Journal of Economics and Sustainable Development
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.3, No.14, 2012

The Role of Human, Financial and Social Capital in the Performance of Small Businesses in Nigeria: A Second Look

Dr. (Mrs) Regina G. Okafor
Dept of Accountancy, University of Nigeria, Enugu Campus
E-mail gwamokafor@yahoo.com

Abstract

The methodology adopted in this paper involved using a five likert scale measure to assign values to the impact of human, financial and social capital variables on a sample of 20 firms (12 manufacturing and 8 servicing), and then applying the Kruskal-Wallis analysis test to determine whether there is significant difference in the level of the impact of the three independent variables on the dependent variable (firm performance). Results indicate that two human capital variables, namely education and work experience, have a higher impact factor on both types of firms relative to the impact of family background, and owners' direct involvement. Measures of financial capital especially willingness to borrow has greater impact on manufacturing firms than on servicing firms. While measures of social capital especially it's relational component has impact on both types of firms. The result of the Kruskal-Wallis analysis test suggests that the performance of small firms in Nigeria is essentially driven by all three factors (human, financial and social capital).

Keywords: Human Capital, Financial Capital, Social Capital, Performance, Small Businesses

1.0 INTRODUCTION

Small scale businesses have continued to struggle in different sectors of the economies of both developed and developing countries. They empower economic development by encouraging entrepreneurship, generating employment and reducing poverty. Statistically, they constitute nearly 90% of the total number of firms in most developing countries, provide 80% of total employment and account for over 50% of the gross domestic product (Rogers, 2002; Central Bank of Nigeria (CBN), 2000). In Nigeria in particular, small firms in the service and manufacturing sectors constitute over 35% and 22% respectively of the total number of small businesses (Okafor, 2007). They dominate the activities of small businesses, and play significant role in the provision of goods and services for economic development.

The two types of businesses have distinguishing characteristics. Manufacturing businesses are more likely to acquire high level of fixed assets than servicing type of businesses. Fixed assets help to produce goods which are sold to generate revenue. The obvious fact is that manufacturing firms need funds to lease/buy machines for production, employ highly skilled, qualified and experienced employees and develop new markets. Service businesses are more likely to be established either at home or in rented offices. As a result of that characteristic, many of them are likely to require less fixed assets, but more human capital. The study of Hisrich (1989) indicates that service businesses are less likely to apply, attract, or secure bank loans because they may lack required fixed assets (real estate, machinery and plant and other valuables), which could serve as collateral for credit accommodation. Also, because of the general tendency to establish such businesses at home and most often as a hobby by the entrepreneur, they are under less pressure to generate high profit. Such businesses are not often associated with real growth potentials based on the standard assessment criteria of banks. In addition, many of them often require relatively smaller amount of money for both startup and working capital. The limited capital requirement of such businesses explains their reluctance to seek loan accommodation from banks.

Past studies indicate that human and financial capital (Coleman, 2007), and social capital (Okafor, 2011, Luca and Manucla, 2010; Liao and Welsch, 2005; and Hoing, 1998) are necessary requirements for small business creation, success and survival. Success of an entrepreneur is dependent on the ability of his firm to make profit. Profitability is an accomplishment that is necessary if a firm is to be considered a "going concern". It is known that the profits of small firms are concentrated on the owner(s) quite unlike the profit of a public limited company which is only distributed if and only when declared as dividend. As a result, the ability of a small firm to generate profit is an important indicator of success on the part of the entrepreneur (Haber and Reichel, 2005; Watson, 2002; Brush and Chaganti, 1998; Cooper Gimeno-Gascon and Wao 1994). A firm that generates high level of profit performance is likely to employ qualified and experienced employees. Moreover a high rate of profitability increases the ability of a firm to attract external loans. The study of Okafor (2011) reveals that

entrepreneurs in manufacturing firms (high technology) require a high level of structural and relational elements of social capital because such capital helps them to secure the high level of external financial resources needs of their firms from financial institutions. Those in service type of business also require relational capital in order to get connected with their clients.

2.0 PAST STUDIES

Past studies consistently indicate that human capital plays a role in the profitability and growth of small scale ventures (Coleman, 2007; Bosman et al, 2004; Bates, 1990). Profitability is the standard measure of a firm`s ability to generate revenue in excess of expenses. This accomplishment is very necessary for the survival and growth of a firm (Harber and Reichel, 2005; Rodriques et al, 2003; Davidsson et al, 2002). Human capital comprises various elements including education, relevant employment experience and skill. It also includes factors such as family background, and the direct presence of the owner(s)/partners in the business. Infact the educational level of the owner-manager and that of the employees have significant effect on the survival and growth of a firm (Pena, 2002; Cooper et al, 1994 and Bates, 1990).

Relevant industry experience is an important human capital. Bosma et al (2004) found that previous experience in an industry substantially improved small firm prospects for survival, profitability and growth. In a study of retail and service firms, Brush and Changanti (1998) found that both education and industry experience had an impact on firm performance as measured by net cash flow and employment generation. Experienced lawyers, accountants, engineers and teachers who have acquired relevant professional experience are more preferred for employment than fresh graduates who have not gained any experience.

A number of studies reveal that shortage of financial capital can be a major barrier to small business success, and that explains why women small businesses were more concerned about access to capital than any other business problem (Orser et al, 2000). Firms that are unable to secure external capital may be more vulnerable to vicissitudes faced by small firms in general. They are less likely to have resources required to introduce potentially profitable new products and services or to expand into new markets. However, many service firms do not apply for bank loans for fear of denial because they may not have the basic fixed asset required by banks for credit accommodation.

Researchers studying social capital are primarily concerned with the significance of relationships as a resource to enhance social contacts (Coleman, 1988) because social capital was traditionally conceptualized as a set of social resources embedded in relationships (Burt, 1992). As the study of social capital expanded to the field of entrepreneurship, researchers come to the conclusion that a high level of social capital, built on a favourable reputation, relevant previous experience, and direct personal contact, often assist entrepreneurs to gain access to financial capital, key competitive information sources, potential customers and suppliers (Florin et al, 2003). The deduction from the above is that availability of resources facilitated by entrepreneurial networks greatly enhances the survival and growth potentials of firms (Bruderl and Preisendorfer, 1998).

3.0 CONCEPTUAL AND HYPOTHETICAL FRAMEWORK

Existing literature on the establishment, survival, growth, and success of organizations emphasizes the role of human, financial and social capital (Luca and Mannria, 2010; Coleman, 2007; Liao and Welsch, 2005; 2003; Bosma et al, 2004; Florin, 2003; Pina, 2002; Anderson et al 2002). Human capital refers to intellectual resource or industry specific experiences which help to prepare an entrepreneur for the challenges of business ownership (Coleman, 2007). Within the context of this paper, human capital includes such attributes as education, experience, availability of partners who can provide additional expertise, and family history of the firm. It stands to reason that an entrepreneur who has the benefit of higher levels of human capital would be better placed to pilot his firm to higher levels of performance.

Financial capital takes the form of equity and or/debt capital infusions into a business. Conceptually financial capital refers to the ability of a firm to secure external capital. Availability of financial capital depends on the level of effort invested in sourcing such capital. Firms that are reluctant to apply for external capital experience difficulty in attracting adequate resources required to introduce profitable new products and services or to expand to new markets.

Social capital is an asset embedded in the social structure of relationships of individuals (Liao and Welsch, 2005; Lin, Cook and Burt, 2001). Literature reveals that social capital has dimensions – structural, relational and

cognitive (Liao and Welsch, 2005). These dimensions encompass all aspects of social contexts such as social interaction, social ties, trusted relationships and value systems which define the actions of individuals located in a particular environment. The three dimensions of social capital are not mutually exclusive but highly interrelated. Thus, an entrepreneur can use his structural ties such as friends in the university, club members, union members or family affiliation to secure loans from credit institutions. He can also use his relational abilities acquired from social ties to access loans and attract important employees that can help to move the firm to higher levels of performance (Coleman, 1988).

On the basis of the related literature and the conceptual framework discussed above, the following hypotheses were formulated in null form:

i. Human capital variables (education, experience, family background and presence of partners); financial capital variables (equity infusion, and willingness to borrow), and social capital variables (structural, relational and value system/cognitive) have no impact in the performance of small firms in manufacturing and servicing types of business.

ii. The level of human, financial and social capital does not substantially influence the performance level of firms in manufacturing and services delivery. In other words, there is no significant difference in the impact level of human, financial and social capital in the performance of firms in the two industrial sectors (manufacturing and servicing).

4.0 METHODOLOGY

This paper relied mainly on primary data derived from 20 small businesses in the sample. The primary data was however supplemented with secondary data extracted from the 2009 statement of accounts of the sample firms. The 20 enterprises operate within Enugu metropolis.

The dependent variable (performance) is defined to include measures of revenue, basic assets and profit. The three independent variables on the other hand are defined to include human capital (education, experience, family background, presence of partners), financial capital (equity infusion and debt capital), and social capital (structural ties, trusted relationships and value systems). The independent variables (human, financial and social) capital as a group is presumed to influence the dependent variable which is performance.

The five point likert scales of values were used to assign values to levels of the impact of the independent variables. Then, Kruskal-Wallis analysis test was used to compare the level of difference between the three independent variables human, financial and social capital on a dependent variable performance.

The Kruskal-Wallis analysis test is a powerful alternative to the F-test when variance and normality assumptions for parametric tests are not met. It is also the most appropriate way to handle ordinal level data when more than two groups are compared. In particular, here we want to compare the impact level of the three independent variables on a dependent variable performance.

The formula is stated as follows:

$$H \text{ statistics} = \frac{12}{N(N+1)} \sum \frac{R^2}{n} - 3(N+1)$$

Where:

H = Result of the test Statistics

N = number of ranked scores in all independent variables combined

n = number of cases in each individual sample (independent variables)

R = the sum of ranks for each individual sample (independent variable)

The H statistic is tested using the chi-square distribution with three groups, df = 2. Therefore, we test H against the critical value of 13.82 @ $\propto$ = .001

H must be greater than or equal to x^2 (critical value) to be considered significant.

5.0 PRESENTATION, ANALYSIS OF DATA AND HYPOTHESES TESTING

A five point likert scale of values was used to measure the impact of the independent variables as follows 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent. The outcome of the value scoring with respect to the twelve manufacturing firms studied is presented in table 1 as indicated below.

Table 1: Impact of the Three Independent Variables on Manufacturing Firms

Independent Variables	A	B	C	D	E	F	G	H	I	J	K	L	AV
A.Human Capital Variables													
Education	4	3	4	3	4	4	4	3	3	3	4	3	3.5
Experience	4	4	4	4	3	3	4	4	4	3	4	3	3.7
Family Background	3	2	2	2	3	2	3	3	2	2	3	3	2.5
Presence of Partners	2	2	1	2	2	2	1	1	1	2	2	1	1.6
Average													2.8
B.Financial Capital Variables													
Equity Infusion	3	2	3	2	2	3	2	2	3	2	3	3	2.5
Willingness to borrow	3	5	4	5	4	4	4	5	5	4	4	4	3.9
Average.													3.45
C.Social Capital Variables													
Structural ties	3	3	3	3	3	3	4	3	4	4	3	3	3.25
Trusting Relations	4	3	3	3	3	3	3	3	3	3	4	4	3.25
Value System	3	2	3	3	2	3	2	3	3	3	3	3	2.75
Average													3.08

Source: from survey data.

A – L = (Identification codes for the firms in the sample)

In relation to human capital, table 1 show that on the average, the impact of education (3.5) and industry experience (3.7) ranked higher than the impact of family background (2.5) and presence of partner (1.6). Because of high cost of fixed assets needed by manufacturing firms, many of the firms in the sample could not afford to inject enough equity capital into business. The data shows that all the firms were willing to borrow from financial institutions to finance their heavy capital projects. The impact of social capital variables was high particularly that of structural ties (3.25) and trusting relationships (3.25). In summary the average score of each of the three capital elements was (2.80) for human capital (3.45) for financial capital and (3.08) for social capital, while the average impact score for the three capital elements was therefore (3.11). This clearly indicates that over 65% i.e. (3.11/5) of the performance of manufacturing firms could be explained by the three components of capital viz human, financial and social capital.

The impact of the three independent variables on the performance of the eight servicing firms covered in the study is presented in table 2 below.

Table 2: Impact of the Three Independent Variables on Service Firms

Independent Variables	M	N	O	P	Q	R	S	T	AV
A. Human Capital Variables									
Education	3	3	3	3	3	3	3	3	3.00
Experience	2	2	2	2	3	3	3	2	2.38
Family Background	1	2	2	2	1	1	1	2	1.5
Presence of Partners	-	-	-	-	1	1	1	-	0.38
Average									1.8
B. Financial Capital Variables									
Equity Infusion	3	3	3	3	3	3	4	4	3.25
Willingness to borrow	1	1	1	2	1	1	2	2	1.4
Average.									2.32
C. Social Capital Variables									
Structural ties	2	2	2	1	-	-	-	-	0.88
Trusting Relations	3	3	3	2	2	2	2	2	2.38
Value System	2	2	2	2	2	2	2	2	2.00
Average									1.75

Source: From survey data

M-T = (Identification codes for the service firms studied).

The table shows that education (3.0) and experience (2.38) had higher impact factors than family background (1.5) and presence of partners (0.38). Many servicing firms were not willing to borrow, which resulted in an impact factor of (1.4) relative to (3.25) for equity infusion. The table also shows that servicing firms do not depend on structural elements of social capital but rather on relational and value system components of social capital as reflected in the relative scores of (0.88) and (2.38) respectively. As Okafor (2011) argues entrepreneurs are not obliged to belong to any structural group, they operate as individuals confined only by the practices, norms and values of society. Actually what they need is to use their personal interaction and ties "imamadu" to profit from high relational social capital. It is clear from table 2 that the average impact factor of the three variants of capital (human, financial and social) is (1.67) which is relatively lower than the score for manufacturing firms (3.11).

Hypothesis 2, states that the level of the three independent variables (human, financial and social capital does not significantly influence the level of firm performance. The Kruskal-Wallis analysis test was used to compare the difference in the level of impact of the three independent variables and the level of firm performance.

Procedure:

The first step was to combine data of the two types of firms (manufacturing and servicing), and rank the scores according to each independent variable. The ranks were then summed up for each independent variable separately. The null hypothesis would be sustained if there was an equal distribution of scores under the three independent variables.

Table 3: Kruskal – Wallis one Way Test Analysis of Impact of Human, Financial, and Social Capital on Performance of Manufacturing and servicing types of business

Human Capital Variables		Financial Capital Variables		Social Capital Variables	
	Rank	Changes in scores	Rank	Changes in scores	Rank
4	14	5	4	4	6
3	27	4	9	3	30
2	22	3	13	2	19
1	12	2	6	1	1
		1	5		
R	75		37		56
n	4		5		4
R	18.7		7.4		14

Source: Author's Computation

Result at 0.001 level of significance

$$H = \frac{12}{N(N+1)} \sum \frac{R^2}{n} - 3(N+1)$$

Result:

N = 13

n = Human capital variable = (4), Financial capital variable = (5), Social capital variable= (4)

$R^2 = (75)^2$ human, $(37)^2$ financial, $(56)^2$ social

df = 2

Substitution:

$$\frac{12}{13(13+1)} \sum \frac{(75)^2}{4} + \frac{(37)^2}{5} + \frac{(56)^2}{4} - 3(13+1)$$

$$\frac{12}{182} [2464] - 42 = 120.46$$

For df = $x^2 = 13.82$

Test statistic is 120.6 which is greater than the critical value 13.82

Since the Result of the Hypothesis Test = 120.6

Critical value = 13.82 for df =2, sig. = 0.001

Reject Ho and accept Hi

Therefore, there is significant difference in the impact level of human, financial and social capital in the performance of firms in the two industrial sectors (manufacturing and services).

6.0 SUMMARY AND CONCLUSION

A number of substantial differences between the two industries servicing and manufacturing were identified in the study. First, most of the service firms started as hobbies and were mainly situated in the homes of the owner managers. As a result, they did not require much of fixed assets as manufacturing firms. The owners of such businesses normally relied on equity infusion, and demonstrated unwillingness to apply for bank loans. Manufacturing firms on the other hand require spacious premises, plant and machinery and other facilities for the production of goods. Such businesses definitely require external financing to cover the high cost of fixed assets, and to employ educated and experienced employees. Social capital of all dimensions is very important for the take off and success of the two types of businesses especially in this country where businesses are very competitive. The characteristics of both types of firms obviously affected the relative impacts of human, financial and social capital on the performance of both groups of firms. The impact of human capital (education and experience) is significant on both firms. Financial capital including willingness to apply for bank loan is more significant in manufacturing firms than it is in servicing firms. Tables 1 and 2 indicate that the relational component of social capital impacts significantly on the performance of both types of firms.

Further, the effect of the three types of capital was considered as a group to ascertain the difference in their level of impact on firm performance. The result indicates that the level of performance of a firm is driven by all the three factors (human, financial and social capital impacts). Taken together the results of the analysis led to rejection of Ho.

These findings highlighted the role which human, financial and social capital play in the performance and success of small businesses, and also emphasize the need to ensure that small firms are provided access to educational opportunities, management experience and training, external capital as well as exposure to the benefits of social capital. These factors would help entrepreneurs create more profitable businesses and in the process contribute to the economic development of the nation.

REFERENCES

Anderson, A. R., and S. I. Jack (2002), "The Articulation of Social Capital in Entrepreneurial Networks: A Glue or a Lubricant?" *Entrepreneurship and Regional Development* 14(3), 193-210

Bates, T. (1990), "Entrepreneurial Human Capital Inputs and Small Business Longevity," *The Review of Economics and Statistics* 72(4), 551-559

Bosma, N. M. Van Praag, R. Thurik, and G. de Wit (2004), "The Value of Human and Social Capital Investments for the Business Performance of Startups," *Small Business Economics* 23(3), 227-236

Brush, C.G., and R. Chaganti (1998), "Businesses without Glamour? An Analysis of Resources on Performance by Size and Age in Small Service and Retail Firms," *Journal of Business Venturing* 14, 233-257

Bruderl, J. and P. Preisendorfer (1988), "Network Support and the Success of Newly Founded Businesses," *Small Business Economics* 10, 213-225

Burt, R. S. (1992), *Structural Holes*, Cambridge, MA: Harvard Business Pres.

Central Bank of Nigeria (CBN) (2000), "The Changing Structure of the Nigerian Economy and Implications for Development" *Research Department Central Bank of Nigeria*, August

Coleman, S. (2007), "The Role of Human and Financial Capital in the Profitability and Growth of Women-Owned Small Firms" *Journal of Small Business Management*, (45)3,303-319

_____ (1988), "Social Capital in the Creation of Human Capital," *American Journal of Sociology*, 94, 95-120

Cooper, A. C. F. J. Gimeno-Gascon, and C.Y. Woo (1994), "Initial Human and Financial Capital as Predictor of

New Venture Performance," *Journal of Business Venturing* 9, 371-395

Davidsson, P., B. Kiechhoff, . Hatem-J, and . Gustavsson (2002), "Empirical Analysis of Business Growth Factors Using Swedish Data," *Journal of Small Business Management* 40(,335-349

Florin, J.M. Lubatkin, and W. Schulze (2003) "A Social Capital Model of High Growth Ventures," *Academy of Management Journal* 46(3), 374-384

Haber, S., and A. Reichel (2005), "identitying Performance Meassures of Small Ventures: The Case of the Tourism Industry" *Journal of Small Business Management* 43(3), 257-286.

Hisrich, Robert D. (1989), *Women Entrepreneurs: Problems and Prescriptions for Success in the Future in Women Owned Businesses*, Ed. Oliver Hagan Carol Rivchun, and Donald Sexton New York Praeger.

Honig, B. (1998), "What Determines Success? Examining the Human, Financial, and Social Capitalof Jamaican Microentrepreneurs" *Journal of Business Venturing* 13, 371-394

Liao, J., and H. Welsch (2003), "Access to Occupations through Social Ties," *Social Networks* 8, 365-385

_____ (2005), "Roles of Social Capital in Venture Creation: Key Dimensions and Research Implications" *Journal of Small Business Management* 43(4), October 345-362

Lin, N., K. Cook, and R. Burt (2001), *Social Capital* . New York; Walter de Gruyter

Luca P. and M. Presutti (2010), "The Impact of Social Capital on the Start-ups Performance Growth", *Journal of Small Business Management* 48(2), 197-227

Okafor, R. G. (2011), "Social Capital and Venture Creation in Nigeria" *Middle Eastern Finance and Economic Journal:* Euro Journal Publishing Inc. Volume 9, January: 159-167.

_____ (2007), "An Empirical Study of Gender Disparity in Access to Small Business Credit in Nigeria: Evidence from the South East" *A Ph.D Thesis of the University of Nigeria*

Orser, B., and S. Hhogarth-Scott (2002), "Opting for Growth: Gender Dimensions of Choosing Enterprise Development" *Canadian Journal of Administrative Sciences* 19(3), 284-300

Pena, I. (2002), "Intellectual Capital and Business Start-up Success," *Journal of Intellectual Capital* 3(2) 180-190

Rodriquez, A. C., M. A. Molina, A. L. Gonzalez Perez, and U. M. Hermandez (2003), "Size, Age, and Activity Sector on the Growth of the Small and Medium Size Firm," *Small Business Economics* 21, 289-307

Rogers, B. A. (2002), "Funding of SMEs: Sourcing of Funds and Problems Limiting Access" *The Official Journal of the Institute of Chartered Accountants of Nigeria*, 35(1), 15-18

Watson, J. (2002), "Comparing the Performance of Male and Female-Controlled Businesses", *Entrepreneurship Theory and Practice* 26(3), 91-100.