in the employment figures in Nigeria, South Africa, and East African countries, Kaufman (2005), Calice et al. (2012), Beck and Cull (2014), and Mena (2016). In addition to the problems associated with collateral requirements, the macroeconomic conditions in most of the countries also inhibit rapid economic growth in the private sector by compounding the credit risk in the country as well as increasing the risk premium of the equity rate of return needed as a discount rate in the equity valuation model described below. First, the supply of power and electricity tend to be sporadic and unreliable. Businesses have to curtail their production and operations because of the shortage of power supply. Second, the rate of inflation as well as bank base interest rates for loans tend to be very high. There are cases where the annual base borrowing interest rate is about 25%. Since the expected rate of inflation should be fully reflected in nominal interest rate, if the Central bank fails to control the rate of inflation in the country, the borrowing interest rate cannot be lowered. Third, the water supply can also be unreliable as it can be cut off for days, and at times weeks. Since water is necessary for both domestic and industrial consumption, interruptions in

basic water supply can militate against the smooth running of business. Fourth and finally, both highways and city roads can be in disrepair and that makes the transportation of goods and movement of people from place to place inefficient. All the above mentioned macroeconomic or infrastructural problems, together with the continuous depreciation of the local currency, tend to make the running of business in Africa difficult. Of course, these conditions which affect the credit risk of SMEs vary from country to country. The aforementioned factors present insurmountable problems to credit risk analysis and make business forecasting very difficult.

The theoretical and empirical implications of private sector growth is as follows. First, by contextualizing Africa's economic growth and development changes, and diagnosing the prevalence and persistence of institutional voids, and proposing a new model of lending, namely, a cash-flow lending as opposed to the traditional collateral-backed lending, we demonstrate how institutional models may present financially reengineered solutions and culturally-compatible interventions to revolutionize traditional lending practices in Africa's banking and financial institutions in general. Second, and theoretically, we demonstrate how Africa's economic growth and development challenges may be systematically addressed with the identification of institutional voids—defined as the non-existence of institutions that undergird markets, the non-availability of specialized markets, and absence of contract-enforcing mechanisms (Khanna & Palepu, 2013).

3. Sources of Financing for SMEs in Africa

The major sources of financing SME growth and capital expenditure, can be categorised in two – equity and debt financing. The sources of equity financing include personal savings, family equity, business retained earnings, and sweat equity which is the owner's human effort that was put into the company, especially at the start-up period. Debt financing on the other hand, includes short as well as long-term loans from friends, relatives, and negotiated bank and micro financing loans. African SMEs may not be big enough to go public and raise additional equity capital through initial public offering (IPO). Neither do they have strong credit rating to raise debt capital from the capital markets by issuing bonds and selling them to investors. This means the sources of capital for SMEs in Africa are either the entrepreneurs own equity or savings, the family sources of equity, the retained earnings of the business, if profitable, and borrowed money from the banking and microfinance institutions. These sources of financing are illustrated in Table 1. In addition to the domestic equity or debt financing from diaspora relatives or friends. Also, some businesses may get supplementary capital in the form of NGO grant or government subsidy to help grow some businesses deemed important to the country. Some banks value the sweat equity generated by the owner's labour and effort at the start-up period and add it to the business equity in determining the overall equity base for a loan or leverage.

A. Equity Financing	B. Debt Financing	
1. Personal and Family Savings	1. Personal Loans	
2. Business Retained Earnings	2. Bank and Microfinance Loans (Short or Long Term)	
3. Sweat Equity (Mostly Start-ups)	3. Family and Friend Loans	
C. Government or NGO Grants, and Diaspora Transfers can also provide supplementary sources of financing. Such		
supplementary funding can take the form of free grant, equity, or a loan.		

Table 1. Sources of capital for SMEs in Africa

Apart from these sources of financing, there may also be investor financing available to medium-sized or large corporations. Such investor based financing include capital from the Venture Capital firms, Angel Investors, and Private Equity. Unfortunately, these investors generally are interested in larger financing requirements which may exceed the financing capacity of African SMEs. Also, at times, they demand ownership position in the firms when they invest their capital. Recently, crowdfunding has developed in advanced countries and may be tried as a platform for raising capital in Africa. The limitation is that crowdfunding is not strictly a source of equity or debt financing. It is just an electronic platform for pledging financing for a company or a start-up and participants may ask for information about the company before pledging their funding capital through the crowdfunding or electronic platform.

On average, the annual income of Africans, as indicated in the 2016 GDP per capita list shown in Table 2 is very low. It ranges from a high of \$38,699 for Equatorial Guinea to a low of \$656 for Central African Republic. The data show that in Liberia, Burundi, Democratic Republic of Congo, and Central African Republic the average income per person is around \$2 a day. The implication is that, on average, income levels are very low in some African countries so accumulating savings and equity capital to finance their business can be a challenge.

Table 2. Per cap	oita GDP for	· African c	ountries as	of 2015	(PPP)
------------------	--------------	-------------	-------------	---------	-------

Highest Per capita Income Countries		Per capita GDP		
1.	Equatorial Guinea	\$38,699		
2.	Seychelles	\$28,148		
3.	Mauritius	\$20,525		
4.	South Africa	\$13,139		
Mid Per capita Income Counties				
1.	Ghana	\$4,381		
2.	Zambia	\$3,899		
3.	Kenya	\$3,360		
4.	Chad	\$2,580		
Lowest Per Capita Income Countries				
1.	Liberia	\$882		
2.	Burundi	\$818		
3.	Democratic Republic of Congo	\$785		
4.	Central African Republic	\$656		

Source: IMF, 2016. PPP means purchasing power parity data.

4. Bank Loan and Collateral Requirements

For a couple of reasons, bank loans are the commonly available and convenient source of capital for SMEs in Africa. First, debt financing is the cheapest specific source of capital because the tax-deductibility of interest implies that the government shares the interest expense with the borrower. This makes the cost of debt financing significantly lower than the cost of equity financing which reflects the higher business risk of SMEs. Second, as shown in Table 2, the income per capita in Africa is very low and entrepreneurs tend to be poor so savings are negligible and, hence, personal equity is not easily available for SMEs. Corporate retained earnings which are internal sources of equity also may not exist because SMEs are generally not very profitable. Even if retained earnings are available, their specific cost is the high cost of equity capital.

Though it is true that interest rates on business loans are very high and, hence, loan repayment presents a problem to the borrowers, the cost of debt financing theoretically is lower than the cost of equity financing when the tax-deductibility of interest is taken into consideration. Generally, the high borrowing interest rate is due to the fact that expected rate of inflation is very high since nominal interest rate should reflect inflation expectations in the country, if real rate of interest is expected to be positive. Since equity financing from the stock market is not readily available in many African countries, SMEs have no choice but to resort to bank and microfinance loans to finance their working capital requirements as well as their capital expenditure.

Because of the high credit risk of the micro-businesses and SMEs, the banks and other lending institutions tend to ask for collateral as an underlying asset to back the loan. In a study of bank financing for SMEs in East Africa, Calice et al. (2012) report that 94% of their sample indicates that the lending banks tend to demand collateral as a requirement in granting loans to SMEs. They also discuss that 50% of the lending institutions tend to have problems with the definition and registration of the collateral. Also, because of the bigger credit risk of smaller companies, the lending institutions demand higher value collateral than required from larger companies when granting loans to the SMEs. Convincingly, Calice et al. (2012) show, through a survey graph, that SMEs are more unstable and informal and their businesses are harder to evaluate so lenders tend to ask for a higher value collateral compared to what they demand from larger companies.

Before suggesting an alternative cash flow lending criterion compared to the traditional asset or collateral based lending policy, the issues which arise with collateral requirements will be discussed. Collateral generally tends to be physical assets of land or a house. In these cases, valuation is necessary but the valuation process or procedures are not reliable in Africa. There could also be administrative and legal nightmare in getting the assets registered and verified in terms of ownership and documentation of the ownership with the government administrative office. In African countries where documentation is limited, it is very difficult to verify whether the tangible assets pledged as a collateral are legitimately owned by the borrower. Since collateral is pledged as a backing asset if there should be a default, it might be too late if the collateral cannot be sold to recover the remaining loan. Another serious problem with the marketability of the collateral asset is lack of liquidity. In case default occurs, will the lending institution be able to sell the tangible asset to recover the unpaid loan? There is genuine doubt if liquidity exits in the secondary market for such collaterals in Africa.

With the many issues associated with the traditional use of collateral to back SME loans, is there an alternative backing for business loans which will lower the credit risk that lending institutions face? One method is cash flow lending where the approval of the loan depends on the equity valuation of the SME, as illustrated by the present value of the projected free cash flows of equity of the firm. The free cash flows of equity can be used to estimate the equity value of the business and then the proposed loan and other outstanding debts can be weighed against the value of the SME equity value.

The major reason behind the estimation of the market value of the business equity as a decision criterion for accepting the loan application is that the lending institution is expected to share the risk of the business with the owner of the business. The bank or the lender is not expected to bear all the risk of the business so that if the business should fail then the owner walks away without bearing any cost. Also, the risk sharing principle imposes a sense of discipline on the borrower for the business to be well managed to help repay the loan.

5. Cash Flow Lending as Alternative to Collateral (Asset-Backed) Lending

Asset-backed lending is the case where the lender requires collateral as a backing for the loan so that in case of default, the lender can sell the collateral to recover the principal loan outstanding. As a contrast, cash flow lending is a case where the approval of the loan application is determined on the basis of the strength of the projected cash flows and equity value of the firm. The equity value is based on the discounted value of the projected cash flows of the firm. The projection period can be broken into two stages. The first stage can be for three years for technology firms which are subject to rapid changes in business innovation, or five years for more stable industries, like retail and manufacturing, to cover the period of the valley of death (Oshawa & Miyazaka, 2006). It is during the valley of death period that many start-up businesses fail. The second period will then continue from the end of the first period to infinity since a business is assumed to be a going concern. The second stage of the valuation exercise shown as the second term often called terminal value will be estimated, assuming a conservative constant growth rate for the cash flows. The common practice is to use the long term real growth rate of the economy. The first and second stage values are then added up to give the total equity value of the borrowing firm. Finally, for approval, the proposed loan and all other outstanding debts should be smaller than the estimated value of the equity of the company. Since a bank is supposed to protect depositors and shareholders money always, all the assumptions underlying the projected cash flows should be conservative to minimize the risk of cash flow projections, and subsequently, over valuation of the equity.

To help with the projection of the cash flows and credit risk analysis, the borrower needs to provide the financial institution with some historical financial statements. Though these statements may be unaudited, it will be preferable if they are prepared by informed accounting workers. The credit officer of the financial institution would then take the financial data provided and rework it to suit what the bank needs for the equity valuation. The accounting information needed here is not different from what is usually requested by the bank when the traditional asset-backed lending is considered. For the cash flow method of lending to be sustainable, both the credit officers of the financial institutions and the SME borrowers have to be educated in collecting and analyzing relevant data. In forecasting the cash flows, the growth rates used have to be reasonable when compared to the rate at which the applicable industry has been growing.

6. Business Equity Valuation Process: The Model

The business valuation process requires historical financial statements and some scientific underlying assumptions which will help forecast the free equity cash flows of the business for reasonable periods combined with the estimation of the required return on equity as the appropriate discount rate to use to covert the cash flows to equity value. Below is the specification of the valuation model with the definition of the variables. To be consistent with the corporate valuation literature, we use the notation from Pinto et al. (2010). The annual free cash flow of equity, having made allocation for capital expenditure and net working capital is expressed as

$$FCFE = NI + NCC - CCAPEX - CWC + Net Borrowing$$
(1)

Where FCFE = Annual free cash flow of equity, NI = Net Income, NCC = Non-cash charges, like depreciation and amortization, CCAPEX = Change in long term capital expenditure, CWC = Change in net working capital, and Net borrowing = (Annual debt issue - Debt repayment). It should be noted that:

$$Annual NI = (EBIT - Interest expense - corporate taxes)$$
(2)

EBIT is the earnings before interest and corporate taxes. The interest expense includes the annual interest on the loan being applied for. It should be noted that the free cash flow of equity in equation (1) is not the traditional income statement which nets allowable accounting expenses against revenues for the year. FCFE in equation (1) adjusts annual net income to add back non-cash expenses and then deducts allocations for capital expenditure

(CAPEX) and net working capital (WC), and if some additional net capital is raised it is added to the FCFE.

For the equity valuation process, we need to estimate the appropriate discount rate which is the cost of equity capital, k, which for simplicity, shall be assumed to be equal to the corporate borrowing rate plus a reasonable equity premium of 3%. Thus, if the borrowing rate is 22% then the cost of equity capital, k = 22% + 3% = 25%. Note that the equity risk premium is arbitrarily set at 3% just for this illustration, but if necessary, the lending institution can academically establish a suitable equity risk premium for the SME which applies for the loan. Formally, the cost of equity capital or the required return for equity can be stated as:

$$k = company$$
's borrowing rate + (company's equity risk premium) (3)

In this case, the appropriate discount rate to use for the equity valuation is the cost of equity capital because interest expense has been deducted from the EBIT to arrive at the net income. An alternative measure for the cost of equity capital could be the security market line of the CAPM which reflects the riskfree interest rate, the market equity risk premium, and the beta risk of the firm. However, it will not be easy to estimate the market risk premium and the beta of a small unlisted business so the security market line of the CAPM will not be helpful. Also, it will be wrong to discount the free cash flows of equity with the weighted average cost of capital (WACC) because the cost of debt is deducted before arriving at the net income (NI) and the free cash flows of equity. Also, the use of WACC implies that the debt/equity ratio is assumed to be constant at the optimal level, and this might not be true in the case of SMEs.

With the cost of equity or the discount rate, k, estimated, the total equity value of the business, can be specified as

$$Equity \ Value = \sum_{t=1}^{n} \frac{FCFE_t}{(1+k)^t} + \frac{FCFE_n \ (1+g)}{(k-g) \ (1+k)^n}$$
(4)

Where, as defined earlier, FCFE is the annual equity free cash flow of the firm, k is the cost of equity capital, and g is the annual growth rate of the equity free cash flows.

6.1 Numerical Example

Let's assume that the following information has been gathered prior to the determination of the size of the loan and whether the loan application should be approved or not. Because of the higher credit risk of SMEs in Africa, the lending institution has to adopt a conservative approach to the projection of the cash flows and the cost of equity capital.

Assumptions: EBIT = 1500, NCC = 150, CCAPEX = 90, CWC = 75, g = 5%, Net borrowing = 0, k = 25%, loan interest rate = 22%, the first period estimation period = 3 years. It is assumed that NI remains constant for the first 3 years, and the subsequent free cash flows of equity will grow at the real growth rate of the economy (GDP), that is g = 5%. The proposed loan is \$1800, and the small business corporate tax rate = 15%. With these assumptions, the annual free cash flow of equity (FCFE) is 923, conservatively assumed constant for the first three years.

The present value of the free cash flows of the company's equity value is:

$$Equity \ Value = \frac{923 \times [1 - 1/(1.25)^3]}{0.25} + \frac{923(1.05) \times (1/1.25)^3}{(0.25 - 0.05)} = 923(1.952) + 4846(0.512) = \$4283$$
(5)

Thus, the proposed loan of \$1800, if it is the only loan outstanding and is less than the estimated business equity value of \$4283, the loan could be approved if other relevant information which can impinge on the credit risk of the business is acceptable to the lending institution. The capital structure or debt/equity ratio of the company is \$1800/\$4283 or 0.42, if the company has no other debt outstanding.

The relevant information which should be taken into consideration to supplement the valuation decision may include business site visit, age of the business, the managerial expertise of the owner, the stability of the industry, and prior repayment track record of the borrower. Such additional information requires that a process of due diligence has to be conducted to make sure that all relevant information is accurately and sufficiently collected.

It should be noted that the free cash flows of equity method is not the only valuation model which can be used to value the equity base of the business. Other valuation models, such as the free cash flow of the firm, and the residual income approach can also be used to value the total company or equity of the firm. The appropriateness of the valuation model used depends on the availability of the relevant information. With good training, the credit officer can work with the borrower to generate the needed information for the financial projections, equity valuation, and the additional credit risk analysis.

7. Summary and Conclusions

It is well known in the economics literature that economic growth depends on the performance and depth of small and medium-sized businesses. This implies that macroeconomic growth depends on corporate profitability and the growth in the private sector. In Africa, because personal incomes are generally low and equity capital is very limited, SMEs tend to rely on bank and microfinance loans to grow their business. Also, SMEs use bank and microfinance loans to finance their growth because the interest on the loan is tax-deductible and, hence, debt is cheaper than equity financing despite the high borrowing interest rates.

Unfortunately, because of national political and economic instability, continuous depreciation of the local currency, and other macroeconomic problems, credit risk of SMEs tend to be very high. The high borrowing rate charged by lenders reflects the persistent high inflation rate and other credit risk factors of SMEs, such as high risk of business failure. To mitigate the high credit risk of the borrower, the lending institutions tend to ask for collateral to back the loans. In the absence of acceptable collateral, the loans are normally denied. The major problems with the collateral requirement are that they are illiquid, there is lack of reliable ownership information, the valuation of the physical collateral asset is also a challenge in an economy with limited secondary market for used assets, and the legal and administrative huddles tend to be too frustrating to facilitate the seizure and sale of the assets if there is default. Because of lack of liquidity in the secondary market for collaterals, the lending institution may be saddled with seized assets which they cannot sell at a reasonable price to recover the remaining principal of the loan. Since the lending institution is not in the core business of seizing collaterals and selling them, a more convenient lending practice is suggested.

This research develops an alternative method for mitigating the credit risk of SMEs. We design a free equity cash flow lending model as an alternative method to reduce the credit risk of the borrower. Instead of relying on the asset-backed lending practice typified by collateral requirement, the free cash flow of equity is estimated with projected cash flows and the required return or cost of equity. What the lending institution needs to do is to estimate the equity base of the borrowing company, using free cash flow of equity or any appropriate valuation method and compare the estimated equity with the proposed loan and all existing debts. Finally, the lending institution accepts the loan if it is less than the estimated equity base of the SME, after taking all outstanding loans into consideration. However, this accept criterion should be supplemented with valid and reliable information on business ownership, previous loan re-payment track record, other credit risk consideration, and a site visit. While the collateral or asset-backed lending procedure depends on the projected free cash flows and estimated equity base of the SME. The granting of the loan should be followed with periodic monitoring by the lender's credit officers to make sure that realized financial cash flows come out as predicted in the free cash flow estimation.

The implications of this research are obvious: In order for Africa to meet the Millennium Development Goals (MDGs) as well as sustain recent developmental trends and standards, Africa's SMEs must put the highest priority on economic growth and development. Hence, it is important for African governments, and lending institutions to expand their loan facilities to SMEs by replacing the collateral lending practice with the free cash flow of equity lending model.

Acknowledgements

This paper was presented at the 8th Africa Business and Entrepreneurship Conference held at the Virginia Commonwealth University in Richmond, Virginia, USA in October, 2017. We would like to thank our MBA student, Martin Ofori-Atta, for his research assistantship, Dr. James Tabi of the African Development Bank, and Sam Sarpong, the CEO of Ghana Commercial Bank, for their feedback.

References

- Abor, J., & Biekpe, N. (2007). Small Business Reliance on Bank Financing in Ghana. *Emerging Market Finance and Trade*, 43(4), 93-102. https://doi.org/10.2753/REE1540-496X430405
- Abor, J., & Quartey, P. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39, 218-228.
- African Development Bank. (2013). Annual Report. Abidjan, Côte d'Ivoire: African Development Bank Group.RetrievedJanuary18,2016fromhttp://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Annual_Report_2013.pdf
- Alicia, R. A., & Valerio, B. P. (Eds.). (2014). Entrepreneurship Education and Training: Insights from Ghana, Kenya, and Mozambique. A World Bank Study.

- Ayyagari, M., Beck, T., & Demirguc, A. (2007). Small and Medium Enterprises across the Globe. *Small Business Economics*, 29(4), 415-434. https://doi.org/10.1007/s11187-006-9002-5
- Beck, T., & Cull, R. (2014). *SME Finance in Africa, Policy Research Working Paper 7018*. World Bank Group, Development Research Group.
- Beck, T., Demirguc, A., & Peria, M. S. M. (2011). Bank Financing for SMEs: Evidence across Countries and Bank Ownership Types. *Journal of Financial Services*, 39, 35-54. https://doi.org/10.1007/s10693-010-0085-4
- Bruton, G. D., Ireland, R. D., & Ketchen, D. J. (2012). Toward a research agenda on the informal economy. *Academy of Management Perspectives*, 26, 1-11. https://doi.org/10.5465/amp.2012.0079
- Calice, P., Chando, V. M., & Sekiou, S. (2012). Financing to Small and Medium Enterprises in East Africa: Findings of a Survey in Kenya, Tanzania, Uganda, and Zambia. *African Development Bank Group Working Paper Series No. 146.*
- Caouette, J. B., Altman, E. I., & Narayanan, P. (1998). *Managing Credit Risk: The Next Great Financial Challenge*. John Wiley and Sons.
- Castells, M., & Portes, A. (1989). World underneath: The origins, dynamics, and effects of the informal economy. In A. Portes, M. Castells, & L. A. Benton (Eds.), *The informal economy: Studies in advanced and less advanced developed countries*. Baltimore: Johns Hopkins University Press.
- De Mel, S., McKenzie, D., & Woodruff, C. (2009). Measuring Microenterprise Profits: Must We Ask How the Sausage is made? *Journal of Development Economics*, 88, 19-31. https://doi.org/10.1016/j.jdeveco.2008.01.007
- Denis, D. J. (2004). Entrepreneurial finance: An overview of the issues and evidence. *Journal of Corporate Finance*, 10, 301-326. https://doi.org/10.1016/S0929-1199(03)00059-2
- Gallardo, J. (2002). A Framework for Regulatory Microfinance Institutions: The Experience in Ghana and the Philippines. *Policy Research Working Paper 2755*, the World Bank.
- Godfrey, P. C. (2011). Toward a theory of the informal economy. *Academy of Management Annals*, 5, 231-277. https://doi.org/10.1080/19416520.2011.585818
- Hubbard, G., & Duggan, W. (2007). Why Africa needs a marshall plan. *Financial Times*. Retrieved from https://www.ft.com/content/aaf5ef7a-12c3-11dc-a475-000b5df10621
- Jütting, J., & Laiglesia, J. R. (2009). Employment, poverty reduction and development: What's new? In J. P. Jütting & J. R. Laiglesia (Eds.), *Is informal normal? Towards more and better jobs in developing countries*. Paris: OECD. https://doi.org/10.1787/9789264059245-3-en
- Kadri, A. Y., Bunyaminu, A., & Bashiru, S. (2013). Assessing Rural Banks Effectiveness in Ghana. International Business Research, 6(3), 140-153. https://doi.org/10.5539/ibr.v6n3p140
- Kauffmann, C. (2005). Financing SMEs in Africa, Policy Insight No. 7. OECD Development Centre. https://doi.org/10.1787/021052635664
- Khanna, T., & Palepu, K. (2013). *Winning in emerging markets: A road map for strategy and execution*. Boston, MA: Harvard Business Press.
- Khavul, S., Bruton, G. D., & Wood, E. (2009). Informal family business in Africa. *Entrepreneurship Theory* and Practice, 33, 1219-1238. https://doi.org/10.1111/j.1540-6520.2009.00342.x
- Ledgerwood, J., Earnie, J., & Nelson, C. (Eds.) (2013). The New Microfinance Handbook: A Financial Market System Perspective. Washington D.C.: The World Bank. https://doi.org/10.1596/978-0-8213-8927-0
- McKinsey Global Institute. (2016). Lions on the Move II: Realizing the Potential of Africa's Economies.
- MENA. (2016). What's Holding Back the Private Sector in MENA? Lessons from the Enterprise Survey. European Bank for Reconstruction and Development. European Investment Bank, and the International Bank for Reconstruction and Development/The World Bank.
- Osawa, Y., & Miyazaka, K. (2006). An Empirical Analysis of the Valley of Death. *Asian Journal of Technology Innovations*. https://doi.org/10.1080/19761597.2006.9668620
- Pinto, J. E., Henry, E., Robinson, T. R., & Stowe, J. D. (2010). Equity Asset Valuation (2nd ed.). Wiley.
- Rao, P. K. (2003). Development Finance. Springer. https://doi.org/10.1007/978-3-662-06570-9

- Regional Economic Outlook. (April 2016). Sub-Saharan Africa: Time for a Policy Reset. *IMF World Economic and Financial Surveys*.
- Renooy, P., Ivarsson, S., Wusten-Gritsai, O. V. D., & Meijer, R. (2004). Undecleared work in an Enlarged Union: An analysis of shadow work - in-depth study of specific items. Brussels: European Commission.
- Schneider, F., & Enste, D. H. (2000). Shadow economies: sizes, causes and consequences. *Journal of Economic Literature*, *38*, 77. https://doi.org/10.1257/jel.38.1.77
- Venkatesh, S. (2006). *Off the books: the underground economy of the urban poor*. Cambridge, MA: Harvard University Press.
- Williams, C. C., & Round, J. (2008). Retheorizing the nature of informal employment: Some lessons from Ukraine. *International Sociology*, 23(3), 367-388. https://doi.org/10.1177/0268580908088896

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).