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PRIVATE COST OF CAPITAL AND INCREMENTAL BUSINESS VALUE OF MID-MARKET FIRMS

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ABSTRACT

This study examined the implications of private cost of capital on the incremental business value (IBV) of middle market firms in Nigeria. Specifically, three costs were identified as follows: private cost of debt (PCD), private cost of equity (PCE), and overall private cost of capital (PCOC). The purpose was to investigate the extent to which private cost of capital, which is calculated differently from weighted average cost of capital for large enterprises, could contribute to incremental business value of middle market (mid-market) firms. Two panel data regression models were specified with one dependent variable (incremental business value). The first model has private cost of equity and private cost of debt as independent variables, while the second has private cost of capital as the independent variable. The panel comprised 10 middle market enterprises registered as members of the Nigerian Association of Stock Dealers (NASD).

Middle market enterprises are operators in the private sector whose total assets (excluding land and building) are above one hundred and fifty thousand USD but not more than one million five hundred thousand USD. The study adopted the fixed effect model as the best linear estimator after a model validation with the aid of the Hausman test. We found that private cost of debt, private cost of equity, and overall private cost of capital have negative and significant effects on the incremental business value of middle market firms. We concluded that incremental business value is more elastic to changes in private cost of equity than private cost of debt, and that this is as a result of two phenomena: firstly, higher explicit private cost of equity than debt, and secondly, greater proportion of private equity than private debt in the capital structure of middle market firms in Nigeria.

Keywords: Private cost of capital, private cost of equity, private cost of debt, incremental business value, capital market, middle markets, financial dualism, and capital access point.

JEL Classification: G30

INTRODUCTION

A very disturbing phenomenon in the financial sector of less developed countries is the concept of financial dualism. Myint (1985) broadly described it as the coexistence of the formal and informal players in a nation's financial markets. This phenomenon has policy implications for both macroeconomic management and private enterprise development. For the former, it calls for normative consideration in monetary and fiscal policies. For the latter, it touches on financial decisions of enterprises relating to investing, financing, liquidity, dividend and valuation. Incidentally, the same less developed nations with dualistic money, capital and foreign exchange markets also show very weak institutional structures toward doing away with financial dualism.

In Nigeria, formal and informal financial markets are patronised, respectively, by the bifurcated private sector operators: large and small. We have carefully excluded micro enterprises because this work

focuses on enterprises with capacity for substantial value creation and transcendental growth. In spite of the lofty argument for financial sector liberalisation and the avoidance of market distortions, there is sufficient literature to support enterprise development interventions by government and multilateral agencies through the provision of soft loans, common facilities, technical supports, etc. (IPRC-OECD, 2011). Indeed, these interventions are neither easily nor frequently accessible as desired. (Dagogo, 2006; Dagogo & Ohaka, 2015). When supplied through the government media, it is further muddled with other economic phenomena like adverse selection and hoarding.

Generally, the rates of interest and foreign exchange in the formal markets are less than the rates in the informal markets. Besides, transactions in the formal markets are far less risky than those in the informal market place. Large enterprises are active players in the formal markets where prices are low. They can also drag prices even lower because of their sheer size and associated economies of scale. Again, in the event of government intervention, large enterprises have the social and political networks needed to access such windows at rates lower than the market offer. In the process, they become instruments of “crowding out” the intervention incentives meant for private enterprise development to the disadvantage of small enterprises.

Meanwhile, small enterprises have difficulties competing with the large enterprises in the market for capital where the highest bidder takes all. When they turn to the government for intervention, they meet insurmountable bottlenecks which they are unable to confront. They may then be left with two options: first is private capital, if their business models are quite attractive for those classes of investors. Second is informal financial market where funds are available at usurious rates. Very frequently, the second option is the *devil's alternative* and the bitter pill small enterprises have to swallow.

While it is somewhat easy to articulate the financial decisions of large and small firms along the path of established theories and implicit behaviours in a bifurcated sense (Myers & Majluf, 1984; Leach & Melicher, 2012), it does not appear too easy to establish or contemplate precisely what these decisions might be for the middle player of a trifurcated private enterprise sector. It will seem at first that medium enterprises will share in the features of both large and

small enterprises discussed above. However, this paper assumes ab initio that the contextual circumstances for enterprises (also known as middle market enterprises) will be different, and this will influence their financial decisions differently.

The distinctiveness of middle market enterprises has led to a wide spread acceptance of middle market finance theory, a calculated departure from the mainstream finance theory that takes account of the peculiarities of the middle market enterprises on the one hand, and away from the drudgery of the micro and small-sized firms on the other hand. The need for an isolated treatment of middle market firms arises not only from their transient position but also from the expeditious nature of their financing, investing, dividend, liquidity and valuation decisions. Thus, they constitute an indispensable linkage in the enterprise development continuum, with an implicit perception of failure where this transition does not occur within a reasonable period. (Dagogo & Ohaka, 2015). In addition, they differ from small-sized firms in terms of relative contribution to GDP, capacity for bootstrapping, management efficiency, corporate governance, tangibility of assets, informational asymmetry, agency costs, etc. With reference to financing decisions, these differences explain the reason for an adjusted cost of capital model applicable to mid-market firms. (Slee, 2011).

Key questions arising from the background and justifications above are presented here to give the required thought directions:

- a. Is there any significant effect of private cost of capital on the IBV of middle market enterprises?
- b. Is there any significant difference in the effects of private cost of debt and private cost of equity on the IBV of middle market enterprises?

LITERATURE REVIEW

This section reviews existing literature in the following sequence: a review of cost of capital, a justification of the use of incremental business value, and an empirical relevance of mid-market finance theory.

Cost of Capital

The concept of cost of capital is one source of difference between accounting and economic profits. For instance, accounting profit only recognises cost of debt as interest charges without recourse to the associated implicit costs. Generally, an investor's cost of capital is the minimum required rate of return on his investment (Vernimmen, Quiry, Dalocchio, LeFur, & Salvi, 2014; Pouraghajan et al, 2012). Put succinctly, an investee's cost of capital is an investor's return. It therefore implies that investees would seek to minimise their cost of capital by carefully selecting the most efficient mix of capital structure (referring to an optimal combination of debt and equity), whereas investors would carefully choose a portfolio of asset classes (bond, public equity, private debt, private equity) that minimises their regrets or risks while maximising their returns, always ensuring that their risks are adequately priced as reasonable return. As Dagogo and Imegi (2017) described it, every mention of capital structure has a corresponding mention of its implications for overall cost of capital or the weighted average cost of capital (WACC). Albeit, there are competing views about the reality of creating value only by altering the ratio of debt-to-equity in a manner that reduces WACC. Barring any dissenting views and letting the traditional view to prevail, an investee's ability to create incremental business value is enhanced by reducing WACC (Casseli & Negri, 2018).

Capitalisation of private firm of the mid-market range may attract mezzanine, venture capital, securitisation, bank lending, leveraged buyout, management buyout (or buy-in), and other private debt or equity investments. Markets for these alternative assets are less efficient than markets for public equity or bond investments because there are fewer organised markets for investors, and therefore deals are usually on an 'ad hoc' basis, and fundraising is transacted on a deal-by-deal basis. (Dagogo & Imegi, 2017; Slee 2011) Eventually, the financial costs attracted by mid-market firms reflect the perceived riskiness of their investment projects measured by the project's propensity to generate expected cash flow, and perceived financial risk measured by the degree of financial leverage or their sensitivity to credit and liquidity risks. Therefore, to determine the private cost of capital, we consider a risk-free rate plus a risk premium, which does not only cover operating and financial risks but also includes

a premium for inefficient market, asset intangibility, asymmetric information, and the likes. In other words, risks are priced by capital type, capital access point, and investee type, so that the models of cost of capital based on public equities and bonds such as the capital asset pricing model (CAPM) and dividend growth model are unsuitable for determining the cost of capital in mid-market firms. (Slee, 2011). For example, after-tax cost of debt is generally given as:

$$(rf + \textit{credit spread})x(1 - \textit{tax rate}) \quad (1)$$

Where rf equals risk-free rate. This measure is helpful in understanding the overall rate paid by a firm for a given type of debt capital. The measure can also give investors an idea of the firm's risk level compared to others because riskier firms generally have higher cost of debt (Van Binsbergen, Graham & Yang, 2010).

Meanwhile, cost of equity represents a firm's hurdle rate, marginal rate of efficiency of capital invested or the internal rate of return. It is often used as the capital budgeting threshold for required return. A firm's cost of equity represents the compensation the market demands in exchange for owning the asset and bearing the risk of ownership. CAPM seems to be more suitable for a wider spectrum of firms (including non-dividend paying firms) than the dividend growth model. That said, the theory behind CAPM is more complex, as it is based on an equity stock's volatility and the level of individual stock's risk exposure relative to the market risk. It is given as:

$$K_e = rf + \beta(m - rf) \quad (2)$$

Where K_e equals cost of equity capital, rf equals risk-free rate or the rate of return paid on risk-free investments such as treasury bills, and β equals the beta or measure of risk calculated as a regression on the firms' stock price. The higher the volatility, the higher the beta and relative risk. And m equals market rate of return (McLaney, 2009; Vernimmen et al., 2014). Since the central theme of this study is on external financing, retained earnings are assumed away and not discussed in this literature. Besides, the effect of retained earnings on lowering the overall cost of capital is not in doubt. Unfortunately, the resulting overall cost of capital (k_o) formulated with large enterprises return data cannot be applied to derive the private cost of capital. Slee (2011) recommends a private discount rate model to determine

the rate of return required by private capital investors. It is of the following form:

$$PCOC = \sum_{i=1}^N [(CAP_i + SCAP_i) \times \frac{MV_i}{\sum_{i=1}^N MV_i}] \quad (3)$$

Where: N equals number of sources of capital; CAP_i equals median expected return for capital type i ; $SCAP_i$ equals specific CAP risk adjustment for capital type i ; while MV_i equals market value of outstanding securities. The process of determining PCOC involves four steps. First is to determine the appropriate capital types; second is to determine the market value of each capital type; third is to apply a specific capital type (SCAP) risk adjustment to the selected median capital type; and fourth is to calculate the percentage of capital structure for each capital access point and add the individual percentages to derive PCOC. Accordingly, the difference between WACC and PCOC lies in the manner of risk weighting. While the overall cost of capital for public firms is risk-weighted in the known broad classifications such as debt (k_d), preference, (k_p), ordinary equity (k_e) and retained earnings (k_r), PCOC accounts for risk properties of each specific capital type within the debt and equity classifications.

Incremental Business Value

Incremental business value (IBV) is the result of generating a return in excess of the corresponding cost of capital. Recently, IBV has become the most preferred value metric because it applies economic definition of value rather than accounting book value. Secondly, it is dynamic, applicable for continuous value determination processes, and is multi-purposed such as for appraising whole entity, strategic business units, product lines, specific projects or employees. It is also useful for capital allocation decisions and in measuring the efficiency of capital employed. For private firms, the expected cash flow is discounted by a rate derived upon the use of private cost of capital model given in Equation 3. It is given thus:

$$IBV = \text{Recast EBITDA} - (\text{Investment} \times \text{private cost of capital}) \quad (4)$$

Where IBV is incremental business value; and EBITDA is earnings before interest, tax depreciation and amortisation, which is adjusted for owners' discretionary expenses and one-time enterprise expenses.

For investment, the relevant figure is the greater of the total amount of capital investment or the financial market value. A positive IBV reflects shareholders' value accretion and a negative IBV indicates depletion. While Drucker (1998) alluded that IBV is the genuine economic profit that arises from generating revenue beyond the corresponding economic cost, Miller and Modigliani (1958; 1963) found it as the key indicator of the required rate of market return, which is sufficient to compensate for risk and economic income. It was this understanding that laid the foundation for discounted cash flow methodology, and the use of net present value (NPV). Another metric that became more acceptable in the industry than NPV is economic value added (EVA), patented by Stern Stewart & Co. The difference between IBV and EVA lies in the nature of expected cash flow to be discounted. In EVA the expected cash flow is the same as operating profit, whereas in IBV it is EBITDA (Slee, 2011; Copeland et al., 1996; and Kanabali & Kashinath, 2015).

Garcio and Aguilera (2014) made a novel departure in the process of identifying and measuring value by redefining the taxonomy of value creation and appropriation. They proposed incremental value creation and appropriation, which in their view, attended to the difficulty in estimating customers and suppliers value-added. They assumed that the sum of value created should not always be equal to the sum of value appropriated, leading to a zero-sum game at all times. In other words, their position is that value creation and appropriation could be positive, negative or zero sum. Also, their research notes asserted that value is not necessarily created by fund providers alone but by multiple stakeholders. To that extent, they classified previously used accounting measures of value as too absolute. While we acknowledge the wider scope and application of coverage of incremental value, as noted above, this work is concerned only with private capital elasticities of incremental business value.

Middle Market Finance Theory

Middle market finance theory finds a dividing line between small and medium enterprises finance theories on the one hand, and between medium and large enterprises on the other hand. In doing so, the middle market finance theory identifies a triadic integration of valuation, capitalisation and transfer of ownership interests that explains capital market decisions of medium-sized firms. Slee (2011) argues that

valuation forms the base of the interconnection, and maintains a balance with the other two components, without which much of it will be done in isolation from the market and will amount to vanity. Absence of this balance will be a source of disequilibrium in the case of private securities that do not have access to the active trading market. They must rely on point-in-time appraisal or discrete rather than continuous pricing and value determination.

Next, capitalisation rests on valuation to enable private capital markets price and allocate capital, given their risk-return sensitivity. Although every round of capitalization requires pre- and post-money valuation, the inefficiency of the private capital markets, arising from informational asymmetry, distorts the valuation results. (Leleux, Swaay & Megally, 2015). Finally, transfer of ownership interest relies on capitalisation and valuation. It takes different forms and involves parties from within and without the firm. The shortcomings of the earlier pillars inhibit the ease of transfers of ownership of private firms. Lack of liquidity hinders diversification, which increases the riskiness of private transfer markets. It is the coherent importance of all three concepts at any given time in exhibiting the same weakness of mid-market firms that inspired the thinking of constituting the mid-market finance theory.

METHODOLOGY

Ex-post facto research design was adopted since the research relied on historical data generated from annual reports of mid-market enterprises. Besides, because of our limited ability to subject the study environment to an acceptable degree of control and our normative processes in the inclusion of independent variables, the study fits the quasi-experimental research design. The population consists of all enterprises in Nigeria whose total assets (excluding land and building) are above one hundred and fifty thousand USD but not exceeding one million five hundred thousand USD and with a total workforce above fifty employees but not exceeding one hundred and ninety-nine employees (SMEDAN, 2013). A sample of ten such enterprises listed under the Nigerian Association of Stock Dealers (NASD), an over-the-counter securities market, was selected not without the following considerations: maintenance of balanced panel, ease of data collection, reliability of data, and completeness of requisite data. (CSCS, 2018).

Ten years data were collected covering 2009 to 2018 from a cross section of the sample. It may seem at first that the time series data for ten years were insufficient, nevertheless, the study remains robust on account of the cross sectional data, which sufficiently compensated for the limited time series, leaving us with a panel dataset of 100 data points.

We employed a two-stage analytical process. The first stage examined the panel regression models, showing two alternate models: fixed effect and random effect models. The second stage tested for serial autocorrelation to show if there is a serial relationship between a variable in time t and the same variable in time $t - 1$. Two models were formulated with IBV as dependent variables in each case: cost of debt (represented by the one most important source of debt capital in the firms' capital structure) and cost of equity (represented by one most important source of equity in the firms' capital structure) as independent variables for one model; and PCOC, as an independent variable for the other model. It is the proxy for overall cost of capital for private firms. The first model examined the individual effects of each source of capital for the mid-market firm while the second looked at the global effect. Both models were isolated to avoid multicollinearity. The model follows the classical linear regression equation of the following form:

$$IBV = \beta_0 + \beta_1 PCE + \beta_2 PCD + \mu_i \quad (4)$$

$$IBV = \beta_0 + \beta_1 PCOC + \mu_i \quad (5)$$

Where IBV equals incremental business value, calculated for each enterprise as defined in equation 3; PCD equals private cost of debt; PCE equals private cost of equity; PCOC equals private cost of capital; b_0 equals constant term; $b_1 - b_2$ equal coefficients of predictors; and μ_i equals error term or stochastic variable representing the uncontrolled country-specific factors such as demand volatility, business cycle, labour market, etc. (Pourghajan et al., 2012).

Two panel regression models were specified in line with fixed and random effects estimation procedures, respectively (See results presented in Table 2).

Fixed Effect

This focuses on whether there are differences by using a fixed intercept for each of the different cross-sectional structures, as the difference may be due to special features of each mid-market firm. It is given thus:

$$IBV_{it} = \beta_1 + \beta_2 D_{2i} + \beta_3 D_{3i} + \beta_4 D_{4i} + \beta_5 D_{5i} + \dots + \beta_{10} D_{10i} + \beta_{11} PCE_{it} + \beta_{12} PCD_{it} + \mu_{it} \quad (6)$$

$$IBV_{it} = \beta_1 + \beta_2 D_{2i} + \beta_3 D_{3i} + \beta_4 D_{4i} + \beta_5 D_{5i} + \dots + \beta_{10} D_{10i} + \beta_{11} PCOC_{it} + \mu_{it} \quad (7)$$

Because the fixed effects account for both cross-sectional and time-series data, the increased covariance caused by individual-firm differences is eliminated, thereby increasing its estimation-result efficiency. In this case, b_1 equals intercept value of firm 1; $b_2 - b_{10}$ represent the differences of the other firms from firm 1, measured by their differences of their coefficients; $D_{2i} - D_{10i}$ represent 9 dummy variables representing 9 firms; $b_{11} - b_{12}$ equal coefficients of predictors; and μ equals error term or stochastic variable representing other variables that are merely explained away. $i = 1, 2, \dots, 10$ mid-market firms; and $t = 1, 2, \dots, 10$ years.

Random Effects

This focuses on the relationship with the study sample as a whole, thus the samples are randomly selected, as opposed to using the entire population. The total sample regression function of the random effect can be expressed as:

$$IBV_{it} = \beta_0 + \beta_1 PCE_{it} + \beta_2 PCD_{it} + w_{it} \quad (8)$$

$$IBV_{it} = \beta_0 + \beta_1 PCOC_{it} + w_{it} \quad (9)$$

If this is represented with random variables, then $\beta_{0i} = \beta_0 + \epsilon_i$, which indicates that the difference occurs randomly, and the expected value of β_{0i} is β_0 , and $w_{it} = \epsilon_{it} + \mu_{it}$ that is, the error term w_{it} is a sum of two parts: ϵ_{it} is the combined time series and cross-section

error component, and μ_{it} is the cross-section or firm-specific error component.

Hausman Test

This is the most commonly used method for evaluating fixed and random effects. It shows whether sectional unit differences are fixed or random. It has an asymptotic chi-square distribution with degrees of freedom equal to the number of independent variables. If the variables are significantly correlated, then the fixed effects estimation is consistent and efficient, and should be adopted. On the other hand, if the variables are not significantly correlated, then the random effects estimation is consistent and efficient, and should be adopted. (Gujurati, Porter & Gunasakar, 2013).

Serial autocorrelation was also conducted to test the existence of serial relationship between one variable in time t and the same variable in time $t - 1$. The result shows no serial correlation amongst the variables.

Table 1

Breush-Godfrey Serial Correlation LM Test

Model 1	F-statistic	3.181682	Prob. F(2,105)	0.0041
	Obs*R-squared	0.379355	Prob. Chi-Square (2)	0.8272
Model 2	F-statistic	0.196212	Prob. F(2,106)	0.8221
	Obs*R-squared	0.405730	Prob. Chi-Square(2)	0.8164

DATA ANALYSIS AND RESULTS

The following tables explain the dynamic relationship between the dependent and independent variables. First is the analysis of Hausman test. The null hypothesis states that the fixed effect does not have a better model fit than random effect. Here, null hypothesis was rejected, implying that the fixed effect model does have a better model fit than the random effect model. The above result now leaves us with the analysis of fixed effect model alone.

Table 2

Panel Regression Results

Model 1	Fixed effects		Random effects	
Variables	Coeff.	Prob.	Coeff.	Prob.
C	-82.7790	0.4058	34.4733	0.0000
PCD	-2.4083	0.0071	-0.0047	0.9874
PCE	-10.7421	0.0120	0.0011	0.9785
R ²	0.7705		0.0000	
F-Test	4.6576		0.0006	
DW	2.2809		1.9583	
Model II				
C	33.4716	0.0000	32.6833	0.0000
PCOC	-3.0168	0.0354	0.1837	0.7158
R ²	0.4165		0.0012	
F-Test	8.0923		0.1333	
DW	2.1202		2.0830	

Table 3

Summary Statistics of Hausman Test

Test summary for model 1	Chi-sq statistic	Chi-Sq. d.f.	Prob.
Cross-section random	458.9261	2	0.0000
Period random	0.0000	2	1.0000
Cross-section and period random	3.9923	2	0.1359
Test summary for model II			
Cross-section random	0.8326	1	0.0015
Period random	3.8778	1	0.0489
Cross-section and period random	0.0593	1	0.8077

* Period test variance is invalid. Hausman statistic set to zero.

Second, the analysis above shows goodness-of-fit (R^2) of 0.77, meaning that 77 percent of the changes in the dependent variables were caused by the changes in the independent variables. The f-test of 4.7 with a p -value of zero shows that the model is statistically significant. Third, the analysis shows a statistically significant but negative relationship between private cost of equity and IBV. Fourth, there is a statistically significant but negative relationship between private cost of debt and IBV. A one unit increase in private cost of debt causes 2.4 units decrease in IBV. Finally, there is again a statistically significant but negative relationship between PCOC and IBV, as a unit increase in PCOC causes 3.01 units decrease in IBV. In all, the best fit regression line takes the following form:

$$IBV = -82.77 - 10.7PCE - 2.4PCD \quad (10)$$

$$IBV = 33.47 - 3.01PCOC \quad (11)$$

Another look at equation 11 above shows that PCE with a coefficient of -10.7 exerts a higher degree of elasticity on IBV than PCD with a coefficient of -2.4. Put another way, a unit change in private cost of equity will affect IBV much more than a unit change in the private cost of debt. This may be interpreted in two ways: upside reward arising from a drop in PCE and downside risk arising from an increase in the same. Finally, a comparison between the coefficient of PCOC (-3.01) and the previous two shows that the degree of elasticity of PCOC falls between the coefficients of PCE and PCD, thus affirming that PCOC exerts an equilibrating mechanism in the capital structure of mid-market firms as does WACC (K_o) in the capital structure of large firms.

DISCUSSIONS

The existence of relationship between various private costs of capital and incremental business value might not have been in doubt ab initio. It was the difference in their spatio-temporal degrees of elasticity that incited the authors. There are two issues here: the first is the relative response of IBV to changes in PCOC. For lack of existing studies in this area, we compared this result with the study of Dagogo and Imegi (2017) which examined the implications of various costs of capital on

the market value and profit of entrepreneurial firms. It was concluded that values of capitalised funds depend more on the vagaries of market forces than on profitability prospects of the firms' assets. Both studies reported similar results in spite of the differences in the formula between PCOC and WACC adopted in Dagogo and Imegi, (2017). It affirms that with the traditional capital structure theory, a company can improve its incremental business value or market value as it drives down its overall cost of capital (K_o), and asserted that the same implication holds at every stage of the enterprise.

The second issue is to evaluate the fact that a unit change in private cost of equity will affect IBV much more than a unit change in the private cost of debt would. This may be interpreted in two ways: upside reward arises in an increasing proportion to marginal drop in PCE and downside risk arises in an increasing proportion to marginal increase in same.

This conveys a signal for risk-return axiom. It illustrates that private equity capital is more expensive than private debt capital and must therefore attract higher returns, and that the opportunity cost of private equity capital must be sufficiently priced to compensate the risk of bankruptcy of mid-market firms. This draws us back to appreciate the Pecking order theory of Myer and Majluf (1984), which is in tandem with the reasons for private equity financing of start-up and early-stage growth firms, and to escape from fixed interest charges and financial risks associated with early-stage debt financing.

However, mid-market firms cannot be so declassified as to lack the capacity to leverage on less costly fixed interest securities. Higher impact of the cost of private equity capital alludes first to a greater proportion of the same in mid-market firms' capital structure in spite of its higher cost, and second to the existence of market inefficiency caused by asymmetric information, oligopolistic market structure, higher transaction cost, and low liquidity.

The lesser impact of the cost of private debt simply alludes to lesser utilisation of mezzanine, factoring or leveraged buyout in preference for bank, government or multilateral organisations' funding. Unfortunately, this study exposes the fact that Nigerian mid-market enterprises still exhibit the nuances of small enterprise financing,

and remains a far cry from the standards of mid-market enterprises in developed economies but basking under the universality of the acronym, SME, without seeking means of being strengthened for advancement deserving of their class.

The above discussions underscore the logic in support of financial leverage and value creation. Simply put, an entrepreneur creates more value with debt financing on two accounts: first, debt finance is traditionally cheaper than equity finance. Second, it offers opportunity to increase operating profit by expanding business operations. The only precaution is the risk of insolvency, which serves as a check to excessive utilisation of debt finance. Put together, we expected a result that will reflect a greater or balanced weight of debt-to-equity. That was not the case as shown above.

CONCLUSION

Firstly, reduction in private cost of capital (debt or equity) causes accretion in IBV. Secondly, both PCOC (a pragmatic description of the overall cost of capital for emerging or mid-market firms) and WACC have similar effects on any value world under study. Thirdly, there is greater weight of private equity than private debt in the capital structure of mid-market firms in Nigeria. This is the case in spite of lower cost of debt capital from banks, multinational institutions and government agencies. It suggests the following: difficulty in accessing low cost capital from debt sources, oligopolistic private capital securities market, high transaction cost, crowding out of private sector capital allocation by large enterprises, and asymmetric information.

Fourthly, mid-market firms have not distinguished themselves as belonging to an entirely separate investment asset class but still seek funds in the same category as small enterprises in the ‘SME’ construct. This no doubt has also rubbed on their ability to create incremental business value, which explains the reason some mid-market firms have remained in this category for unacceptably longer periods.

In addition, we acknowledged that this work is not without some limitations. Firstly, we restricted ourselves to incremental value of fund providers in the midst of several other claimants of the firm’s value

created. Secondly, we considered that a comparative analysis of the effects of public and private costs of capital on incremental business value could reveal further insights about the alternative models, and demonstrate greater reliance of the mid-market finance theory. However, this was not our objective. Finally, dynamic econometric models could be used to account for the occurrence of lag in both dependent and independent variables. Each of these limitations is a valid reason for advancing further research in this area.

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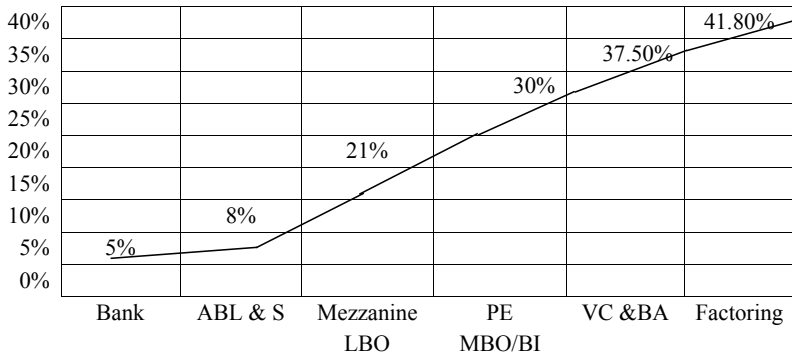
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APPENDIX



Key: ABL = Asset-bank loans & securitisation; LBO = leveraged buyout;
 PE = private equity; MBO/BI = management buyout/buy-in
 VC & BA = venture capital and business angels

Source: Pepperdine private capital market line. Slee (2011)

Figure 1. *Middle market expected returns.*