

Resources and Business Failure in SMEs: Does Size Matter?

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Almost all analyses that use small and medium-sized enterprises (SMEs) as their unit of analysis treat this group of firms as a homogenous group. However, the literature indicates that the small business sector is more heterogeneous than originally thought. To test this assumption, this study investigates business failure among SMEs controlling for size of the firm. Using data from over 60,000 SMEs in the UK, the study utilizes logistic regression to model business failure with a number of surrogate measures for resources. The analysis is compartmentalized into small and medium-sized firms. The results reveal that the resources that impact business failure do in fact vary based on firm size. The implications of the findings are addressed in the paper.

It is generally argued that firms fail because they lack resources (Ahmad & Seet, 2009; Campbell et al., 2012). However, it is not always clear whether or not these resource deficits are confined to firms of a particular size. The extant literature asserts that larger firms will have more resources, and, as such, should be able to survive while smaller firms with their limited resource stock should fail (Watson, 2007). However, empirical evidence suggests that failure is not confined to small firms but firms of all sizes. It is this observation that has motivated the work presented in this paper. The paper will try to understand whether or not the predictors of business failure, which are generally seen as surrogate for firm resources (Watson, 2007), vary based on the size of the firm. This analysis will be useful in guiding public policymakers to the best way to support firms of different sizes in order to prevent or alleviate failure rates among these enterprises. Similarly, managers in small and medium-sized firms can use the results from this analysis to help them determine the types of resources they should cultivate in the firm in order to minimize the risk of failure.

Resources and Business Failure

The organization ecology (OE) scholars who study business failure, generally argue that firms fail not because of factors external to them, but results directly from poor internal management decisions having to deal with shocks presented in the

external environment (Hannan & Freeman, 1988; Hannan, 1997). In essence, what this school of thought suggests is that failure is an internally driven activity. Contrary to this belief, industrial organizations (IO) scholars believe that firms fail because the environment in which they operate becomes too turbulent and therefore exert pressure on the firm which leads to its failure (Scott, 1992; Zou & Stan, 1998). For example, taking the Schumpeterian thesis of creative destruction as its starting point, industrial organization scholars argue that shifts in the environment caused by things such as technological change, economic or geographic shifts, regulatory changes, etc., are factors which the managers of a firm have no control over and these put pressure on the firm's strategy, which will lead to it failing. Thus, both schools of thought are at odds in explaining business failure among firms. The IO school blames external factors while the OE school blames internal factors vis-à-vis, management decision making. To reconcile both, this work will look at the resource-based view as the theoretical lens through which to analyze business failure.

The resource-based view of the firm argues that once a firm possesses resources that are scarce, difficult to copy, and measurable, this will lead to a competitive advantage that will ensure the survival of the firm (Amit & Schoemaker, 1993; Barney, 1991). From a reading of this literature, it appears that most scholars writing on the resource-based view of the firm generally infer that resources are only internal to the firm; thus, conflate the resource-based view and the organizational ecology view in explaining firm failure. Resources however, are not only tied to the internal operations of a firm. Resources can be external as well as internal to the firm. In fact, Amit and Schoemaker, (1993) defined resources as a set of factors that are owned or controlled by the firm. Indeed, controlled means that the resources do not have to be directly inside the organization but may be within the wider industry sector. As such, once resources are not conceptualized as only internal to the firm, the resource-based view of the firm will reconcile both the industrial organization view and the organization ecology view of business failure. Therefore, using the resource-based view lens; a number of factors that are generally referred to as surrogates for resources can be analyzed in order to determine their impacts on business failure.

Size

Firm size has been a long standing variable that is used to proxy firm resources (e.g., Bloodgood, Sapienza, & Almeida, 1996; Williams, 2009, 2011). The general argument is that the larger the firm, the more resources it will have, hence, the greater the likelihood of it surviving (Watson, 2007). This logic seems to suggest that with more employees, the firm tends to have a larger stock of resources and, as such, can generate economies of scale and reduce the cost of doing business, thus ensuring its long-term survival (Mittelstaedt, Harben, & Ward, 2003). An even more compelling argument for the importance of size in the survival/failure discourse is that size provides a buffer for the firm to absorb the fixed cost of doing business. Firms of larger size and presumably more resources are better able to absorb certain fixed costs of operations. Small firms do not have this latitude because absorbing large fixed costs can lead to a firm having to exit an industry (Hall & Tu, 2004). As such, overcoming the liability of smallness is important in the future survival of the firm.

In the extensive literature, a number of studies noted a positive relationship between size and firm performance as measured by growth, profitability, survival, or internationalization. For example, Watson (2007) and Calof (1994) noted that large firms are more likely to survive than small ones. This positive relationship between size and performance of the firm seems overwhelming. The general consensus strongly suggests a positive relationship between firm size and firm performance. Indeed, viewing failure through the resource-based view lens, it is expected that larger firms will have a higher stock of resources. Among other things, these resources can be used as a buffer to absorb fixed costs, which generally helps to drive failure and helps the firm to overcome turbulent times in the market.

Governance

The organizational structure of the firm is a critical proxy for the access to resources, which can impact the performance of that firm. For example, whether or not the firm is publicly or privately owned can impact the amount of resources it has at its disposal.

Firms that are publicly owned and listed on stock markets are more likely to have access to cheaper sources of finance than firms that are privately owned and depend solely on the small networks of the owner and family members (Brush, 2002; Watson, 2007). Based on this observation, it is logical to expect that firms that are publicly owned and listed, will have a larger stock of resources than those that are privately owned. Following this logic and using the resource-based view lens to analyze business failure, it is expected that publicly-listed firms are more likely to survive than private firms given that the former will likely have more avenues to gather additional resources than the latter.

Firm Age

Age is seen as a good proxy for the stock of resources that a firm possesses (Williams, 2009). Researchers have used the age of the firm as a proxy for experience (Autio, Sapienza, & Almeida, 2000). In fact, from a resource-based perspective of the firm, older firms will have considerably more resources than younger firms. This logic is based on the assumption that firms acquire resources over time (Autio, 2005). Because older firms will have a larger stock of resources than younger firms, the resource-based view explains that these firms will stand a better chance of survival than those with a lower stock of resources. This is because the higher stock of resources will provide a stronger buffer for the firms to absorb shocks and unanticipated costs, which can generally lead to business failure. This line of reasoning converges with the expectations of some researchers that older firms are less likely to fail than younger firms. Watson (2007) even found evidence among established firms that the older firms had a greater chance of survival than the younger ones.

Industry Sector

The sector in which the firm operates may impact its ability to amass resources. Indeed, researchers who are trying to understand firm performance as measured by success or failure have argued that the industry sectors impact on performance success

(Campbell et al., 2012; Watson, 2007). The argument is that access to resources may differ across industry sectors, and, as such, the performance of the firm may differ across sectors as well (Barney, 1991; Watson, 2007). The level of competition in the industry, the number of firms, and the structure of the industry are all factors that will determine whether or not a firm exits or remains in the sector (Porter, 2008). This observation about industry sectors makes the analysis of sectors important in the performance of business failure. Sectors that are predisposed to a greater stock of resources (maybe due to the make-up of the industries that reside there), will more than likely be better able to support its firms, and, as such, more firms in these sectors will be able to survive compared to those sectors that are informal and resources are hard to come by.

Financial Resources

Financial resources are generally seen as the most important resource that the firm possesses because they are easily observable and most persons can identify with them (Barney, 1991). These resources, while not the most important for a company to succeed, are an essential part of the resource pool that a company can possess in order to improve its competitive advantage and increase its chances of success. In this study, a number of these measures were used to capture the resource stock of the firms. These include net income, revenue, and return on assets.

Researchers have argued that higher capitalization normally suggests a greater belief in the viability of the business (Caves, 1998). Further, others have suggested that lower capitalization implies that the owner might want to learn from the business instead of wanting to grow the business, thus, embracing the idea that thinly capitalized business is a greater candidate for closure (Bates, 2005). However, this view is challenged by Gimeno et al. (1997). They argued that organizational survival is not exclusively a function of economic profitability but also depends on the firms' 'threshold for performance'. Indeed, it is suggested that internal characteristics such as firm size as well as other human capital attributes, like the owner's interests, are variables which help to define this threshold. It means then that the threshold performance varies across the different types of firms (Gimeno et al., 1997). They argued that the dynamism in the relationship with firm performance is not only dependent on the interest of the owner but also on the influence of outside stakeholders such as shareholders, employees, customers, community members, and the government (Gimeno et al., 1997). The strength of the influence of the external stakeholders tends to vary based on the size of the firm, with the owners of smaller firms having more control over decision-making, bearing in mind that their financial and non-financial resources normally outweigh those of other stakeholders.

Location

Agglomeration theory is a tool that can be used to better understand the impact of location on the performance of the firm. It hypothesizes that a relationship exists between the geographical location of firms and their competitive positions (Folta, Cooper, & Baik, 2006). It is argued that the performance of geographically clustered firms improve with cluster size (ibid). The theory argues that the 'economies of

agglomeration' enhance the firm's ability to innovate through patenting, attracting alliances, partners, and private equity partners. This suggests that these geographical links, such as those which exist in places like Silicon Valley, benefit small firms by improving the access to and use of information whether it relates to process, company strategy, and knowledge, as well as the ability to attract additional financial resources (Folta et al., 2006, p. 222). McCann and Folta (2011) further argued that firms do not benefit equally from clustering or networks. Before entering the network, it is important to consider the knowledge stocks of the firms as a key determinant of possible clustering.

Location is also a source of human capital resources for the firm. Areas that are more densely populated (e.g., urban areas) generally have more human resources than those that are less populated. For small firms, the recruitment of skilled workers and access to capital are important resources that can determine their survival or failure. If a location possesses these resources in abundance, it may be easier for the firms there to access them. In a recent study analyzing the longevity of small firms in Jamaica, the results showed that firms, which were located in rural areas had a higher chance of survival than those in urban centers (Williams & Jones, 2010). Despite having larger amounts of resources - especially human capital resources, firms in urban centers face a greater level of competition for markets, and so, those firms that do not start with a high stock of resources will eventually exit the market place. Indeed, this increased chance of survival in a rural area appears to stem from the lower levels of competition for market-share which these small firms face despite their small stock of resources. In essence, the location in a rural area provides a competitive advantage for these small firms. The remoteness of some rural locations in Jamaica makes it difficult for a large number of SMEs to operate in those geographic areas, so those that have a first mover advantage are more likely to face less competition for market-share. This lessening of competition thus provides a sort of monopoly status to these SMEs in the rural locations and therefore, increases their chance of survival.

Critically, while it is expected that urban centers will have a greater stock of resources which small firms can access, the cost of accessing these resources may inhibit resource-poor SMEs from actually taking advantage of these resources. With the inability to gain access to these resources, it may result in these firms being unable to compete in a highly competitive market environment. Urban centers that are densely populated with excess demand for labor may not be ideal locations for SMEs because of the high premium they will have to pay to attract human capital resources. Indeed, the locational advantage derived from being rural appears to be context-specific. As such, one can conclude using the lens of agglomeration theory that the impact of the location on the performance of the firm is still uncertain. Merely being located in a geographical area does not automatically lead to strong performance but it is the quality of the resources and levels of competition among the firms in the area that matter.

Method

This section describes the method that is used to achieve the aims of the paper.

The Analytical Framework

To motivate this study, a model which captured the relationship between the dichotomous dependent variable and the independent variables had to be derived. To this end, a model from the qualitative genre was used given the dichotomous nature of the dependent variable. The logit model was used because it had the possibility of producing outcomes that were not dependent on the normality assumptions of the population from which the data was drawn (Gujarati, 2003). In its theoretical form, this model is depicted as follows:

$$\text{Logit}(Y) = \ln(P/1-P) \quad (1)$$

However, the operational model becomes:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \epsilon_j \quad (2)$$

Where:

\hat{Y} represents the unbiased estimator of the dependent variable, business failure, which is dichotomous and measured by whether or not the firm is active in the industry; that is, it keeps open or if it's inactive, meaning it closes its doors.

X_1 represents size

X_2 represents governance structure

X_3 represents age

X_4 represents industry sector

X_5 represents net income

X_6 represents revenue

X_7 represents return on asset

X_8 represents location

ϵ_j represents the error term

The model in Equation 2 above was estimated to provide insights into which factors are most important in predicting the likelihood of failure among small firms.

Research Data and Operational Measures for Variables

The data for this study were collected from the Financial Analysis Made Easy (FAME) database, a database with a significant amount of financial and company information on UK firms. The search for firms was narrowed down to those that were active or inactive in all industry sectors in the economy of the United Kingdom (UK) over the period from 1999-2008. This period was chosen because it represented a halcyon period in the contemporary UK economy in terms of economic growth and stability since the early 1990s. The average gross domestic product (GDP) growth over this period was 2.74%; the average inflation rate was 1.75% and interest rate at 4.79%. Also, the exchange rate variation was -0.82. The relative robustness of the economy, it is assumed, would be more amenable to business survival than failure.

Since this study focused on SMEs, a maximum upper bound on the number of employees in the firm was placed at 250. This upper bound of 250 employees

represented the definition for SMEs in the UK (Storey, 1994). As such, the search led to over 63,103 firms that were deemed appropriate for the analysis. The number of inactive firms accounted for 32.8 % of the sample while the number of active firms accounted for 67.2%. Similarly, 8 variables that had full information and were used in previous studies as surrogate for resources were collected from the database for analysis. These variables along with their operational measures are listed in the table below.

Table 1: Variable Measurements

Variable	Measurement	Variable Code	Previous Research
Dependent variable (Output) Business Failure	Dichotomous variable with the following labels Inactive = 1 Active = 0	CS	Mellahi and Wilkinson (2004)
Independent Variables			
Firm Size	Latest number of employees	Size	Tang and Murphy (2012) Williams (2011)
Firm Age	Number of years since incorporation	Age	Semrau and Werner (2012) Autio et al. (2000)
Location	1 = Urban centres, 0 = Rural areas	LC	Williams and Jones (2010)
Governance Structure	1 = Private limited liability 2 = Public listed company	GS	
Industry Sector	Ordinal 1 = Services 2 = Wholesale and retail 3 = Food 4 = Manufacturing	IDS	Williams and Jones (2010)
Net Income	Revenue minus cost	NETI	Bates (2005)
Revenue	Sales figures	Rev	Bates (2005)
Return on Asset	Total Asset divided by Profit	ROA	Bates (2005)

Results

This study aimed to understand whether or not size mattered in relation to the impact of resources on business failure. To do this, it modelled the resources, which impacted business failure among different size categories of the firm. The results below reflect the findings from this analysis.

Table 2: Results from All Firms

Logistic Regression- All Firms (N=63103)				
<i>Independent variables</i>	β	<i>Wald</i>	<i>Sig.</i>	Exp(β)
Constant	-.237	24.335	.000	.789
Size	.009	1011.847	.000*	1.009
Governance Structure	1.754	3127.543	.000*	5.777
Firm Age	-.196	3073.00	.000*	.822
IDS	.033	17.603	.000*	1.034
ROA	.000	24.004	.000*	1.000
Rev	.000	67.481	.000*	1.000
NETI	.000	78.699	.000*	1.000
Location	-.210	86.938	.000*	.811
-2LL (Initial Model)	63683.435			
-2LL (Final Model)	54260.290			
χ^2 (df) (Final Model)	9423.145 (8)			
χ^2 (df) Hosmer-Lemeshow test	240.136 (8)**			
Nagelkerke R ²	.24			
R ² _L	.15			
% Correct Prediction	74.6			

Dependent variable is business failure, that is, whether or not the firm is active.

** Variables are significant at the 0.05 level of significance*

*** Statistic is significant at the 0.05 level of significance*

R²_L = 1- (Final model -2LL/ Initial model -2LL).

When the model was analyzed using all 63,103 firms in the data set without controlling for size, the results reflected that all 8 variables which were proxies for resources had a significant impact on failure in small and medium-sized firms. For example, the results suggested that as firms get older, the likelihood of failure is reduced. This is in keeping with the mentality of the resource-based view of the firm which argued that older firms have more resources than younger firms, and, as such, the likelihood of failure is lower among the former. Further, a look at the model diagnostic statistics also suggested that the results were indeed robust. The model had a predictive accuracy of 74.6%, a high predictive accuracy in this line of research (Watson, 2007). Also, the model had a lower -2log likelihood value when the initial model without the variables was compared with the final model with all variables. This suggested that the model fitted was a better predictor of failure than the previous model. Similarly, the model chi-square value was also significant, which suggested that the fitted model was a better predictor than the model fitted only with the constant. In an ideal world, the Hosmer-Lemeshow test would be expected to be insignificant, which suggested that

the chosen model fit the data well. In this case, the test showed a significant statistic. This meant that the model and the data did not fit well. This is not of major concern since all the other diagnostics show a good fitted model.

Medium Sized Firms

The table below shows the results when the data were restricted based on the size of the firm. In this case, firms with employees ranging from 51-250 were classified as medium firms. These results show that the pattern of significant variables does change. Not all variables that were found to be significant in the full model are found to be significant here.

Table 3: Results from Medium-sized Firms

Logistic Regression- Medium- Sized Firms (N=21377)				
<i>Independent variables</i>	β	<i>Wald</i>	<i>Sig.</i>	$\text{Exp}(\beta)$
Constant	2.558	335.491	.000	12.912
Size	-.001	6.04	.014*	.999
Governance Structure	.353	19.361	.000*	1.424
Firm Age	-.151	277.716	.000*	.860
IDS	.003	.029	.864	1.003
ROA	.006	79.403	.000*	1.006
Rev	.000	3.303	.069	1.000
NETI	.000	22.13	.000*	1.000
Location	-.820	220.615	.000*	.440
-2LL (Initial Model)	9856.072			
-2LL (Final Model)	9106.685			
χ^2 (df) (Final Model)	749.387 (8)			
χ^2 (df) Hosmer-Lemeshow test	43.114 (8)**			
Nagelkerke R ²	.11			
R _L ²	.08			
% Correct Prediction	68.3			

Dependent variable is business failure, that is, whether or not the firm is active.

** Variables are significant at the 0.05 level of significance*

***Statistic is significant at the 0.05 level of significance*

R_L² = 1 - (Final model -2LL/Initial model -2LL).

Indeed, when compared to the model with all firms present, the model with medium-sized firms only showed that industry sector and revenue were not significant predictors of business failure. The interpretation here is that for medium-sized firms, failure can happen despite their revenue stock and also the industry sector in which they operate.

Small Firms

Small firms were operationalized as those firms with 50 or less employees. The table below shows the results from the model that was analyzed to determine whether or not the resources that were found to be predictors of business failure in medium-sized firms remain consistent across small firms.

Table 4: Results from Small Firms

Logistic Regression- Small Firms (N=41726)				
<i>Independent variables</i>	β	<i>Wald</i>	<i>Sig.</i>	Exp(β)
Constant	-.576	121.815	.000*	.562
Size	.034	860.397	.000*	1.034
Governance Structure	1.972	3303.867	.000*	7.184
Firm Age	-.216	2998.424	.000*	.806
IDS	.004	.179	.672	1.004
RoA	.001	35.784	.000*	1.001
Rev	.000	58.701	.000*	1.000
NETI	.000	30.549	.000*	1.000
Location	-.096	14.762	.000*	.908
-2LL (Initial Model)	52988.990			
-2LL (Final Model)	43662.030			
χ^2 (df) (Final Model)	9326.960 (8)			
χ^2 (df) Hosmer-Lemeshow test	193.865 (8)**			
Nagelkerke R ²	.279			
R ² _L	.18			
% Correct Prediction	74.6			

Dependent variable is business failure, that is, whether or not the firm is active.

**Variables are significant at the 0.05 level of significance*

***Statistic is significant at the 0.05 level of significance*

R²_L = 1 - (Final model -2LL / Initial model -2LL).

The results from the model suggested that similar to medium-sized firms, industry sector was not a significant predictor of failure among small firms. However, unlike medium-sized firms, the revenue stock of the small firm was found to be a significant factor in the prediction of failure among small firms. These results were interesting and, in general, suggested that resources as a predictor of failure were contingent on the size of the firm in most respects. The discussion below will shed further light on these findings.

Overall, a look at the model diagnostics for all the models that were analyzed suggested that the results were robust. In all cases, both the model R^2 and the Nagelkerke R^2 were in line with results from previous works. Similar to a linear regression, both sets of R^2 provided a gauge of the significance of the model. The values varied between 0 which meant the model was useless in predicting outcomes to 1 which meant it predicted the outcome perfectly. Further, the Hosmer-Lemeshow test looked at the observed model with the predicted model. A result that was not significant (i.e., $p > 0.05$) suggested that the model predicted real world data fairly well.

The wald statistics, which is similar to the t statistic in linear regression, helped to determine the significance of the variable under investigation. A simple rule of thumb was that when the wald was greater than 2, the variable had a significant impact on the model. This rule was followed in reporting on variables that impacted business failure/success.

In addition, the expected beta value, which reflected the percentage change in the odds score (i.e., if the beta value of the independent variable, which measured the size of the impact of the variable on the outcomes changed by 1, the expected beta value revealed the odds with which the case could be predicted), showed that the results were indeed robust. Similarly, the model chi-square showed that the results were indeed robust, as in all cases the final model chi-square was significant.

Also, the log likelihood score (-2LL), which showed how much unexplained information was in the model after it had been fitted suggested that the models were all valid as the -2LL for the initial model was less than the -2LL for the final model, which included all the variables.

Discussion of Results

The research embodied in this paper was geared towards a better understanding of the factors that impacted business failure among SMEs, using the resource-based view lens as the theoretical underpinning for the analysis of variables and data. Importantly, there was a common assumption in the literature that the same stock of resources would have an equal impact on a firm irrespective of the size of the firm. Most of the works that looked at impact of resources on firm performance had not controlled for firm size as an important variable (Campbell et al., 2012; Watson, 2007). An important contribution that this research has made to the literature was to model the same resources that impact business failure across different sizes of firms, that is, small and medium enterprises, in order to determine whether or not the statistical significance of the resources remained the same. The results from the analysis suggested some interesting findings.

When the data was modeled on all firms pooled together, that is, both small and medium-sized firms, the results suggested that all eight (8) proxies that were used as surrogates for resources were found to be significant in predicting business failure among small firms. Similar to previous works (e.g., Ahmad & Seet, 2009; Campbell et al., 2012; Watson, 2007) the results were in concert with the postulates of the resource-based view theory of the firm. In essence, it took the very general view that firms which had a larger stock of resources would no doubt have a stronger proclivity to survive.

Conversely, the greater the stock of resources, the lower the likelihood of failure among small firms. However, this general view hid the fact that the impact of different types of resources may vary based on the size of the business. One type of resource may have a different impact on failure in smaller firms versus medium-sized firm. This is an observation that the general literature missed. This study advanced this argument by testing the various resources across two categories of firms – small and medium-sized – to determine whether or not the impact of the resources on failure remains the same across the size category.

For firms categorized as medium-sized, the analysis suggested that not all variables that served as surrogates for resources significantly impacted business failure among this category of firms compared to the results for the pooled sample.

In the case of the medium-sized firms, the variables that were not found to be significant predictors of business failure among this group of firms were industry sector and revenue stock. This is to say, despite the amount of money that the firm had and irrespective of the industry sector in which it operated, it was not immune to failure. This is an important observation. Taking the lens of the resource-based view of the firm uncritically, it suggested that firms with large stocks of resources such as revenue found it more difficult to fail. The results here suggested otherwise. When firms reached a certain level of maturity, it required more than a large stock of resources to ensure survival. The continued existence of these firms was heavily dependent on managerial astuteness and leadership. It was how management created effective strategies to use these resources in the most efficient and optimum way that determined which firm survived and which ones would fail.

Similarly, for firms that were designated as small, the results from the analysis found that industry sector and not revenue stock had an insignificant impact on the likelihood of failure among these firms. Again, this result deviated from the findings in the pooled data, which suggested that industry sector was indeed a significant factor that impacted business failure among SMEs. It can be reasoned that the industry sector was found to be insignificant among small firms because all firms, despite their size, must compete in the industry in which they are located in order to survive. This argument was true for manufacturing as well as the services industry. In other words, all firms had to find coping strategies in order to remain open despite the industry sector in which they operated. However, the fact that revenue was significant in the case of the medium-sized firms and not in the category of small firms, suggested that size did impact the types of resources that were required to ensure business survival among the SMEs. For smaller firms that had not reached a mature stage in their life cycle, cash generated from revenue was critical to help them acquire additional physical and human resources that were needed to grow the business and ensure survival. Therefore, those small firms that had less revenue resources tended to find it more difficult to survive than those with a large stock of revenue resources.

Concluding Thoughts

The aim of the study was to understand whether size mattered in determining which resources were more critical in diagnosing business failure among SMEs. The

results revealed that indeed, SMEs should not be treated as a homogenous group when trying to understand the impact of resources on their survival or failure. Industry sector was found to not significantly impact business failure among firms that were categorized as small. Similarly, for firms categorized as medium-sized; industry sector and revenue stock were not found to have a significant impact on business failure at that level. Policymakers at the firm level and at the country level should recognize this important finding that small firms are not homogenous, and therefore, policies aimed at reversing the mortality rate among these firms need to be properly contextualized. The study also has implications for future research. Future researchers need to use other surrogates of resources to model whether or not the impact of various types of resources on business failure does vary across firm size. Likewise, future researchers can also use different measures of failure such as bankruptcy or other established measures in the extant literature (Mellahi & Wilkinson, 2004) to test whether or not this result holds.

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