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## Detection and Prevention of Corporate Insolvency and Liquidation in Selected Businesses in Enugu and Anambra States of Nigeria

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### **Abstract:**

*Business Liquidation as the name implies has been one of the problems which every investor dreads and would always tries to avoid. This paper explores the existing literature that diagnostics of the companies' financial crisis in its first stage of development provides the company possibilities of overcoming the crisis further development, thus preventing insolvency and avoiding significant financial loss. Survey research methods were employed; and to establish the validity of the findings, four research hypotheses were formulated on the basis of the posed research questions and tested using statistical testing tools which include Pearson-product moment correlation, chi-square, simple regression and z-test. The research study established that businesses with inadequate working capital relative to their size of operations are more susceptible to business failure than those with adequate working capital. It recommends that an effective early warning information capable of alerting management of insolvency and financial crisis such as exceeding the limit of overdraft facility, inability to take advantage of discount available for bulk purchase, inability pay creditors on due date, exit of experienced employees etc. are found significant investors and management and/or organizations because it will help organizations to spot financial crisis and adopt early preventive measures and actions.*

**Keywords:** Liquidation, financial ratios, early warning information, indicators, corporate insolvency, financial crisis

### **1. Introduction**

Prevention they said is better than cure. The problem facing every business enterprises especially our case studied companies has been how to measure the solvency and liquidity position of their enterprises for the purpose of meeting their financial obligations as they fall due and to ensure going-concern of their entities. Express-diagnostics of the company's financial crisis, in a view of insolvency prevention, increases the company's ability to prevent occurrence of insolvency, providing an opportunity to quickly recognize upcoming financial crises or its milder symptoms. (Iveta M & Alona, 2016). According to SAS 1 'A business is considered a going concern if it is capable of earning a reasonable net income and there is no intention or threat from any source to curtail significantly its line of business in the foreseeable future (Ugwoke, 2010). Therefore, insolvency is a threat to corporate firms which demand for early detection and prevention to combat business failure, bankruptcy and liquidation.

The application of financial analysis tools such as current, quick and fixed asset ratios, creditors cover and liquidity index among others have not helped in stemming the rising rate of insolvency cases and business liquidation owing mainly to the fact that these tools are inadequately equipped to highlight futuristic financial problem spots (Enyi, 2005). In the period of economic stability, crisis is often considered as a negative phenomenon (Rosenblatt, 1989), and its development is related to certain changes. It is noticed that there is a strong link between the crisis and the changes, i.e. impulses of positively solved crisis will be reflected in successful company's development (Sakalas & Virbickaite, 2011). (Sakalas & Virbickaite, 2011) conclude that some researchers emphasize a positive impact of crisis onto the company's further economic development if the crisis situation diagnostics is carried out at its first stage. A consistent enterprise bankruptcy threat diagnostic system is required that would make it possible to comprehensively assess the enterprise's financial condition, as, if indications of crises situation are identified at its early stages, the company has a possibility to react quickly and to diminish threats of crises development (Garskaite-Milvydiene, 2014). Diagnostics of the company's financial/liquidity crisis in its first stage of development provides the company possibilities of overcoming the crisis further development, thus preventing insolvency and avoiding significant financial losses. In this context, the necessity of an early detection of the financial crisis symptoms, forecasting crisis development, and assessment of the crisis probability becomes crucial. A recent United States survey list of 4552 failed enterprises, which claimed that included in the list of liquidated business enterprise are those that employed high caliber managers who consistently and conscientiously applied all the existing tools of financial management to the later and yet went down just like those that never applied them at all (Dow Jones Economic Report, 2005). Many business enterprises have failed today due to their high dependent on the present tools of financial management such as current ratio and acid-test ratio to measure the solvency and liquidity position of their firms which have failed as a result of historic nature of those financial data used for such measurement.

However, bankruptcy and business liquidation will continue to take these tolls on business enterprise worldwide unless there is an effective and reliable prior information generation system to act as an early warning devices (EWDs) which will guide managers on the best way to avoid actions that could lead to insolvency in their daily decision making process. This study, therefore, will focus on finding remedial indicators that could serve as early warning devices (EWDs) to insolvency and other insolvency related problems rather than using only the present financial tools to predict and detect insolvency cases before they occur as they make use of stale information. Under the going concern assumption, an entity is ordinarily viewed as continuing in business for the foreseeable future with neither the intention nor the necessity of liquidation, ceasing trading or seeking protection from creditors pursuant to law or regulations.

Business liquidation is a process by which the life of a limited liability company is brought to an end. It is also known as winding up. Business enterprises are created into perpetuity but many could not stay as the owner(s) would want it due to some factors surrounding the business. Many business enterprises today have failed due to the fact that they lack the ability to set off their financial obligations and at the same time lack the ability to borrow. Companies in Nigeria are wound up in accordance with the provisions of the Companies and Allied Matters Act 1990. Winding up companies could be in three modes such as winding up by the court, voluntary winding up, and winding up subject to the supervision of the court (Ofoegbu, 2003).

Our primary concern, however, is not in finding a way of perpetuating the existence of a business concern as this may become undesirable at some point in time owing to the changing nature of universe and humanity itself, but it is in examining the strength of financial ratios in detection of corporate insolvency and finding business indicators that will provide operators with a fore knowledge about when a business life is threatened and how to reduce the threat or manipulate such a threat to the benefit of the business owners.

The general wide spread distress in the banking sector and other financial institutions in Nigeria of the late 1980s and 1990s led to the liquidation of many banks and other financial institutions. The fallout of the liquidation exercises caused widespread hardships on the banking public, which equally led to the collapse and liquidation of many non-bank organizations and bankruptcy of individual (s) as a result of the negative multiplier effect.

The American Accounting Association (AAA) report, 2006 has however shown that effective organizational decisions are those taken proactively. It equally suggests that most information generated from the present tools of financial management, especially ratio analysis, have largely failed to highlight insolvencies before they occur, because they are all generated from historical data (that is stale information) contained in income statements and balance sheets of an enterprise for a past period of operation. Insolvency in businesses can only be prevented if it can be detected or predicted early enough to enable any preventive decisions and actions.

### *1.1. Objectives of the Study*

Given the statement of the problem above, the broad objective of the study is to ascertain the relationship between adequate capital and longevity of a business enterprise while the specific objectives are as follows;

- To access the relationship between organization capital and the life span of a business enterprise.
- To identify the causes of insolvency and business failure.
- To examine the role of pricing decision on the performance and sustenance of organization performance and growth.

## **2. Research Questions**

For this study to accomplish its desired objectives, the following research questions are formulated.

- What Relationship Exists Between Organization Capital And Life Span Of A Business Enterprise?
- What Are The Causes Of Insolvency And Business Failure?
- Why Do The Present Tools Of Financial Management Such As Short-Term Solvency And Other Accounting Ratios Seem Unable To Spot Bankruptcy And Insolvency Cases Before They Occur?
- What Role Do Pricing Decision Play On Organizations Performance And Growth Sustenance?

## **3. Research Hypotheses**

Modern researchers agree that research whenever feasible should proceed from hypotheses. Therefore the following hypotheses were formulated for this study.

### *3.1. Hypotheses One*

There is a significant relationship between capital adequacy and longevity of a business enterprise.

### *3.2. Hypotheses Two*

Declining profit, accumulated losses, ineffective leadership, and inadequate control systems contribute to insolvency and business failure.

### *3.3. Hypotheses Three*

There are deficiencies in the current ratio and acid-test ratio that made them seem unable to detect insolvency cases before they occur.

### *3.4. Hypotheses Four*

Pricing decision has significant role to play on the performance and sustenance of organization growth.

#### 4. Review of Related Literature

Business failure is defined as unfavorable state of affairs in a business enterprise which make the continued existence as a "going concern" impossible, having continuously failed in its obligations to creditors, employees, contributors of capital and the general public. The recent economic meltdown down has woken researchers from economic, financial and other management science from sleep (Unegbu & Malgwi, 2013). There is a cancerous vermin called insolvency which is destroying corporate bodies with a devastating effect on cash economies. According to Heaton (2007), insolvency is like a cancer. The cancer is harmful because it will prevent the creditors from being paid according to its terms. In words of Atman (1983), "business failure occurs when an enterprise has come to its terminal end". Declining and dwindling financial fortunes normally precede failure (Goldstick, 1988). Many studies on organizational failure have adduced many factors as being responsible for the scourge.

Most of these studies especially those carried out abroad have fingered mainly critical deficiencies in the financial systems and financial management functions concerned. Whether it is referred as corporate governance or corporate management, what is important is the effectiveness on corporate existence. Other recent studies have listed the following as among the causes of organizational failure:

- Poor selection process for board members
- Lack of independence on the part of non-executive directors who are poorly remunerated, hence unwilling to accept responsibility.
- Non-financial literacy for most audit committee members.
- Non-disclosure of related party transactions and conflict of interest by board members and senior management.

Agwuma (1998), attributed the failure of banks to managerial ineptitude and insider causes in addition to exogenous factors such as macro-economic instability, economic recession and faulty fiscal policies. Also fingered, as having played a big role in bank failures is what he termed institutional factors. The institutional factors mentioned include; upsurge in the numbers of financial institutions, fraud, and insider transactions. It was on the basis of this that the central bank of Nigeria (CBN), decided to strengthen the banking sector through many innovative reforms that included the consolidation of banks to make for fewer but more powerful financial institutions in terms of larger capital base and better management teams. Uwah (2006:79), in his Business Times Editorial quoted central bank's operational report which revealed that as many as banks which were unable to meet the central bank of Nigeria's (CBN)'s consolidation requirements are currently listed as distressed and could be liquidated any moment. The consequences of this action on the depositors, employees and the nation as a whole can better be imagined than felt. The question now is, how did this distressed, which ultimately resulted into general insolvency in the affected banks come about? Meyer, (1996) looked at the reasons why businesses decline from both the economist and sociologist perceptions. Ordinarily, organizational decline can be understood to mean when a business enterprise is facing deteriorating demand, deteriorating resources or deteriorating performance. Typically, economists may be more concerned about demands and to some extent performance, while sociologists may be more interested in how the business resources are dwindling. There are several identifiable causes of organizational decline, which include but definitely not limited to age, stage of the organizational life cycle, technological obsolescence, faulty information processing and consumers change of taste. In all, the aforementioned causes of decline usually become pronounced and/or triggers off deteriorating demand, which in turn sets dwindling financial fortunes in motion. Specifically, the most dangerous of all the causes of decline can be traced to faulty information processing systems (Meyer, 1996).

Because information system which forms the major part of a firm's financial management function is undoubtedly the most important and most reliable feedback and feed-forward tool or managers of business entities. Such tools, which include ratio analysis and other forms of performance evaluation system, play important role in business enterprise. This is an undisputable fact and the relevance stems from the fact that faulty information processing can present a threat situation as strength situation or vice versa and acting on such spurious control information eventually would always lead to serious calamity for the concerned entity. To further expatiate on the deteriorating demand symptom, a look at the effects of demand will be necessary. Elementary economics would readily inform that demand is the driving force behind the successful production and marketing of any product or service (Samuelson, 1980). Demand intertwined with sound marketing and production policy/strategy which determines the performance and continued existence of any business organization. Deteriorating demand therefore, occurs when people decide to change their consumption taste or preferences for the organization's products and services. Change of taste of preferences is a function of whether there are substitutes or improved varieties of the firm's goods and services or that the firm is pricing itself out of the market. In whichever situation, deteriorating demand has been shown in Baden – Fuller (1989), to have the capacity to cause entire industry to decline.

Several other factors may contribute to the failure of an enterprise; prominent among such factors is financial distress which can result in insolvency. Child (1969), posited that a privately owned business enterprise cannot normally survive if it fails to return financial profits enough to meet its liabilities, that is service its debts, maintain its assets, sustain the income of its owners and give hope of better future to its employees,. In his own submission, Nelson (1981) noted that the common causes of business failure are

- Change in market
- Over and uncontrolled expansion;
- Lack of adequate and effective control systems; and
- Lack of effective leadership.

Goldstick (1988:419), was more comprehensive in his analysis of business failures. He presented a scaled table of causes which he called errors as follows:

Error No	Factor	%
1	Change in cost debts	23.3
2	Change in market	66.6
3	Change in Technology	13.3
4	Change in location	3.3
5	Change in key relationships	36.3
6	Over expansion	66.6
7	Over leverage	53.3
8	Over diversification	40.0
9	Single customer dependence	13.3
10	Lack of control systems	80.0
11	Dissension among key people	40.0
12	Ineffective leadership of the CEO	83.3

*Table 1: Goldstick's Causes of Business Failure  
Source: Goldstick (1988)*

Note: % rate represents the % of companies whose problems were caused by the named factors.

Thus, from the above analysis, the highest cause of the chief executive officer followed by inadequate control systems. Also significant were change in market and over-expansion. Other noted cause of business failure in Nigeria includes:

Improper capitalization faced with inability to procure credits to augment working capital, inefficient and ineffective management, poor product quality, labor related problem, inconsistent and strangulating government policies and regulations, inability to penetrating stay in the market, persistent losses from operations, over trading etc.

Osioma (1997) defined overtrading as "an over-investment of the liquid resource of a firm in illiquid assets, with the consequences that cash and near cash resources are so depleted that maturing business obligations cannot be met".

#### 4.1. Insolvency in Business

Insolvency has been identified as the major cause of most business liquidations worldwide. Insolvency is the condition of a person who is unable to meet his financial obligation as they fall due Ofoegbu (2003). Insolvency can also be defined as "the inability of an organization to meet the demands of its maturing current or long term liabilities owing to lack of liquid fund" corporate solvency on the other hand can be defined as the ability of an organization to stay financially afloat after attaining a state of financial buoyancy. In other words an organization, which is capable of maintaining the status of a "going concern", may be considered solvent. Sellers, McFarland and Hoffner (2002:721) in analyzing the decision of Canadian court on insolvency tried to distinguish between corporate insolvency, liquidity and balance sheet insolvency defined insolvency thus:

Insolvency occurs when;

- A corporation is unable to meet its obligation as they generally come due,
- A corporation has ceased meeting obligations as they generally come due.
- The property of the corporation at a fair value is not sufficient to enable payment of all obligations due and accruing due.

Thus, the first type of insolvency, they referred to as corporate insolvency", the second, they tagged "liquidity insolvency" and the last they called "Balance sheet insolvency".

Doelsch and Hammer (2002) identified another type of insolvency which they called "cross Boarder insolvency". Cross Boarder insolvency according to them exists where transactional firms are unable to generate sufficient revenue to satisfy their debt obligations. Their financial distress then creates a situation where assets and claimants are scattered across more than one country.

#### 4.2. Solvency Management:

It is one thing to come afloat but it is entirely a different ball game to remain or stay afloat. The management of organizational solvency is vested in the efficient manipulation of the makeup of the organization's working capital base. Now what do we mean by the working capital?

Working capital is a margin or buffer for meeting obligations within the ordinary operating cycle of the business (Osioma, 1997:252). In other words, working capital represents the circulating capital of an organization and it may comprise: stocks of trading goods, raw materials, working capital, debtors and other receivables, bank balances and cash, marketable securities and other short-term claims on third parties.

The definition of working capital is however, incomplete without the other side of the current liabilities – which includes short term claims by third parties on the business. In the true sense of it, working capital is the net difference between the organization's current assets and the current liabilities. The management of working capital is however, the function of financial management.

Financial Management refers to a decision making process in the prudent utilization of capital resources of a business enterprise (Okeke, 2000), financial management is that managerial activity which is concerned with the planning, acquisition, allocation, and control of financial resources of an organization in order to achieve the goal(s) of the organization with minimum financial discomfort and maximum benefit (Nwude, 2004:001). To achieve this objective, the firm needs to attain high efficiency in its financial management because the major reasons for the poor performance are usually weak and ineffective financial management.

#### 4.3. Tools of Financial Management

The first step towards attaining efficiency in financial management is by keeping accurate financial records and accounts. It is from the analysis of these records that information concerning financial operations and projections can be obtained. This information now forms the re-allocation of the organizational capital resources. The major tools of analysis for financial records are ratios. A ratio is the relationship that our number bears to another number (Ofoegbu, 2003:153). It can be deemed as a statistical relationship between figures, which are aimed at highlighting desirable and significant features. The common tool currently used for analysis of financial information includes:

##### 4.3.1. Business Solvency Ratios

- Current Ratio
- Quick /Acid test Ratio
- Creditors payment period
- Debt Total Asset Ratio
- Capital Adequacy Ratio.
- Debt /Equity ratio.

##### 4.3.2. Activity Ratio

- Inventory turnover
- Fixed Asset Turnover
- Total Assets Turnover.

##### 4.3.3. Profitability Ratios

- Net profit margin
- Gross profit margin
- Return on Equity (ROE)
- Return on capital Employed (ROCE).

###### 4.3.3.1. CurrentRatio

The current ratio also known as the working capital ratio measures the totality of all current assets against current liabilities. The current ratio is a crude measurement of the business solvency, as it affects the current liabilities only.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

###### 4.3.3.2. Quick ratio/Acid Test Ratio

Is a stricter measure of business solvency. It measures the quick assets (current assets minus stock and prepayments) against the totality of current liabilities. The ratio measures the firm's ability to pay off all short-term obligations out of cash and near cash items only (Osisioma, 2000:273).

$$\text{Acid Test Ratio} = \frac{\text{Current asset} - (\text{stock} + \text{prepayment})}{\text{Current liabilities}}$$

###### 4.3.3.3. Debt/Equity Ratio

This ratio reveals the relationship between shareholders' funds and long-term debt. It measures the extent of security for creditors. The shareholders equity includes ordinary shares and reserves.

$$\text{Debt/Equity Ratio} = \frac{\text{Long term Debt}}{\text{Shareholder's Equity}}$$

###### 4.3.3.4. Debt/Asset Ratio

Is a more stringent measure of asset ownership, as equity may not always sum up to total asset. It is a useful tool in the measurement of long- term solvency.

###### 4.3.3.5. Capital Adequacy Ratio

On the other hand, may be defined in terms of;

- Financial institution,
- Non-financial institution. For financial institutions, it measures the acceptable level of a bank's capital and it is expressed as a percentage of a bank's risk weighted credit exposure. For non- financial institution, it measures

current assets in terms of total assets, and it is used to show what proportion of the total assets is available to meet short-term obligations. It can also be said to a kind of measure of a firm's solvency (Osisioma, 1997:265).

#### 4.3.4. Activity Ratios

Which include inventory turnover, fixed Asset Turnover, total assets turnover and so on are ratios used in the measurement of the business bubble rates? For instance, inventory turnover rate measures the number of days debtors are allowed before payments for sales and remitted. This ratio is an important ingredient in the measurement of an effective solvency ratio.

#### 4.4. Working Capital Management

Working capital management is simply the management of investments/divestments in current assets and increases/decreases in current liabilities (Nwude, 2004:626). That is, management of current assets levels and arrangement of the short-term credit to finance the current assets investments. The management of working capital involves the determination of optimum level of working capital to keep, monitoring and controlling the level of individual components of working capital to ensure that the optimum level is not exceeded, and provision of funds to finance current assets. Poor management of working capitals results to liquidity problems which might lead to bankruptcy in very severe cases (Nwude, 2004:627). When an organization has insufficient working capital, it is said to be under-capitalized or overtrading. Symptoms of over-trading involves rapid growth in sales, current and fixed assets, high stock turnover, low average collection period etc. The common component of working capital for most organizations includes cash, debtors, receivables, inventories, marketable securities and redeemable futures. The condition as to the adequacy of each component is a matter of conjecture based on the stringent measure tailored in accordance with the need; size and scope of operations of the firm. Insolvency and other financial problems occur as a result of the inability of the management to identify this need, size and scope and the corresponding quantity of each component of working capital necessary for them.

#### 4.5. Theory of Business Cycles

The business cycle or economic cycle refers to the ups and downs seen somewhat simultaneously in most parts of the economy. The cycle involves shifts over time between periods of relatively rapid growth of output (recovery and prosperity), alternating with (contraction or recession). These fluctuations are often measured using the real gross domestic product and business failures follow this trend. To call those alternatives "cycles" is rather misleading as they don't tend to repeats at fairly regular time intervals. Most observers fund that their lengths (from peak to peak, or from trough to trough), vary, so that cycles are not mechanical in their regularity. Since no two cycles are alike in their details, some economists dispute the existence of cycles and use the word "fluctuations" (or the like) instead. Others see enough similarities between cycles that the cycle is a valid basis of studying the state of the economy. A key question is whether or not there are similar mechanisms that generate recessions and/or booms that exist in capitalist economics so that the dynamics that appear as a cycle will be seen again and again.

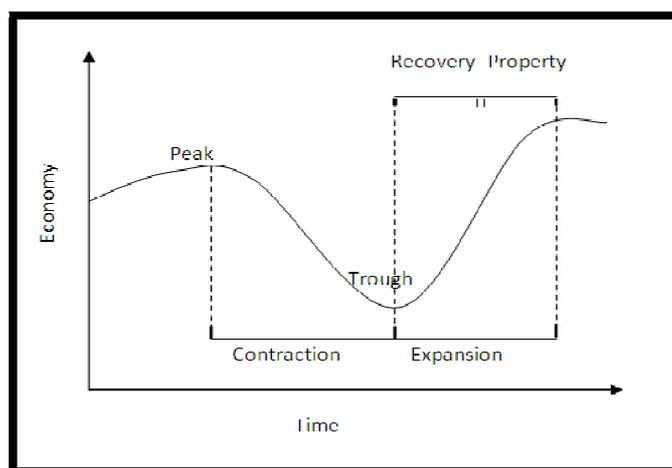


Figure 1: An Abstract Business Cycle  
Source: Ball (2004)

#### 4.6. Juglar Cycle

In the Juglar cycle, which is sometimes called the business cycle, recovery and prosperity are associated with increase in productivity, consumer confidence, aggregate demand, and prices. In the cycles before World War II or that of the late 1990s in his United States, the growth periods usually needed with the failure of speculative investments built or a bubble of confidence that bursts or deflates. In these cycles, the periods of contraction and stagnation reflect a purging of successful enterprises as resources are transferred by market forces from less productive uses to more productive uses. Cycles between 1945 and the 1990s in the United States were generally more restrained and followed political factors, such as fiscal policy and monetary policy. Automatic stabilization due to the government's budget helped defeat the cycle even without conscious action by policy-makers.

#### 4.7. Austrian School of Economics

The Austrian school of economics rejects the suggestion that the business cycle is an inherent feature of an unregulated economy and argues that it is caused by intervention in the money supply (Ball, 2004). Austrian school of economics follows Ludwig von Mises, point to the role of the interest rate as the price of investment capital guiding investment decisions. In an unregulated (free market) economy, it is posited that the interest rate reflects the actual time preference of lenders and borrowers. Some follow Knut Wicksell to call this the "natural" interest rate. In the opinion Ball (2004), Government control of the money supply through central banks disturbs this equilibrium such that the interest rate no longer reflects the real supply of and demand for investment capital. Austrian economists conclude that, if the interest rate is artificially low, then the demand for loans will be higher than the actual supply of willing lenders, and if the interest rate is artificially high, the reverse will be the case. This misinformation leads investors to misallocate capital, borrowing and investing either too much or too little in long-term projects (Ball, 2004). Periodic recessions, then, are seen as necessary "corrections" following periods of fiat credit expansion, when unprofitable investments are liquidated, freeing capital for new investment. The Austrian theory also predicts that imposition of artificially low interest rate, and the resulting increase in the supply of fiat credit, generates inflation, which obliges the control bank to increase the supply of credit yet further to maintain the artificially low interest rate, thus, prolonging the "boom" and worsening the inevitable "correction". Austrian school economists point to the detcom investment frenzy as a modern example of artificially abundant credit subsidizing unsustainable overinvestment. In the Keynesian view, this Austrian theory assumes that the "natural" rate of interest is unique at any given time and cannot be affected by policy. To Keynesian economists, this rate is only unique if the economy is assumed to always be at full employment. If the economy is operating with less than full employment that is with high unemployment rate, then in theory, monetary policy and fiscal policy can have a positive role to play rather than simply creating booms that necessarily collapse on themselves. It should be noted that, in the Austrian school, the absence of full employment is typically attributed to government interference in the labor markets, such as minimum wage laws, employment regulations, and taxes levied against employers, which prevent the employment market from fully clearing.

#### 4.8. Marxist School of Thought

According to Martegna and Stanley (1999), Michael Kalecki's Marxian – influenced political business cycle theory blames the government: he argued that no democratic government under capitalism would allow the persistence of full employment, so that recessions would be caused by political decisions; persistent full employment would mean increasing workers bargaining power to raise wages and to avoid doing unpaid labor, potentially hurting profitability. In recent years, proponents of the "electoral business cycle" theory have argued that incumbent politicians encourage prosperity before elections in order to secure re-election and make the citizens pay for it with recessions afterwards.

#### 4.9. Real Business Cycle Theory (RBC)

From recent trends in global economics and from experiences garnered during booms and recessions, it is pertinent to say that business failures follow the trend of economic fluctuations especially in the developed world. Taking United States as a reference point, it was apparent that economists have come up with many ideas to answer the question: what main factor influences and subsequently change the decision of all actors in an economy? The one which currently dominates academic literature was introduced by Kydland and Prescott (1982:526). They envision this factor to be technological shocks that is, random fluctuations in the productivity level that shift the constant growth trend up or down. Examples of such shocks includes innovations, bad weather, imported oil price increase, stricter environmental and safety regulations, and so on. The general argument is that something occurs which directly changes that effective of capital and/or labor. This in turn affects the decisions of workers and firms, who in turns affect what is bought and produced and thus eventually affect output. RBC models predict time sequences of allocation for consumption, investment, and so on, given these shocks.

But exactly how do these productivity shocks cause ups and downs in economic activity? Let us consider a good but temporary shock to productivity. This momentarily increases the effectiveness of workers and capital. Individuals face two types of tradeoff. One is the consumption investment decisions, since productivity is higher, people have more output to consume. An individual might choose to consume all of it today. But if he values future consumption, all that extra output might not be worth consuming in entirely today.

Instead, he may consume some but invest the rest in capital to enhance production in subsequent periods and thus increase future consumption. This explains why investment spending is more volatile than consumption. The life cycle hypothesis argues that households base their consumption decisions on expected lifetime income and so they prefer to "smooth" consumption over time. They will thus save (and invest) in period of high income and defer consumption of this to periods of low income. The other decision is the labor leisure tradeoff. Higher productivity encourages substitution of current work for future work since workers will earn more per hour today and less tomorrow. More labor and less leisure results in higher output today. More output means greater consumption and investment today.

On the other hand, there is an opposing effect: Since workers are earning more, they may not want to work as much today in future periods. However, given the procyclical nature of labor, it seems that the above "substitution effect" dominates this "income" overall, the basis, RBC model predicts that given a temporary shock, output, consumption, investment, and labor will rise above their long term trends and hence formulate into a positive deviation. Furthermore, since more investment means more capital is available for the future a short-lived shock may have an impact in the future. That is, above trend behavior may persist for some time even after the shock disappears. This capital accumulation is often referred to as an internal propagation mechanism. Since it converts shocks without persistence into highly

persistent shocks to output. Similarly, recessions follow a string of shock to the economy. If there are no shocks, the economy would just continue following the growth trend with business cycles.

#### 4.10. Challenges of Early Detection and Prevention of Insolvency

Prevention they say is better than cure. Business Information system or better still management Information Systems (MIS) exists to provide managers with tactical, strategic and operational information, which they require in the day –to –day running of their various organizations. The quality, accuracy and timeliness of these data determine the success and the effectiveness of the decision to be taken with them. Where information used in decision making is inaccurate, surely the outcome of the decision would be failure. In the same vein, if the data used in processing the information employed in the decision process is already stale, then the same measure of failure in the decision outcome is expected. The American Accounting Association MAS Report, 2006 has however shown that most effective organizational decisions are those taken or proactively. Why information generated from the present tools of financial management especially for analysis, have largely failed to highlight insolvencies before they occur is because they are all generated from historical data (that is stale information) contained in the balance sheets and statements of profit and loss of the enterprise for a past period. Insolvency can only be prevented if it can be detected or predicted early enough to enable early preventive measure and action.

#### 4.11. Going Concern Concept/ Indicators

The going concern assumption is a fundamental principle in the preparation of financial statements. Under the going concern assumption, an entity is ordinarily viewed as continuing in business for the foreseeable future with neither the intention nor the necessity of liquidation, ceasing trading or seeking protection from creditors pursuant to laws or regulations. Accordingly assets and liabilities are recorded on the basis that the entity will be able to realize its assets and discharge its liabilities in the normal course of business. There are explicit requirements in the Accounting Standards for Management to make a specific assessment of the entity's ability to continue as a going concern, and standards regarding matters to be considered and disclosures to be made in connection with going concern. For example, International Accounting Standards (IAS) 1, "Presentation of Financial Statements" states: "when preparing financial statements, management shall make an assessment of an entity's ability to continue as a going concern". Examples of events or conditions, which management will need to consider in its assessment which may individually or collectively cast significant doubt about the going concern assumption are set below. Items and or factors which always signify that a material uncertainty exists in a business enterprise are as follows:

- Exceeding the limit of overdraft facility.
- Inability to take advantage of discounts available for bulk purchase.
- Inability to pay creditors on due dates.
- Deficiency in the capital reserve.
- Dependence on short-term finance for long-term needs.
- Inability to recover debts.
- Default in interest and principal repayment.
- Overdue payments of PAYE deductions, employees' pension contributions etc.
- Consistent adverse or declining current ratio.
- Midway cancellation of major capital project.
- Declining material stock level
- Loss of key management personnel.
- Loss of franchise or major patent right.
- And many more.

#### 4.12. Working Capital as the Determinant of Life Span of Business Enterprises

The major determinant of the life span of a business enterprise is the adequacy of its capital base. The foundation of all business enterprise lies in the capital base of the organization. A business is as large as its capital base and as strong as its earning capacity. Capital is the amount set aside for the establishment and running of a business. To the economist, capital is a resource set aside for the production of future resources (Samuelson, 1980:45). Such resources may be tangible e.g. goods and fixed assets or intangible such as service, skills and knowledge. Osioma (1997) identifies two types of capital as follows:

##### 4.12.1. Fixed Capital

Which he defined as the money expended in the purchase of that which was sunk once and for all into the business (fixed assets), and

##### 4.12.2. Circulating Capital

Which was defined to include such items as stock in trade, which are parted with, and replaced by others in the ordinary course of business (working capital)? Thus, the capital of a business includes static and non- static elements.

The non- static element is that portion that expands with profit and appreciates with losses. This category of capital is the type that determines whether the business will continue to exist or not, and if so, at what rate. This of course, is the working capital of the business.

The capital structure of a company is composed of long term fund, medium term and short term funds (Emekekwe, 2005:204).

Capitalization, therefore, is the process of sourcing, maintaining and managing the capital base of a business enterprise in a manner that ensures the take-off, existence and growth of the enterprise. The method adopted for capitalization can have far reaching effects on the fortunes and life of an organization in the same way the main capital base can. Capitalization method has to do with.

- How the capital is sourced
- Source of capital e.g. equity or debt, and
- Types of capital and the overall leverage.

Osisioma (1997) posited that the primary interest of the investor is in the fixed capital of the firm while that of the creditor is in the nature and adequacy of the firm's working capital. As earlier mentioned, it is profit that builds and strengthens the capital base of a firm while losses dwindle it. A steady, robust and adequate capital ensures the continued growth and existence of the firm whilst cumulative losses that are picked up and carried forward have the tendency of eating up the capital and hence, endangering the going concern position of the firm.

Therefore, there is a perfect positive relationship between adequate capital and the life span of an organization.

#### 4.13. Instruments of Capital Maintenance

For an organization to have a steady, robust and adequate capital, it must be able to implement a highly efficient financial management policy capable of dynamically allocating and re-allocating organizational resources in a manner that generates and ensures maximum benefit to the organization as well as allow for the optimal use of such resources. Apart from the main core tools of financial management mentioned earlier, one other method employed to ensure capital maintenance is the strategic management accounting method.

According to CIMA (1984), strategic management accounting is the provision and analysis of management accounting data relating to a business strategy particularly the relative levels and trends in real costs and prices, volume, market share, cash flow and the demand on a firm's total resources.

Strategic management accounting is a part of general business strategic analysis which involves the understanding of the organization's business environment. Strategy analysis helps in the understanding and development of a conducive business environment upon which corporate profitability and solvency can be involved. Strategic management accounting, therefore, contains the analytical ingredients for corporate decisions making and for focusing on corporate solvency.

Such ingredients include; Cost volume profit analysis, Learning curve analysis, Pricing decisions, operational Break Even analysis etc.

#### 4.14. Pricing Decisions

Perhaps, the most strategic policy decision being made in any organization might happen to be decisions on the pricing of its products. Product pricing decisions are so important that the continued existence of the organization depends more or less on it. According to Glautier and Underdown (1997), a firm's long-term survival depends on its ability to sell its products at prices that will cover costs as well as provide a profit margin that will ensure a reasonable rate of return for investors.

According to Monroe (2003), price decisions are one of the most important decisions of management because it affects profitability and the companies' return along with their market competitiveness. Thus, the task of developing and defining price is complex and challenging, because the managers involved in this process must understand how their customers perceive the prices, how to develop the perceived value, what are the intrinsic and relevant costs to comply with this necessary, as well as consider the pricing objectives of the company and their competitive position in the market (De Toni & Mazzon 2013).

According to Hinterhuber (2008), price has a high impact on companies' profitability, and pricing strategies vary considerably between sectors and market situations. This work equally posited that the price that maximizes values must be the price that is capable of following the elasticity rule while ensuring that marginal cost will always equal or be lower than the marginal revenue. The choice of the percentage to be used as a mark-up will depend on the relative size of the non-product costs, the ability to sell the product in good time and the pricing policy of competitors. The important of this is captured in the contents of the 4 axioms of pricing as follows:

- Axiom 1: A product should be priced high enough to ensure
- Profitability and low enough to attract high sales volume.
- Axiom 2: If the price is too high one can price oneself out of the market, lose customers and encourage competitors.
- Axiom 3: If the price is too low, one loses money doing a thriving business.
- Axiom 4: The price is right when the producer recovers all his costs and Satisfies the demand of all parties in the business of the Organization, which includes: Creditors, employees, government, Investors, Customers and general public.

Thus, axioms 1 and 4 underscores the need for pricing decisions to reflect the total costs and in addition, add a mark-up on such costs as an incentive to undertaking the venture. This mark-up is essentially important as it forms that basis for profit maximization and for recovery of non-periodic and learning stage losses. Various methods of pricing maybe used and these include; Total or full cost pricing, Marginal cost pricing, return on investment (ROI) pricing, market based pricing, Market penetrating pricing, market skimming pricing etc.

According to Kodjo (2004:404), some of the more common demand-based pricing methods are briefly examined as follows: perceived value pricing, demand differential pricing, competitive based pricing, skimming pricing, penetration pricing, going rate pricing, and scaled bid pricing. Whichever method is contemplated by the firm, the most important thing is the complete recovery of cost and drive towards profit ability and sustenance of the firm's operational activities.

#### 4.15. Preventing Business Failure

An extensive review of a foregoing has been able to finger out the immediate and remote causes of business failure which were traced to such factors as financial, managerial, control, predictability and technical deficiencies. The question now is how can business failure be averted? To be able to provide an effective answer a firm has to:

- Determine its starting requirement
- Provide this capital in the right quantity and the right quality (Osisioma, 1997).
- Employ capable managers of resources with good training and adequate experience.
- Install, among other tools of working capital management, an effective early warnings information/technique capable of alerting management when trouble is around the corner.

#### 4.16. Research Design

Research design is simply a map or plan of action showing what and how the researchers carried out the step-by-step procedure to accomplishing the research task. Based on the nature of our study, survey research approach was adopted, which was based on data collected from questionnaire.

#### 4.17. Sources of Data

This work is a field one. For the purpose of this research work, data were obtained specifically from two sources namely: primary and secondary sources. Primary sources of data are sources from which raw data can be obtained. In collecting primary data for this work, three devices were employed thus: personal interview, observation, and use of questionnaire. By way of validating and authenticating the data obtained from the secondary sources, the researcher conducted a personal (oral) interview on the management and senior staff of the selected companies for the study.

The secondary sources involve the use of existing but related data, which were produced by earlier researchers for the purpose of contributing their quota to the problem under study.

In order to enhance the quality of information in the research work, the researcher made extensive use of accounting and business text books on related topics of study, academic journals extracts on related topics of study and accounting and management professional bodies bulletins.

#### 4.18. Instruments for Data Collection

Three data collection instruments were used in the generation of data necessary for analysis and subsequent conclusion. These instruments are questionnaires, informal and structured interviews and participant observation. The questionnaires were based on the research questions with a view to producing answers that were used to test the hypotheses.

#### 4.19. Population of the Study

The study population of this work comprises management and senior staff of four (4) selected manufacturing companies in Enugu and Anambra states of Nigeria. Judgmental approach was adopted to select the four indigenous and successful companies located in Enugu and Anambra states.

S/NO	Names of Companies	No of Management and Senior Staff
1	InnosonNig.Ltd	58
2	Emenite Ltd	44
3	JuheiNig.Ltd	85
4	Krisoral And Company Ltd	123
	Total	310

Table 2: Management and Senior Staff Strength of the Selected Companies  
Sources: Field Survey 2013.

#### 4.20. Sample Size Determination

The formula adopted in determining the sample size for this study is that pro-pounded by Taro Yamani (1964). The relevant formula is –

$$n = \frac{N}{1 + (Ne^2)}$$

Where,

- n = sample
- N = population size
- E = Error (0.05)
- I = Theoretical Constant.

Thus, applying this formula in determining the sample size for this study, we substituted as follow;

$$n = N$$

$$n = \frac{1 + (Ne^2)}{310}$$

$$n = \frac{1 + 310(0.05)^2}{310}$$

$$n = \frac{1 + 312(0.0025)}{310}$$

$$n = \frac{1 + 0.78}{310}$$

$$n = \frac{1.78}{310}$$

$$n = 174.64$$

$$n = 175$$

Therefore, the 175 questionnaire will be administered in the ratio of:

INNOSON NIG.LTD.....	$\frac{58}{310} \times 175 = 33$
EMENITE LTD .....	$\frac{44}{310} \times 175 = 25$
JUHEL NIG.LTD.....	$\frac{85}{310} \times 175 = 48$
KRISORAL \$ COY LTD.....	$\frac{123}{310} \times 175 = 69$

**5. Validity and Reliability of Instruments**

To ascertain that the instrument is reliable, test-re-test method was adopted in which 20 copies of the questionnaire was distributed to the firms understudy; five (5) copies to each firm. These were collected afterwards and re-distributed for the second time, the outcome of the test-re-test was determined using the Pearson-product moment correlation coefficient of reliability to ensure consistency in the items of the survey. The result gave reliability coefficient  $r = 0.94$ . Indicating a high degree of consistency.

Pearson-product moment correlation is calculated as follow:

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{n\sum x^2 - (\sum x)^2} \frac{n\sum y^2 - (\sum y)^2}{n\sum y^2 - (\sum y)^2}$$

- Where  $r$  = Correlation coefficient
- $n$  = Sample size
- $x$  = Average response of first test
- $y$  = Average response of second test.

	Av. Response (x)	Av. Response (y)	xy	X <sup>2</sup>	Y <sup>2</sup>
1	5	4	20	25	16
2	5	3	15	25	9
3	3	4	12	9	16
4	4	5	20	16	25
Total	17	16	67	75	66

Table 3: Reliability Test Table  
Source: field survey, 2013

$n = 20, \sum x = 17, \sum y = 16, \sum xy = 67, \sum x^2 = 75, \sum y^2 = 66$

$$r = \frac{20(67) - (17)(16)}{\sqrt{20(75) - (17)^2} \sqrt{20(66) - (16)^2}}$$

$$r = \frac{1340 - 272}{\sqrt{(1500 - 289) (1320 - 256)}}$$

$$r = \frac{1068}{\sqrt{(1211) (1064)}}$$

$$r = \frac{1068}{\sqrt{1288504}}$$

$$r = \frac{1068}{1135}$$

$r = 0.940969163$   
 $r = 0.94$

### 5.1. Validity of Instrument

To ascertain the validity of the instrument, the instrument was validated by lecturers in the Department of Accountancy and other Departments who examined the items and made sure they were in line with the objectives of the study. The structure and language of the questionnaire was modified in the light of their corrections. The instrument was structured in such a way as to minimize the effect of errors like inconsistency and ambiguity.

### 5.2. Models' Specification

The simple linear regression was used to measure the relationship between two variables. This is because of its simplest and essential components compared with other econometrics methods.

The model is specified as follows:

$Y = f(X)$  .....Functional relationship.

$Y = b_1 + b_2 X + E_i$ .....Regression Mode.

$BUSLIFE = f(CAPBASE)$

Where;

$Y$  = Dependent variable(Life span of a business enterprise. (BUSLIFE)

$X$  = Independent variable (Capital base of a business enterprise(CAPBASE).

$b_1$  = constant.

$b_2$  = coefficient of Independent variable.

$E_i$  = Error margin

$\Delta BUSLIFE$

$\Delta CAPBASE > 0$  and positive

$\frac{\Delta Y}{\Delta X}$

$> 0$  and positive

### 5.3. Model Justification

Our model is justified on simple linear regression as the determinant of life span of a business enterprise is its capital base.

## 6. Data Analysis Technique(S)

The analysis of data is subject to simple statistical treatment organized and presented in tables and percentages. Hypotheses were tested using under listed statistical tools.

### 6.1. The Pearson-Product Moment Correlation

For the purpose of determining the relationship between organization capital and life span of a business enterprise, the Pearson-product moment correlation coefficient( $r$ ) was used.

#### 6.1.1. Formula

$$r = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Chi- Square ( $\chi^2$ ) test:  
Hypothesis was tested using Chi-Square( $\chi^2$ )  
 $\chi^2 = \sum \left( \frac{O - E}{E} \right)^2$

Where  $\chi^2$  = value of the Chi- Square calculated

$O$  = observed frequency

$E$  = expected frequency

The calculated chi-square( $\chi^2$ ) will be compared with the tabulated chi square using the normal level of significance of which leaves 95% confidence interval. The degree of freedom is given by  $(R-1)(C-1)$  = number of column and row in the contingency table, the contingency table show the observed and expected frequencies. The difference between the calculated values of the chi-square will form the base for accepting or rejecting the null hypotheses.

z -test:

$$Z = \frac{x - \bar{\mu}}{\frac{S}{\sqrt{N}}}$$

Where  $x$  = Population means

$\bar{\mu}$  = Sample mean

$S$  = Standard deviation

$n$  = Sample size

The simple linear regression:

This regression model examines the relationship between a dependent variable and only one regressor (one independent variable).

$$Y = a + bx$$

### 6.2. Presentation and Analysis of Data

This is concerned with the presentation and analysis of data gathered from the questionnaire administered on management and senior staff of four (4) selected companies and analysis was done in such a way as to allow a smooth flow that enabled conclusions to be drawn for policy making.

### 7. Distribution and Return Questionnaire

Category	Number	No Returned	% Returned
InnosonNig Ltd	33	33	100
Emenite Ltd	25	25	100
JuhelNig Ltd	48	48	100
Krisoral&Coy Ltd	69	67	97
Total	175	173	99

Table 4: The Questionnaire Was Distributed to All the Companies as Follows:

Source: Field Survey, 2013

Table 4 shows that out of 33 questionnaires administered to management and senior staff of Innoson Nigeria Ltd 33(100%) were completed and returned, out of 25 questionnaire administered to management and senior staff of Emenite Ltd, 25(100%) were completed and returned, out of 48 questionnaire administered to management and senior staff of JuhelNig.Ltd, 48(100%) were completed and returned and out of 69 questionnaire administered to Krisoral&Coy.Ltd, 67(97%) were completed and returned. And this number was used for the presentation and analysis of data. However, only data collected in respect of the research questions were dealt with in the presentation and analysis of data.

S/N	Questions	% of responses					Mean Score of Responses		
		5	4	3	2	1	Mean	SD deviation	COV
		%	%	%	%	%			%
1	The longevity of an enterprise is highly dependent on its capital base	64	30	1	5	0	4.53	0.93	20.53
2	The steady, robust and adequate capital ensures the continued existence and growth of an enterprise.	85	14	1	0	0	4.84	0.34	7.02
3	There is a perfect positive relationship between adequate capital and the long life span of an enterprise.	48	46	4	1	1	4.39	0.71	16.17
4	The method adopted for capitalization has far reaching effects on the fortunes and life of an enterprise	44	22	5	26	3	3.78	1.32	34.92

Table 5: Distribution of Responses in Respect to Capital Adequacy and Longevity of a Business Enterprise

Source: Field Survey, 2013

Table 5 shows that 90% of the respondents were of the opinion that the longevity of a business enterprise is highly dependent on its capital base. 98% of the respondents were agreed that a steady, robust and adequate capital ensures that continued existence and growth of an enterprise. 94% of the respondents agreed that there is positive relationship between adequate capital and life span of an enterprise. 66% of the respondents suggest that the method adopted for capitalization has far reaching effects on the life of an enterprise.

S/N	Questions	Expected Mean = 3					% of Responses					Mean Score of Responses		
		5	4	3	2	1	Mean	SD deviation	COV					
		%	%	%	%	%			%					
1	Declining profit causes insolvency and business failure	58	39	0	3	0	4.52	0.66	14.6					
2	Ineffective leadership and inadequate effective control system are the major causes of insolvency and business failure	83	14	3	0	0	4.8	0.47	10.49					
3	Accumulated losses and over trading are common causes of insolvency and business failure	46	48	3	2	1	4.36	0.73	16.74					
4	Poor quality product and changes in market causes failure of business enterprises	43	45	5	3	4	4.2	0.96	22.86					

*Table 6: Distribution of Responses on the Causes of Insolvency and Business Failure  
Source: Field Survey, 2013*

Table 6 shows that 97% of the respondents agreed that declining profit causes insolvency and business failure. 97% of the respondents were of the opinion that ineffective leadership and inadequate effective control systems are the major cause of insolvency and business failure of many businesses in Nigeria. 94% of the respondents agreed that accumulated losses and over trading causes insolvency and business failure. 88% of the respondents agreed that poor quality and change in market also causes business failure.

S/N	Questions	Expected Mean = 3					% of Responses					Mean Score of Responses		
		5	4	3	2	1	Mean	SD deviation	COV					
		%	%	%	%	%			%					
1	Current ratio has failed to restore creditors' confidence on liquidity position enterprises	60	33	1	4	2	4.45	0.85	19.1					
2	There are deficiencies in the current ratios, acid test ratio to detect insolvency cases before they occur	69	20	2	5	4	4.45	1.03	23.15					
3	Working capital management tools have failed in the detection insolvency cases due to the stale nature of financial information	41	42	1	11	5	4.03	1.14	28.15					
4	Capital adequacy ratio which measures a firm's proportion of total assets in terms to meet short-term obligations has failed to detect insolvency cases	16	37	13	23	11	3.24	1.27	39.2					

*Table 7: Distribution of Responses on the Present Tools of Financial Management Such as Short-Term Solvency and Other Accounting Ratios to Spot Bankruptcy and Insolvency Cases Before They Occur  
Source: Field Survey, 2013*

Table 7 shows that 93% of the respondents agreed that current ratio has failed to restore creditor confidence on liquidity position of an enterprise. 89% of the respondents favors the idea that there are deficiencies in current ratio to detect insolvency cases before they occur. 83% of the respondents agreed that working capital management tools have failed in detecting insolvency case due to the stale nature of financial information. 53% of the respondents agreed that capital adequacy ratio which measures a firm's proportion of total assets in terms to meet short-term obligations has failed to detect insolvency cases.

S/N	Questions	Expected Mean = 3					% of Responses					Mean Score of Responses		
		5	4	3	2	1	Mean	SD deviation	COV					
		%	%	%	%	%			%					
1	A firm's long-term survival depends on its ability to sell its products at prices that will cover costs as well as provide a profit margin	42	45	1	8	4	4.13	1.05	25.42					
2	Pricing decisions play a significant role on performance and sustenance of organizations growth.	62	23	5	6	4	4.33	1.08	24.94					
3	Pricing policies shape organization business and products so that they yield target profit and growth	30	48	11	10	1	3.96	0.97	24.49					
4	Most establishment depends on their pricing policies to survive	32	39	5	15	9	3.7	1.3	35.14					

*Table 8: Distribution of Responses on the Role of Pricing Decisions on Performance and Sustenance of Organization Growth  
Source: Field Survey, 2013*

Table 8 shows that 87% of the respondents agreed that a firm's long-term survival depend on its ability to sell its product at prices that will cover costs as well as provide a profit margin. 85% of the respondents agreed that pricing decision play a significant role on performance and sustenance of organization growth. 78% of the respondents suggests

that pricing policies shape organization business and products so that they yield target profit and growth. 71% of the respondents agreed that most establishments depend on their pricing policies to survive.

### 7.1. Hypotheses Testing

This study has five (5) hypotheses which were tested with aid of Microsoft assisted packed SPSS version 15. As earlier stated, Pearson-product moment correlation( $r$ ) was used to test hypothesis 1, Chi-square was used to test hypothesis 2, while Z – test used to test hypotheses 3&4. The computed hypotheses were presented as follows.

### 7.2. Hypothesis One

- $H_0$ : There is no positive relationship between organizational capital and life span of an enterprise.
- $H_1$ : There is a positive relationship between organizational capital and life span of an enterprise.

#### 7.2.1. The Test

The study in this test, ascertained whether organizational capital has significant influence on life span of a business enterprise or not in the four(4) selected manufacturing organizations. Based on the condensed outcome of the four questions administered for testing hypothesis 1 and aggregated response from the four organizations, Pearson-product moment correlation was employed to test the strength of the relationship between the variables. Using the special package for social science (SPSS) the result below emerged.

	Mean	Std. Deviation	N
Organization capital	1.5700	1.05388	346
life span of a business enterprises	1.9100	1.10817	346

Table 9: Descriptive Statistics

		Organization Capital	Life Span of A Business Enterprises
organization capital	Pearson Correlation	1	.840(**)
	Sig.(2-tailed)		.000
	N	346	346
life span of a business enterprises	Pearson Correlation	.840(**)	1
	Sig.(2-tailed)	.000	
	N	346	346

Table 10: Correlations

\*\* Correlation is significant at the 0.01 level (2-tailed)

Table 9 shows the descriptive statistics of the relationship between organization capital and life span of a business enterprises, with a mean response of 1.5700 and std. deviation of 1.05388 for organizational capital and a mean response of 1.9100 and std. deviation of 1.10817 for life span of a business enterprises. By careful observation of standard deviation values, it can be said that there is about the same variability of data points amongst the dependent and independent variables.

Table 10 is the Pearson correlation coefficient matrix of the relationship between organizational capital and life span of enterprises, showing the correlation coefficient, significant values and the number of cases. The correlation coefficient shows 0.840 this value indicates that correlation is significant at 0.05 level (2tailed) and implies that there is a positive relationship between organizational capital and life span of a business enterprises ( $r = .840$ ). However, the computed correlations coefficient is greater than the table value of  $r = .195$  with 344 degrees of freedom ( $df. = n-2$ ) at alpha level for a two-tailed test ( $r = .840, p < .05$ ). This result indicates that there is a positive relationship between organizational capital and life span of an enterprise. Therefore, the null hypothesis should be rejected.

### 7.3. Hypothesis Two

- $H_0$ : Declining profit, accumulated losses, ineffective leadership and ineffective control system are not the major cause of insolvency and business failure.
- $H_1$ : Declining profit, accumulated losses, ineffective leadership and ineffective control system are the major cause of insolvency and business failure.

#### 7.3.1. The Test

The study in this test, ascertained whether declining profit, accumulated losses, ineffective leadership and ineffective control system cause organization insolvency and business failure or not in the four selected manufacturing organizations: Based on the condensed outcome of the four (4) questions administered for testing hypothesis 2 and aggregated response from the four organizations, chi-square was employed. Using the special package for social science (SPSS) the result below emerged.

			Selected firms				Total
			Innoson	Emenite	Juhel	Krisoral	
declining profit, accumulated losses, ineffective leadership and ineffective control system are the major cause of insolvency and business failure	Strongly agree	Count	21	27	21	50	119
		Expected	19.6	18.9	28.2	52.3	119.0
	Agree	Count	21	15	51	87	174
		Expected	28.7	27.7	41.2	76.4	174.0
	Undecided	Count	11	9	7	11	38
		Expected	6.3	6.0	9.0	16.7	38.0
	Disagree	Count	3	3	2	2	10
		Expected	1.6	1.6	2.4	4.4	10.0
	Strongly disagree	Count	1	1	1	2	5
		Expected	.8	.8	1.2	2.2	5.0
Total		Count	57	55	82	152	346
		Expected	57.0	55.0	82.0	152.0	346.0

Table 11: Declining Profit, Accumulated Losses, Ineffective Leadership and Ineffective Control System Are the Major Cause of Insolvency

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	129.199(a)	12	.686
Likelihood Ratio	19.886	12	.626
Linear-by-Linear Association	.000	1	.995
N of Valid Cases	346		

Table 12: Chi-Square Tests

Table 12 is the output of the computed Chi-Square values from the cross tabulation statistics of observed and expected frequencies with the response options of agree and disagree based on the responses of the research subjects from four firms. Pearson Chi-Square computed value ( $X^2_c = 129.199$ ) is greater than the Chi-Square tabulated value ( $X^2_t = 21.03$ ) with 12 degrees of freedom (df) at 0.05 level of alpha ( $X^2_c = 129.199$ ,  $p < .05$ )

#### 7.4. Decision Rule

The decision rule is to accept the alternate hypothesis if the computed Chi-Square value is greater than tabulated Chi-Square value otherwise reject the null hypothesis.

#### 7.4.1. Decision

Since the Pearson Chi-Square computed  $X^2_c = 129.199$  is greater than Chi-Square table value  $X^2_t = 21.03$ , the null hypothesis is rejected and alternate hypothesis is accepted. Thus, we conclude that declining profit, accumulated losses, ineffective leadership and ineffective control system are the major cause of insolvency and business failure.

#### 7.5. Hypothesis Three

- Ho: there are no deficiencies in the present tools of financial management that made them seen unable to detect insolvency caused before they occur.
- Hi: There are deficiencies in the present tools of financial management that made them seen unable to detect insolvency causes before they occur.

#### 7.5.1. The Test

The study in this test, ascertained whether there are deficiencies in the present tools of financial management or not in the four (4) selected organizations. Based on the condensed outcome of the four questions administered for testing hypothesis 4, z-test was employed. Using the special package for social science (SPSS) the result below emerged.

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
Apparent deficiencies in the present tools working capital management which rendered their use ineffective in detection and prevention of corporate insolvency and liquidation before they occur	346	1.8375	1.09044	1.00	5.00

Table 13: Descriptive Statistics

		<b>Apparent deficiencies in the present tools working capital management which rendered their use ineffective in detection and prevention of corporate insolvency and liquidation before they occur</b>
N		346
Normal Parameters(a,b)	Mean	1.8375
	Std. Deviation	1.09044
	Most Extreme Differences	
	Absolute	.276
	Positive	.276
	Negative	-.221
Kolmogorov-Smirnov Z		5.515
Asymp. Sig. (2-tailed)		.000

Table 14: One-Sample Kolmogorov-Smirnov Test

a. Test Distribution Is Normal

b. Calculated From Data

### 7.6. Decision Rule

The decision rule is to accept the alternate hypothesis if the computed Z computed value is greater than Z tabulated value otherwise reject the null hypothesis.

#### 7.6.1. Decision

Since the Z computed = 5.515 is greater than Z table value = 1.960, the null hypothesis is rejected and alternate hypothesis is accepted. Thus, we conclude that there are apparent deficiencies in the present tools working capital management which rendered their use ineffective in detection and prevention of corporate insolvency and liquidation before they occur.

### 7.7. Hypothesis Four

- H<sub>0</sub>: Pricing decision has no role to play on performance and sustenance of organization growth.
- H<sub>i</sub>: pricing decision has role to play on the performance and sustenance of organization growth

#### 7.7.1. The Test

The study in this test, ascertained whether pricing decisions play significant roles on performance and sustenance of organization growth or not in the four (4) selected organizations. Based on the condensed outcome of the four questions administered for testing hypothesis 5, z-test was employed. Using the special package for social science (SPSS) the result below emerged.

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
pricing decision has greater role to play on performance and sustenance of organization growth	346	2.2775	1.20379	1.00	5.00

Table 15: Descriptive Statistics

		Pricing Decision Has Greater Role to Play on Performance and Sustenance of Organization Growth
N		346
Normal Parameters(a,b)	Mean	2.2775
	Std. Deviation	1.20379
Most Extreme Differences	Absolute	.236
	Positive	.236
	Negative	-.144
Kolmogorov-Smirnov Z		4.723
Asymp. Sig. (2-tailed)		.000

Table 16: One-Sample Kolmogorov-Smirnov Test

a. Test distribution is Normal

b. Calculated from data

### 7.8. Decision Rule

The decision rule is to accept the alternate hypothesis if the computed Z computed value is greater than Z tabulated value otherwise reject the null hypothesis.

#### 7.8.1. Decision

Since the Z computed = 4.723 is greater than Z table value = 1.960, the null hypothesis is rejected and alternate hypothesis is accepted. Thus, we conclude that pricing decision has greater role to play on performance and sustenance of organization growth.

### 8. Conclusion

In conclusion, this paper focus on detection and prevention of corporate insolvency and liquidation in selected businesses in Enugu and Anambra states. We discussed insolvency and liquidation from the following perspectives such as business failure, insolvency in business and solvency management, tools of financial management, challenges of early detection and prevention of insolvency, pricing decision as a measure to recoup business sustenance, preventing business failure, working capital as a determinant of life span of business enterprises. This study laid emphasis on the fact that why information generated from present tools of financial management especially for analysis, have largely failed to highlight insolvency before they occur is because they are all generated from historical data and insolvency can only be prevented if it can be detected or predicted early enough to enable early preventive measures and actions.

In addition, the provision of capital in its right quantity and the right quality (Osisioma, 1997) and to install, among other tools of working capital management, an effective early warning information capable of alerting management of insolvency and financial distress such as; exceeding the limit of overdraft facility, inability to take advantage of discount available for bulk purchase, inability to recover debt, inability to pay creditors on due date, loss of franchise or major patent right, loss of key employees etc. Future research should make an attempt to develop a well-balanced futuristic financial model that can be applied systematically to access companies financial situation and a detection of possible indication of financial crisis rather than solely dependent on the existing tools of financial management that are weak in detection of financial crisis and insolvency that led to bankruptcy and liquidation.

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