Analyzing Business Failure in Relation to the Life Cycle of the Business and the Economic Cycle: A Study of Entrepreneurial Ventures in Hwange (Zimbabwe)

QUANTITATIVE ANALYSIS USING STAT 11 SOFTWARE
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Abstract
The research was aimed at establishing the relationships that exist among business failure, economic cycle and the life cycle (age) of the businesses under study using a quantitative data which was recorded and coded using the Stat 11 package. Qualitative methods were however employed to further compliment the quantitative methods, in which interviews were carried out to get respondents to clarify some ambiguous issues on the questionnaires administered. It was established from the results obtained that probability of business failure diminishes with age of the business and that of the owner as well. In a recession phase results indicated a negative impact on businesses as it was established that they lead to business failure and during a period of boom results showed a positive impact on business. It was further established that there are variations as to the magnitude of the factors that affect businesses with new firms being susceptible to failure than the old firms.

Key words: business failure, entrepreneurial life cycle, economic cycle

1.0 Introduction
A lot of entrepreneurial ventures have been sprouting all across the business environment in different sectors of the Zimbabwean economy but many have since closed shop of note are, Kariba Batteries in Gweru which manufactured batteries, Foseco Investments, APG Glendening in Gweru, Prices Candles, Manica Spark Plugs, Caridorn Abrasives. This prompted the researcher to investigate what lead to the failure of the businesses and further suggest recommendations as to how entrepreneurs can make their business at all the levels in the life cycle of the ventures and during the different phases of the economy.

The Zimbabwean scenario in the period 2000 up to date has seen the economy shrinking continuously and statistics according to the ministry of finance show that there has been a downward trend from 2009 where the economy stood at -17.7%, in 2010 it improved tremendously to 6%, in 2011 it grew by three percent from the previous year to 9% in 2012 it grew by 1.6% to 10.6% and in 2013 it is pegged at 4.4%, which is a fall from the previous year’s 10.6%. This downward trend has been attributed to businesses operating below capacity. A lot of factors can be attributed to failure of businesses and believing that new firms are at risk of failure by virtue of their newness would be an exaggeration of what obtains in reality. The research therefore aims to establish if there is a link between the stage at which the venture will be at in the organization’s life cycle and the probability of failure at the stage as well as the relationship that exist between failure of the entrepreneurial ventures and the economic cycle.

The research was also prompted by the belief by many authors who indicated that new ventures have a high degree of failure probabilities as compared to their older counterparts for example Douce (2005) put across a notion that young ventures are fragile in support to the work of Venkataraman et al (1990) where it was put across that in turbulent and dynamic environment young and new ventures are more susceptible to failure. The question is do the number of years operating in business impact or have a bearing on its probability of failure? What of the economic cycle? Is it not likely that every business old and new is affected? For example in a recession, the economy will be shrinking, capitalization becoming a challenge, inflation levels plummeting and the whole business environment becoming so turbulent that even those businesses that have been in business for years also fail to cope with the challenges.
2.0 Literature Review

2.1 Entrepreneurial Venture Defined and Explained:

According to Kruger (2004), an entrepreneurial venture is an undertaking or enterprise development involving a self-owned start-up business where the initiator is driven by a gain of some financial sort through utilizing an opportunity that could have risen in the business environment. An entrepreneurial venture is engineered around recognition of a need in the market, sourcing of resources (single sourcing or even multiple sourcing), creating and growing a business which will pay off in profit terms if it is successful. The undertaking is usually accompanied by a risk as the word venture implies. It is an undertaking that involves embarking on a business idea without the assurance that it will succeed but all the same the risk is taken with a fall back plan if the venture fails. Eisemann (2013) observed that an entrepreneurial venture is the pursuit of an opportunity despite the fact that resources available to the entrepreneur are controlled.

2.2 Entrepreneurial Life Cycle Defined:

The entrepreneurial life cycle refers to the different phases or stages which an entrepreneurial venture undergoes. (Stokes and Wilson 2006). The lifecycle involves the concept/test phase, development/abort stage, growth or decline stage, maturity stage and re-growth/decline. Hunter (2005), came up with his own stages of an entrepreneurial life cycle which encompassed the preparation stage, embarkation stage, exploration stage, expansion stage and transformation stage. The stages are the same but the terminology is different where terms like concept/test by Stokes and Wilson describes preparation stage on the life cycle proposed by Hunter, the works of the recent authors tend to draw inspiration from the works of previous authors like the life cycle proposed by Adizes (1979) and Bruce (1987) who proposed 10 stages and five stages respectively.

2.3 Economic Cycle Defined and explained:

According to the Elsby et al (2010), economic cycle refers to the rhythmic or alternating rises and falls in the economic activity of an entire economy in a given year or at the end of an economic year with these rises and falls sometimes extending for several years. An economic cycle is characterized by a peak phase, a recession phase, a trough phase and a recovery phase. The differential phases have a bearing on the operations of businesses in industry and commerce with the entrepreneurial ventures not exception to this. The effects of the different phases of the economic cycle are different on the operations of businesses; it can be positive or negative.

2.4 Causes of business failure in relation to the entrepreneurial cycle (age)

2.4.1 The turbulent and changing environment and the life cycle of the entrepreneurial ventures

Venkataraman et al (1990) Douce (2005), sighted that new firms find themselves susceptible to failure in the turbulent and unstable operating environment. Douce (2005) further notes that new ventures are the most fragile in the business environment. Mason (2009) further affirms that new firms face a great deal of competition from established ventures where they find it difficult to compete.

2.4.2 Age specifications and entrepreneurial venture failure

Rieg (2002), Insee (2002) and Santaro and Gaffeo (2009) borrowed the previous works of Keynes and burrows in as far as the age specifications are concerned where it was observed that the average age of survival of firms is four years and that years below four years, the rates are high. Rieg (2002), Insee (2002) and Santaro and Gaffeo (2009) support this notion, with Santaro and Gaffeo (2009) going on to say young ventures fail more than the old ventures

2.4.3 Management competence, experience and complacency

Zimmerer and Scarborough (2002), Thornhill and Amit (2003) believe that the extent to which management issues affect young and old firms is different with old ventures failing due to management complacency and with young ventures failing due to lack of experience and incompetence on the part of management and lack of financial resources. Mason (2009) further affirms that half of the new businesses fail because of poor
management. It should however be acknowledged that new firms can, from the onset have competent management with experience in the business.

2.4.4 Financial constraints on entrepreneurial venture failure

Meliani (2000), Cressy (2006) and Smida and Khelil (2008), postulated that financial constraints have a huge impact on the success of businesses with new firms being the ones which face challenges in accessing loans due to lack of collateral security and a track record to present to lending institutions.

2.4.5 Probability of failure of entrepreneurial ventures diminishing with age

Honjo (2000) carried a study on 2488 ventures and it was established that age has a bearing on failure of these ventures. Honjo observed that probability of failure increases with age within the first six years and thereafter the probability of failure decreases. Furthermore Lamonatagne and Thirion (2000), sighted that many young ventures fail and close down in their third birthday with Douce (200) and Cardon (2009) giving reasons to such as emanating from lack of experience and also Korosteleva (2011) and Nofsinger and Wang (2011) tending to differ by suggesting that some new firms can come in with a strong financial base cushioning them against failure.

2.4.6 Environmental and natural selection

Hannan and Freeman (1984), recognized the importance of the environment as a regulatory mechanism with firms being expected to do away with rigidity and stagnation if they are to survive in the turbulent environment, with Hernandez and Marco (2002) supporting this view by putting forward that inapt ventures are eliminated from the business environment by those that are adaptive to the changing environment. Harrigan (2005) also affirms to the above studies by putting across that some managers do not realize that a strategy that worked in the past cannot remain a working strategy due to the changing environment and in the same token, Metzeger (2006), also suggesting the theory of natural selection where there is eradication and elimination of ventures whose management and entrepreneurial competence is weak.

2.4.7 Management commitment, motivation and determination

Hatch and Zweig (2000), and Wiklund and Shapered (2001) suggest that a venture succeeds due to the motivation, the drive by the entrepreneur and the determination, lack of these is said to lead to failure of the ventures, with Joachim and Wilcox (2000) postulating that an entrepreneur must maintain a dogged persistence in the face of adversity and challenges in the business world and Wilson and Stokes (2006) observing that some ventures grow into a sizeable entity but due to lack of motivation on the part of the entrepreneurs leads to failure of the growing entities.

2.4.8 Voluntary and involuntary closure

Bates (2005), Headd (2003), Watson (1993) postulate that a business can from a successful sale voluntarily wind down or be hit by an involuntary closure or liquidation. This may be so due to the fact that the successful sale is not good enough to sustain the business and to keep it running and hence it can surprise a lot why a business failed to carry on after such a great and successful sale or on the extreme end the firm would have met its objectives and decides to wind up operations to protect their gains. This can happen to both young and old firms in the business world. In Zimbabwe Buscod Supermarkets which started operations in 2010 and was so successful an so popular in the retail sector but down the line in just after two and a half years, it started closing some small branches in Bulawayo, Victoria Falls and Hwange sighting that the small branches were not generating enough income to date all the supermarkets have since been closed with lawsuits looming.

In the same light of termination and closure, Bruno et al (1992), McGrath (1999), Sherpherd (2003), Singh (2007), sight that a business may close down due to it falling short of its goals and objectives thereby requiring involuntary termination and discontinuation of business.

2.4.9 Internal marketing and entrepreneurial venture failure

Gemin (2010), cited that even if the business environment is conducive small and young businesses face challenges that make them liable to failure such as failure to meet payrolls costs, maintaining and making long
range plans. Gemin (2010) also referred back to the observations made by Zimmerer and Scarborough (2002) and Nieman and Pretorius (2004) where it was noted that the success of the organization is largely influenced by internal constructs where an organization before it goes on to look into the market, it has to look from in within. In circumstances where the organization has management who have a wrong focus, management which is idea driven rather than what it can do with all its resources combined and what provides in the environment, opportunity to be precise, Zimmerer and Scarborough (2002) as well as Nieman and Pretorius (2004) point out that such a venture is at the verge of failing.

2.5 Five constructs by Fauchat and Gruber (2011)

2.5.1 Experiential knowledge

Zimmerer and Scaborough (2002), Headd (2003), Wilson and Stokes (2006) sighted lack of experience as the major factor which leads to failure of ventures especially the new ones as they face challenges in the environment such as rise in interest rates and decline in demand with which new firms lack the experiential knowledge to address such, as compared to the old ventures. Drawing from these previous studies, Fauchat and Gruber (2011), noted that since young firms will be starting off it means they do not have the requisite experience to formulate strategies for operation, which is however rarely the case with old ventures which can formulate and implement survival strategies.

2.5.2 Inadequate technical skills

Mason (2009) observed that lack of collateral security emanated from poor managerial skills where management itself fails to identify the requisite skills needed in the organisation because they themselves they do not have the necessary skills. To extend to this, Fauchat and Gruber (2011), suggest that young firms usually fail to equip themselves with the right technical skills due to financial constraints.

2.5.3 Uncompetitive pricing

Uncompetitive pricing was also cited as another construct which affect the growth and survival of young and new firms by Fauchat and Gruber (2011). Young firms tend to enter a market with a price skimming strategy where they charge a high price for their products so as to recover their costs and make a profit. These firms will be aiming to lower their prices gradually to lure and attract customers.

Fauchart and Grubber extended the works of Nieman and Pretorius (2004) where incorrect pricing was sighted as a cause of failure of young entrepreneurial ventures emanating from poorly understood cost behavior where the firm underestimates the costs it has to meet and when these costs manifest, the cost burden is passed on to the customers through high prices.

2.5.4 Operational capacity

Fauchat and Gruber (2011) observed that new firms can afford to establish themselves in the business environment but they face an uphill task in maintaining the business and keeping it afloat, this may largely be due to lack of consistent funding due to stringent borrowing conditions, uncompetitive pricing which leads to poor cash flows which is far much the case with old ventures.

Fauchart and Grubber extended previous researches by Zimmerer and Scarborough (2002) Nieman and Pretorius (2004) who had sighted that young firms find it hard to operate and meet their demands due to undercapitalization emanating from the very start of the venture where new ventures fail to access loan facilities as lending institutions are risk averse when it comes to new firms as they fear that these new firms may fail to service their loans rendering the lenders to a risk of never getting their money back. Zimmerer and Scarborough (2002) had to go further to point out that young and new firms tend to be affected by improper and ineffective inventory control characterized by overstocking resulting in high storage costs in which case they would not be having such facilities as storage centres, stock outs and run outs. This may be so due to the fact that the ventures will be new and may not have a consistent figure and a stable customer database as it will be keeping on fluctuating as customers try the new offering.
2.5.5 Unsupportive business environment

Gompers (2008), Gries and Naude (2011) and Fauchat and Gruber (2011) sight that young firms tend to suffer from a hostile business environment which can range from social factors such as cultural beliefs, religion, social classes and affiliations, economic factors like, inflation, high interest rates, stringent lending and borrowing conditions, political issues and ideologies, physical environment such as infrastructure and the natural environment and a vast other conditions have a bearing especially on the new firms which will be trying to establish themselves and survive in the business environment.

In the case of Zimbabwe according to a document released by the Committee on Small to Medium Enterprise Cooperative Development in 2011, there is no Act or legal platform set aside specifically for the small businesses and this has subjected new firms to hostility as they try to establish their businesses. It is by far the challenge faced by their older counterparts who now have links and connections to the system. This therefore renders the new and young firms vulnerable to failure due to unsupportive operating and business environment.

3. Methodology

According to Saunders et al (2009), an explanatory design is used to establish causal relationships that exist between variables. The purpose of this research is to establish the interrelationship that exists between the failure of entrepreneurial ventures, the life cycle of the venture as well as the economic cycle. In a refined way, the research is about establishing if there is a relationship between the age of the venture and failure of the venture and also the impact of the various economic stages of the economic cycle. A number of variables were looked into as proposed in the hypothesis testing section. Further more data was extended to statistical tests for example correlation and regression through the use of the Stat 11 package to bring about a clearer understanding of the relationships and draw conclusions.

Qualitative techniques were used with life stories being utilized. A life story is defined as an autobiographical narrative style by a social actor or a person of interest in a field of study within a precise interaction and this will be afforded through face to face interviews; this is according to Bayad and Barbot (2000). Life stories provide a better platform to get information on this under-researched field of study which shows a high degree of lack of empirical and theoretical researches relating to the failure of entrepreneurial ventures.

3.1 Target Population

Table 3.1: target population

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<thead>
<tr>
<th>Section</th>
<th>No of respondents</th>
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<tr>
<td>Owners of entrepreneurial ventures</td>
<td>17</td>
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<td>Key employees</td>
<td>8</td>
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<tr>
<td>Total</td>
<td>25</td>
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Source: Data base of the Hwange Local Board

The researchers also made use of both primary and secondary data sources and as for the primary data sources, the researcher made use of the questionnaires and interviews administered to interviewees drawn from the local authority’s database in an attempt to identify and analyze the interrelationships between failures of an organization, the life cycle of that organization and the economic cycle.

Simple regression analysis was used since there are two independent variables that is; age of the venture and the economic cycle and a dependent variable, business failure. The data was coded and results established through the use of the Stat 11 package. Since both qualitative and quantitative methods were used deductive and inductive techniques was made use to present and analyze the data.

4. Results and discussions

The discussion below is being drawn from the results obtained using the Stat 11 package and the full results are shown in the appendix section. The results were analyzed under the following proposed hypotheses:
H0: There is no interrelationship between business failure of an entrepreneurial venture, the lifecycle (age) of the venture and the economic cycle

H1: There is an interrelationship between business failure of an entrepreneurial venture, the lifecycle (age) of an entrepreneurial venture and the economic cycle

H0: There is no relationship between the age of an entrepreneurial venture and the failure of the venture

H1: There is a relationship between the age of an entrepreneurial venture and failure of the venture

H0: There is no relationship between entrepreneurial venture failure and the economic cycle

H1: There is a relationship between entrepreneurial venture failure and the economic cycle

4.1 Regression Results

Data was coded in the Stat 11 package where it was regressed to establish the relationships that exist between and among variables drawn from the life cycle of a venture and the economic cycle and business failure or business state. The variables used are explained as shown below:

4.1.1 Age

Age (a) has a negative coefficient of (-0.1282303) showing that there is an inverse relationship between age and business failure. It shows that as the business stays more and more in operations the probability of failure decreases.

4.1.2. Recession Phase

The recession phase (rf) has a negative coefficient of (-0.4021139) signifying that there is a negative relationship between business failure and a recession. The recession phase therefore results in a negative impact on a business.

4.1.3 Recovery Phase

The recovery phase (ref) has a negative coefficient of (-0.104901) showing that it has a negative impact on businesses. However the magnitude and the intensity is reduced as compared to the recession phase. The explanation to this may be because the economy will still be recovering and some of the adverse conditions still exist in the economy hence the negative value. The Zimbabwean economy showed some signs of recovery with the introduction of the multi currency system and according to the Trading Economics at www.tradingeconomics.com the economy of Zimbabwe picked up growing from a negative -17.7% in 2009 to a positive 6% in 2010.

4.1.4 Boom

A boom (b) phase of the economic cycle of (0.0168123) showing a positive coefficient signalling that it has a positive impact on the business. In this instance the degree and probability of failure is reduced. The positive value however is disputed by Nofsinger and Wang (2011) who observed that lending institutions are always risk averse and they require collateral security which in most instances new firms do not possess therefore leading to their failure despite the fact that it would be a boom in the economy. However Gompers (2008) had previously sighted that in a positive economic environment lending institutions extend loans even to new ventures since the risk of failure is reduced during a booming period in the economy.

4.1.5 Management Variables

Lack of management competence, experience, determination and motivation (lmgt) shows a negative coefficient of (-0.1163118) signalling a negative impact the lack of all these has on a business.
4.1.6 Loan

Loan (loan) carries a negative coefficient of (-0.1677973) showing that failure to obtain loans by new firms due to their lack of collateral security has a negative impact on their operations.

4.1.7 Operating Environment

The operating environment (envi) carries a negative coefficient of (-0.0785149) signalling that the operating environment in this instance ranging from competition, economic conditions, the rules and regulations in place affect businesses inversely.

4.1.8 Operational Capacity

Capacity (cap) is carrying a positive coefficient of (0.0346143) showing that there is a positive relationship between business failure and operating capacity. As lack of high levels of operational capacity increases business failure increases as well and the opposite is true when the deficiency of operational capacity decrease, the probability of failure of businesses decreases too.

4.1.9 Natural and Environmental Selection

Natural and environmental selection (nat) is showing a negative coefficient of (-0.0142091) postulating that indeed firms that flow in the opposite direction with what will be providing in the operating environment are affected negatively and in this instance they are the most vulnerable to be eliminated.

4.2 T-test

The t-test measures the significance of the independent variables in explaining the dependent variable. T-test figures in the appendix section in the regression table show that the independent variables are significant in explaining the independent variable. The figures for age (A) (-7.65), recession (Rf) (-7.88), recovery phase (Ref) (-2.28), lack of management competences, motivation, determination, experience (Lmgt) (-2.94), loan (Loan) (-3.74), operating environment (env) and natural selection (nat) (-0.49), are in the negative showing that these variables have a negative impact on the state of the business. Age and recession are showing large figures of -7.88 and -7.65 respectively which is a strong negative impact on the state of the business. In a recession period as indicated by the figure business failure is high. Age also shows a negative figure of -7.65 a sign also that the less the years the business is in operation, the higher the probability of failure. Other variables (recovery, management variables, loan, and operating environment) show a moderate impact on business state but the impact is still negative. A boom and operating capacity are indicating a positive figures (0.51) and 0.59 respectively which means they have a positive effect on the state of the business in this case failure and natural selection shows negative figure (-0.49) reflecting that although it has a figure less than 2 it still has a negative impact on the business state. Overall, the variables show that the variables used adequately explain the dependent variable.

4.3 R²

R² measures the degree of goodness of fit of the independent variables in explaining the dependent variable. A 96.26% percent value of R² was obtained showing that the variables used in a bid to establish the relationships that exist between business failures, the age of the business and the economic cycle are significant.

Adjusted R² is an error adjusted figure which is taken to avoid over estimating the impact of adding an independent variable on the amount of variability explained by the independent variables. In this instance an adjusted R² came out to be 93.86%. the figures are shown in the appendix section under the regression results.

4.4 Correlation

Correlation according to Saunders (2009) is the linear relationship that exists between the dependent variable and the various variables of the independent variable(s). According to Saunders if a 0.8 figure appear on the correlation table then it means the independent variables are affecting the dependent variables in the same way. The values in the table are less than 0.8 and therefore it means that each and every independent variable affects
the dependent variable in its own way different from the other variables. The correlation results are shown in the appendix section under the correlation results.

Basing on the results obtained from the field and what was obtained from the regression results, the correlation results shows that there are relationships that exist between business failure, the life cycle (age) of the venture and the economic cycle. The correlation table shows that the different variables that affect business failure are correlated and they affect the business in their own ways different from the other. It therefore follows that all the null (H0) hypotheses will be rejected from the three that were proposed in chapter 1 under the hypothesis section.

4.5 Qualitative Responses

4.5.1 Duration of the Business

The majority of the entrepreneurs have been in business for one year to six years. An extreme case was recorded where eight (8) year duration of business was sighted by one of the interviewee. The response shows that the majority of businesses fail in their early years. This is supported by Insee (2002), who did a study that most of the ventures that failed in the year 2001 were between the ages of one to four years. However the extreme case of eight years shows that even businesses in their late years can fail too.

4.5.2 Economic Cycle (recession, recovery, boom and peak) has on an Entrepreneurial Venture

The state of the economy was one of the major causes of business failure with the economic downturn which Zimbabwe has been experiencing from years back up to date being pointed as the most adverse phase on the economic cycle which has led to failure of the questioned ventures, this however goes against the findings of Strangler (2009) who sighted out that in recession most ventures succeed where the author did a research on Fortune 500 companies where most of them have succeeded in a period which coincide with a recession in America. This further shows that the economic conditions of developed nations are different from developing nations. A boom and a recovery phase in an economy were however pointed out to be a conducive operating environment for the success of ventures.

4.5.3 Zimbabwean Dollar Era versus the Multi Currency Era

The Zimbabwean dollar posed a lot of challenges for the entrepreneurs as they met difficulties in capitalizing their businesses and sourcing of resources. More so the local currency was subject to tremendous fluctuations which rendered it unstable affecting businesses adversely in projecting their cash flows and making budgets. The multicurrency system however brought sanity in the environment but most of the businesses found it difficult to make that transition to the multicurrency system as the Zimbabwean dollar totally lost its value.

5 Conclusion

- From the findings, it can be concluded that there are interrelationships that exists between business failure, the life cycle of the venture and the economic cycle as explained by the variables used in drafting the questionnaires and the structuring of interviews with the findings being regressed and the results showing that indeed there is a relationship that exist among business failure, the life cycle of the ventures and the economic cycle.
- It can further be concluded that there is a relationship between business failure and the life cycle (age) of the venture in question. The rate of failure of a venture diminishes with age, the more a venture stays in business the more it reduces its chances of failure by gaining experience and creating synergies which will make it survive.
- The findings also established that the there are variations that exist between developing nations and developed nations as what provides in the developed nations is not the same situation that provides in developing nations for example studies in developed nations like in the United States of America showed that in a recession business ventures actually succeed while in developing nations like Zimbabwe, business ventures fail in an economic meltdown as established by this research.

To this end it can therefore be concluded that all the null hypotheses in the hypothesis section can be rejected and the alternate hypotheses be accepted which state that there is a relationship which exist among the three variables (business failure, life cycle (age) and economic cycle).
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## APPENDICES

### Appendix 1: Data Set

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### Appendix 2: Results from the Stat 11 software

#### Mean standard deviation

Sorted by:

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<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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Regression results

```
.regression bs a rf ref b lmgt loan env cap nat
```

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<th>MS</th>
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<td>.253623188</td>
<td>Adj R-squared = 0.9386</td>
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```
|     | Coef.  | Std. Err. | t     | P>|t| | [95% Conf. Interval] |
|-----|--------|-----------|-------|-----|----------------------------|
| bs  |        |           |       |     |                            |
| a   | -.1282303 | .0162789 | -7.88 | 0.000 | -.163145, -.0933156 |
| rf  | -.4021139 | .0525612 | -7.65 | 0.000 | -.5148465, -.2893814 |
| ref | -.104901  | .0460866 | -2.28 | 0.039 | -.2037469, -.0060551 |
| b   | .0168123  | .0330813 | 0.51  | 0.619 | -.0541401, .0877647 |
| lmgt| -.1163118 | .0394972 | -2.94 | 0.011 | -.2010248, -.0315989 |
| loan| -.1677973 | .0448773 | -3.74 | 0.002 | -.2640496, -.071545 |
| env | -.0785149 | .0349228 | -2.25 | 0.041 | -.153416, -.0036129 |
| cap | .0346143  | .0589182 | 0.59  | 0.566 | -.0917527, .1690813 |
| nat | -.0142091 | .0288012 | -0.49 | 0.629 | -.0759815, .0475633 |
| _cons | 2.673944 | .2829325 | 9.45  | 0.000 | 2.067114, 3.280774 |

Correlation table

```
corr bs a rf ref b lmgt loan env cap nat
```

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<th>a</th>
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<th>ref</th>
<th>b</th>
<th>lmgt</th>
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