



Research Paper

Investment monitoring systems and corporate financial performance of oil and gas multinationals in Port Harcourt

FYNEFACE NMECHA AKANI¹ and ORJI, LOVEDAY²

¹Department of Accounting, University of Port Harcourt, Rivers State, Nigeria.

²Local Government Council, Rivers State, Nigeria.

*Corresponding author E-mail: orji_loveday@yahoo.com.

Received 1 October 2016; Accepted 29 November, 2016

The paper examines Investment Monitoring Systems and Corporate Financial Performance of Oil and Gas Multinationals in Port Harcourt. Investment Monitoring System is the quantitative and qualitative mechanisms by which the performance of a firm's investment or project is appraised. Corporate financial performance comprises of the processes by which monetary gains can be attained for an organization and its stakeholders based on the set goals and objectives. The paper concludes that investment monitoring system is a mechanism used to assess the achievement of a firm in terms of business transaction and project execution for the purpose of determining the valuable use of monetary resources and time for the benefit

of an organization. The aim of monitoring investment is to examine how funds are put into proper usage for the growth, survival and development of an organization or business. The paper recommends that oil and gas multinationals should use strategic processes to assess their investments; oil and gas multinationals should adopt project appraisal techniques that will enable them realize the money- worth of their investments; and oil and gas multinationals should use capital budgeting approach to make decisions that will maximize value for money.

Key words: Corporate Financial Performance, Investment Monitoring System

INTRODUCTION

Over the years, a lot of researches have been carried out on Investment Monitoring Systems in the Accounting field. This is because corporate bodies are eager to assess the investments that would enhance their financial performance. Some scholars are of the view that Investment Monitoring Systems are related to the capital budgeting (Harrison, 2000; Ibenta, 2005); while, others are of the view that the concept is relatively connected to the processes by which organizations apply appraisal techniques to ascertain the performance of projects that were executed in relation to the returns that would be obtained (Ama, 2005). Existing literatures have shown that investment appraisal, in other words, investment monitoring systems play a huge role by helping in the

management of the affairs of a firm due to the fact they have the ability to provide sound and reliable information on the firm's economic outcome or say, results and its effect on the economic efficiency of the firm (Harrison, 2000). Monitoring investment is an approach that provides the decision maker with a framework to be used as a guide for effectively allocating corporate financial resources. Investment is the commitment of capital to a properly identified and packaged project, and it is a production process that involves financial commitment or transaction with a return or yield (Ama, 2005; Harrison, 2000). Thus, setting aside resources with the intent of putting it in an investment without first of all having a clear idea of what the divisional strategy and corporate

strategy are bear serious risk (Harrison, 2000; Ibenta, 2005, Ama, 2005). Consequently, the performance of a multinational firm is enhanced based on the approaches it adopts to appraise or monitor its investment; and these approaches include: the non-discounted cash flow, which is comprised of Pay-Back Period, Average Rate of Return; the Accounting Rate of Return and Ranking by Inspection; while, the others are discounted cash flow, which are the Net Present Value, Internal Rate of Return, Profitability Index, and the Discounted Payback appraisal techniques (Ama, 2005). The use of funds to get expected returns is very crucial to multinational organizations. No organization will be ready to waste their time and money in non-profitable investments or projects. The process of achieving success in investment and project execution requires a lot of decision-making for managers. Thus, information on the investment to be performed are gathered and analyzed in relation to the economic events of the organization so as to position it for greater success. Therefore, this article intends to ascertain how Net Present Value can influence financial performance of a multinational firm; and investigate into how pay-back period can enhance the financial performance of a multinational firm.

RESEARCH QUESTIONS

Specified next are research questions that have been developed to give focus in this very present study. And the questions are:

1. What is the extent of relationship between payback period and corporate profitability?
2. What is the relationship between payback period and return on investment?
3. How can net present value affect corporate profitability?
4. How can net present value influence return on investment?

RESEARCH HYPOTHESES

Based on the research questions, the following hypotheses were developed.

H₀₁: There is no significant relationship between payback period and corporate profitability.

H₀₂: There is no significant relationship between payback period and return on investment.

H₀₃: There is no significant relationship between net present value and corporate profitability.

H₀₄: There is no significant relationship between net present value and return on investment.

Theoretical framework

Corporate bodies monitor or appraise investments by finding out the cost of investment and economic benefits

arising from their use, objectives and to select the best alternative (Harrison, 2000). Consequently, investment managers frequently take decisions relating to the employment of financial resources of a capital nature to various investments and project proposals (Nzotta, 2002). It is important to note that investment monitoring systems or capital budgeting decisions only arise in situations where there are commitments of funds of a capital nature, usually for more than one investment period of a fiscal year. The appraisal process involves an objective evaluation of different projects to determine their acceptability. The different appraisals (economic, technical, financial, and commercial) are supposed to enhance and ensure the viability of the project that can at the end of the period guarantee the success and growth of the organization (Nzotta, 2002). Multinationals are project-oriented organizations, they invest huge sums of money on projects and expect to generate high returns. Thus, monitoring investment is a large extent an important aspect for multinationals to ascertain how they can create billions and trillions of foreign exchange as well as revenue in the appraisal or monitoring of their investments so as to achieve set objectives.

INVESTMENT MONITORING SYSTEMS

The decisions to invest are the main reason for carrying out business by a firm. It is one of the most vital decisions, which enhances the level of profitability of the business (Harrison, 2000). Capital is budgeted and invested with a view of the benefit that is to be realized in the future (Ama, 2005). The investment decision concentrates on the type, size, and percentage composition of the capital funds. Specifically, in this study, the pay-back period and net present value are adopted as the dimensions of investment monitoring system. The payback period method considers the number of years it will take for the initial investment in a project to be recovered. This period is then compared with the predetermined period to decide the acceptability of a project. The shorter the payback period, the more acceptable the project will become (Ama, 2005). Thus, fiancé managers would prefer a shorter payback period, since the risk element is low. According to Ibenta, (2005), the formula below is used to ascertain the payback period, when the cash inflow represents an annuity.

$$\text{Payback period} = \frac{\text{Cash Outlay}}{\text{Annual Cash inflow}} = \frac{C}{A}$$

According to Ama, (2005) and Ibenta, (2005), the Net Present Value (NPV) technique is a common way for discounting in capital budgeting. Under this method, all future cash flows (inflows and outflows) are discounted using a per-determined discount rate (usually the cost of

capital of the firm) to arrive at a present value as at the time the investment decision is being made. This present value is then compared with the initial outlay on the project. The resultant amount is the net present value and could be either positive, negative or nil. The NPV technique helps an analyst to select a project that maximizes the wealth of the owners of the business (stockholders), from a pool of projects; note that when one of the projects is selected the selection of another project in the group becomes impossible, or simply put, projects in the group are mutually exclusive. This implies that the technique should assist investors in the determination of a project that would enhance the net worth of the company. Moreover, the NPV method assists a manager to separately consider all the projects. This is the value additive principle. The principle means that, when we have information about the value of each project that management thinks is reasonable, then by simply adding their values will give us the net present value. According to Ibenta (2005), the net present value is calculated with the following model:

$$\text{NPV} = \frac{C_1}{(1+r)} + \frac{C_2}{(1+r)^2} + \dots + \frac{C_n}{(1+r)^n} - C_0$$

$$= \frac{n}{\sum_{t=1}^n} = \frac{C_0}{(1+r)^0} - C_0$$

Where NPA = Net Present Value

C=Initial capital outlay

n = Number of years of the project

r = Discount rate

A = Amount of regular cash inflow

CORPORATE FINANCIAL PERFORMANCE

Financial performance is considered to be an opinion based indicator of the extent a firm efficiently uses assets in its ordinary business activities to create income (www.investopedia.com). A firm's performance is made up of all the facts that were collected and broken down into understandable components concerning the material goods, financial resources and transactions in the organization. It involves the area of business intelligence which ensures the organizations performance is set against laid down objectives of the company. Richard et al. (2009) stated that, financial performance is made up of excess of income over expenses (that is, profits), and excess of earnings over the amount spent on assets, investment etc. This study adopts the amount of profit (that is, profitability) and the excess of earnings over the amount spent on investment (i.e., return on investment) as the dimensions of how well or badly a firm is doing. Tatum and Harris, (2013) stated that, the profit of a firm is the excess of income earned by a business over expenditure within a precise interval of time on the

economic calendar. Doing this type of calculation (i.e., computation of profit) is important not just to the individual businesses, but also to economists whose eyes are always on the economy, watching and monitoring its growth. Return on assets serves as a highlighter how well or badly a firm is doing, and is using its assets to create income. Be that as it may, the value can be significantly different from company to company and from sector to sector and therefore for wider benchmarking purposes, profit per employee may be more effective. Profit is the amount over expenses, or say reward that people who go into business or entrepreneurs wish to achieve to compensate for the riskiness of their undertaking. Taking into account the fact that most people who invest so as to make an amount over what they invested, this amount earned by the business can serve as an indicator of progress with that investment (Riley, 2013). Without making excess amount over the money spent, the business will not continue to exist in the future. The excess amount over expenses, which is profitability, shows the general performance of organizations whose aim is to profit. To Parker (2013), the excess amount earned over the put into the investment, helps in indicating profitability. Using return on investment, a person, company, or other organization that has money invested in a business venture, especially one that holds stock in publicly owned corporations can weigh various investments against each other. Even though there are other statistic that be used for the comparison of investments ROI is a handy starting point. ROI measures the amount gained or lost on an investment, and it is a percentage of the initial amount invested. It is a tool that helps investors to evaluate if their investment is doing well or not. To be precise, it shows the amount that the investor receives as his earning for e value invested. This is useful because it allows the investor to easily compare multiple investments. The objective measurement of what profitability is, is given by ROI (Parker, 2013).

METHODOLOGY

Research design

Research design adopted in terms of the data analysis is the correlational design, while the survey is adopted for this study in terms of data collection.

Population, sampling procedure and sample size determination

The study population consists of the multinational companies in the oil and gas sector in Rivers State of Nigeria. In this study, the entire workforce in the Rivers State offices of the selected multinational corporations was considered as the accessible population. The

purposive sampling procedure was used to select five multinationals in the oil and gas sector in Rivers State and they include: the Shell Petroleum Development Company of Nigeria Limited; Nigerian Agip Oil Company Limited; Mobil Producing Nigeria Unlimited; Chevron Nigeria Limited, and Total E & P Nigeria Limited. The selected multinational companies were obtained from the list of companies having joint venture business with the Nigerian National Petroleum Corporation (NNPC). According to the records of the Port Harcourt offices of the selected multinational corporations as at June 2013, there are a total number of ninety-three (93) managers in Shell Petroleum Development Company of Nigeria Limited. Nigerian Agip Oil Company Limited has thirty-three (33) managers. That of Mobil Producing Nigeria Unlimited is fifty-five managers.

The managers in Chevron Nigeria Limited are forty-six (46), and that of Total E & P Nigeria Limited is thirty-seven (37) managers. The cadre of staff used as respondents in the multinational corporations is lower level managers, middle level managers, and top level managers. The sample size determination was done using the Yaro Yemen formula, which, according to Daridarn (2001) is stated thus:

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

Where; n =sample size sought

e = level of significance

N =population size

The confidence level for the study is 0.05. Thus, using the Yaro Yemen formula, the sample size is computed as shown below:

$$n = \frac{264}{1 + 264(0.05)^2}$$

$$= \frac{264}{1 + 264(0.0025)} = 159.04 \approx 159$$

Based on the above, the sample size of the five (5) multinational corporations is 159 managers

Data collection methods

The data in this study was from a primary source as well as secondary source. The primary data were information from the copies of the questionnaire administered. The questionnaire was designed based on the application of ordinal scale where numbers were assigned to each scale. The five- point likert type scale was used to elicit

information from the respondents on the attributes of the study, which is. "Investment Monitoring Systems and Corporate Performance in oil and gas multinationals". The five-point likert type scale used included: (a) excellent, which was ranked as 5; (b) very good, as 4; (c) good, as 3; (d) average, as 2; and (e) poor I. In addition, the secondary data includes information cited from textbooks, journals, articles, magazines, and the Internet.

Test of validity and reliability

The questionnaire was used as the instrument to get responses from the respondents. The instrument was designed based on content validity and it was face-validated by three Senior Lecturers of the Department of Accounting from the University of Port Harcourt. The test-retest kind of reliability test was employed in assessing the instrument's reliability. The initial draft of the instrument was first pilot-tested on 25 managers, that is, five (5) each from the sampled multinational corporations. The final instrument of the study was produced after correcting the data, which was endorsed by three Senior Lecturers in the Department of Accounting from the University of Port Harcourt.

RESULTS

The spearman's rank was computed on Statistical Package for Social Sciences (SPSS) to test the hypotheses. It is a tool that uses non-parametric data and measures the statistical dependence of one variable on another. It examines the extent of relationship between one variable and another variable can be observed, and in fact, measures the degree of relationship between a pair of ranked observations.

Presentation of data and analysis

Response rate of the study

One hundred and fifty questionnaires that is the total copies that were issued to the five (5) oil and gas multinational corporations. Out of this number, 140 were returned. After checking for errors and wrongly completed questionnaires, a total of 121 copies representing 76.10% were found usable. Nineteen (19) questionnaires were not used. Therefore, the response rate adopted for this study is 76.10%.

Test of hypotheses

The interpretation of our analysis for the tested hypotheses was guided by the correlation decision

framework provided by Dana (2001), where values between plus or minus: (i) 0.000 and 0.190, indicates a very weak correlation); (ii) 0.20 and 0.39, represents weak correlation); (iii) 0.400 and 0.590, suggests a moderate correlation); (iv) 0.600 and 0.790 (strong); (v) 0.800 and 0.990, signposts a very strong correlation), and finally, (vi) 1 signals a perfect relationship). (Appendix contains a comprehensive listing of the matrix table).

Hypothesis one

Relationship between payback period and corporate profitability.

H_{01} : Significant relationship does not exist between payback period and corporate profitability. After the test, the outcome reveals a coefficient of 0.826, and a p-value < 0.05 (see appendix 2), by implication, payback period has a very strong and significant relationship with corporate profitability. Thus, we fail to accept H_{01} . This result lends some weight to the views expressed by Ama, (2005) and Ibenta, (2005), which reveals that there is a positive relationship between payback period and corporate profitability. Payback period is the period of time required for the return on an investment to repay the sum of the original investment. The shorter repayment period is profitable to investment decisions in terms of recovering initial cost of investment.

Hypothesis two

Relationship between payback period and return on investment

H_{02} : Payback period does not significantly relate to return on investment. After the test, the outcome reveals a Spearman coefficient of 0.984, and a p-value which is < 0.05 (you will find this in appendix 2), by implication, payback period has a very strong and significant relationship with corporate profitability. Therefore, we fail to accept H_{02} . This is indicative of the fact that payback period holds a potent relationship with return on investment. Based on this, we failed to accept H_{02} . The finding from this result could by extension imply that payback period in a short time significantly leads to the improvement of return on investment. Parker (2013) suggested that payback period has a positive relationship with return on investment and the outcome of the first hypothesis of this study supports it. Payback period ensures the period of time an investment will take for the repayment of its initial cost. The shorter payback period is preferred in the realization of return on investment. When

choosing mutually exclusive investments, shareholders' prefer the investments with the quickest returns.

Hypothesis three

Relationship between net present value and corporate profitability

H_{03} : Net present value does not significantly relate to corporate profitability. This third hypothesis was formulated to ascertain the extent to which net present value is associated with corporate profitability. After the test, the outcome reveals a Spearman coefficient of 0.946, and a p-value which is < 0.05 (you will find this in appendix 2), this means there is a very strong and positive relationship between net present value and corporate profitability. As a result, we failed to accept the H_{03} , but rather net present value significantly enhances corporate profitability. The finding affirms the opinion of Ibenta, (2005) which indicated that there is a positive relationship between net present value and profitability. Net present values that are positive or nil, which are compared with initial outlay of investment, provides favourable results that indicates viable or profitable investment (Ibenta, 2005). The net present value indicates the performance of an investment and a positive net present value determines profitable investments.

Hypothesis four

Relationship between net present value and return on investment

H_{04} : Net present value and return on investment are not significantly related. The result of the test indicates a spearman correlation co-efficient ($r_{ho} = 0.734$, $p < 0.05$) (see appendix 2). This shows a strong and significant relationship between net present value and return on investment. The null hypothesis is therefore rejected, and the alternative hypothesis accepted. The result supports the opinion of Parker (2013) which reveals that a positive relationship existed between net present value and return on investment. Net present value focuses on the achievement of results from investments. The net present value determines the rate at which the organization can expect its returns on the investment it undertakes or the project it carries out.

DISCUSSION

In paper, we discussed findings based on the hypotheses that were tested on investment Monitoring Systems and Corporate Financial Performance as explained below:

Relationship between payback period and corporate profitability

The outcome of the result highlights that payback period significantly relates to corporate profitability (r_{h_0} 0.826). In other words, payback period which is the length or say, amount of time needed for an investment to pay its initial cash outlay is best at the shortest possible period. This is because investors will prefer to recoup wealth at the most recent and reasonable time than to get the cash held up for too long. This is because the essence of any business is to achieve profit at the best possible time frame. Consequently, Ama (2005) is of the opinion that the length of time needed for the return on an investment to repay the original amount invested is payback period. The shorter repayment period is profitable to investment decisions in terms of recovering initial cost of investment (Harrison, 2000; Ibenta, 2005).

Relationship between payback period and return on investment

The outcome of the analysis highlights payback period and return on investment as having a significantly positive relation. The result suggests that payback period that is reasonably short is preferred by managers and shareholders' who require quick returns on their investment. The views of Ibenta (2005) indicated that the time taken by a shareholder to receive dividend determines the motives for further investment in the shares of an organization. Hence, the shortest payback period is preferred for shareholders value creation (Parker, 2013). The 0.984 correlation coefficient signposts that payback period influences return on investment to a significant extent, put differently, it represents that payback period relates to return on investment significantly and positively.

Relationship between net present value and corporate profitability

It is found that net present value is significantly related to corporate profitability ($r_{h_0} = 0.946$). This depicts that net present value at zero or positive level reasonably shows a project or an investment is profitable. Thus, Ibenta (2005) posit that positive or nil net present of investment provides favourable results that indicate viable or profitable investment. Hence, the net present value indicates the performance of an investment: and a positive value determines profitable investment.

Relations between net present value and return on investment

We saw a positive and significant relationship exists

between net present value and return on investment ($r_{h_0} = 0.734$) from the result obtained. This means that net present value focuses on the achievement of results from investments which indicates yield accruable to the expected returns of organizations (Parker, 2013). In the views of Ibenta (2005), the net present value determines the rate at which the investment level of the company will be appraised. This is because the net present value provides the mechanism for the assessment of the level of investment in the organization.

CONCLUSION

We see that Investment Monitoring Systems is strongly related to Corporate Financial Performance from the results of this study. Investment Monitoring System is the quantitative and qualitative mechanisms by which the performance of a firm's investment or project is appraised. Corporate financial performance comprises of the processes by which monetary gains can be attained for an organization and its stakeholders based on the set goals and objectives. Investment Monitoring System specifies how viable the execution of a project or investment is, and how possible returns can be gotten within the stipulated time frame or period. Thus, we could conclude that investment monitoring system is a mechanism used to assess the achievement of a firm in terms of business transaction and project execution for the purpose of determining the valuable use of monetary resources and time for the benefit of an organization. The aim of monitoring investment is to examine how funds are put into proper usage for the realization of growth, survival and development goals and objectives of an organization or business.

Accounting implications of the study

The accounting profession can practically provide solutions to project evaluation processes in the areas of economic justification, financial viability, technical feasibility, commercial or market visibility and managerial decision making. Accounting is the soul of business. It is concerned mainly with the best possible means of fashioning out ways that corporate bodies will strategically, tactically and operationally apply in order to achieve value for money. The accounting profession is a veritable discipline that can provide effective and efficient guide on investment decisions to corporate bodies. The accounting profession can provide fundamental advice to entrepreneurs or organizations that are willing to commit money into projects. The necessary expertise, skills, knowledge and competencies for investment monitoring and appraisal can be provided by accountants so as to enable entrepreneurs and organizations achieve their set goals and objectives, especially in the area of attaining

success in operations and boosting corporate financial performance.

RECOMMENDATIONS

In the light of our findings, the following recommendations were made.

1. Oil and Gas Multinationals should use strategic processes to assess their investments.
2. Oil and Gas Multinationals should adopt project appraisal techniques that will enable them realize the money-worth of their investments.
3. Oil and Gas multinationals should use capital budgeting approach to make decisions that will maximize value for money.
4. Oil and Gas Multinationals should use investment monitoring system as a guide to investment risk management.

REFERENCES

- Ama GAN (2005). Fundamentals of Public Sector Accounting and Finance. Aba, Nigeria: Amasons Publications Ventures.
- Dana SD (2001). Statistics and Data Analysis for Behavioral Science. New York: McGraw Hill Co.
- Daridarn DM (2001). Research Method in Administrative Sciences (3rd edition) Port Harcourt, El Daily Group.
- Harrison FH (2000). Financial Management- A Practical Approach for Management. Lagos:
- Ibenta SN (2005). Investment Analysis and Financial Management Strategy. Enugu: Institute of Development Studies, University of Nigeria Nigeria: Sherbrooke Associates.
- Nzotta SM (2002). Corporate Financial Decisions. Owerri: Oliverson Industrial Publishers.
- Parker A (2013). What Is a Return on Investment (ROI)? Accessed on: http://www.ehow.com/info_7748858_return-investment-roi.html. Retrieved on: August 21, 2013.
- Richard et al. (2009). 'Measuring Organizational Performance: Towards Methodological Best Practice'. Journal of Management. Accessed on: www.wikipedia.com. Retrieved on June 21, 2013.
- Riley J (2013). What is Profit? Accessed on: <http://tutor2u.net/business/gcse/financeprofit.htm> Retrieved on: August 24, 2013.
- Tatum M, Harris B (2013). What is corporate profit? Accessed on: <http://www.wisegEEK.com/what-is-a-corporate-profit.htm>. Retrieved on: 23 August, 2013. [www.investopedia.com. Financial Performance. Accessed on http://www.investopedia.com/terms/f/financialperformance.asp](http://www.investopedia.com/terms/f/financialperformance.asp), Retrieved on: 25 August, 2013.

APPENDIX 1

Instruction: Please, kindly complete the blank spaces, and also tick (✓) in the appropriate boxes that applies to you by using the followings; Excellent 5; Very Good 4; Good 3; Average 2; Poor 1

Investment monitoring systems

S/NO	PAYBACK PERIOD	5	4	3	2	1
1	How do you evaluate the use of payback period in appraising investment?					
2	In what way has payback period monitored your company's investment?					
3	How do you classify a shorter payback period for project acceptance?					
4	Does your organization's size influence the application of payback period in monitoring its projects.					
5	In what way can you categorize your firm's net annual cash receipts?					
6	How do you classify your company's interest on capital in the last five years due to the use of payback period?					
NET PRESENT VALUE						
7	How do you evaluate investment decision based on the use of net present value?					
8	In what way do you classify your company's cash flow in the last five years?					
9	How do you assess the net worth of your investment with the application of net present value?					

Corporate financial performance

S/NO	CORPORATE PROFITABILITY	5	4	3	2	1
10	How do you assess your company's profit level in the last five years?					
11	How do you evaluate the earnings ratio of your company in the industry average?					
12	How do you classify your company's return on investment considering the projects executed in the five years?					
13	In what way do you categorize your company's return on asset based on the profit earned in the last five years?					
RETURN ON INVESTMENT						
14	How do you evaluate the returns from your investment in the last one years?					
15	How do you evaluate your organization's investment decision for the realization of shareholders value?					
16	How do you categorize your company's yield from its investment in the last five years?					

Source: SPSS Output, 2013

APPENDIX 2

Correlation Matrix and SPSS Output Table for spearman Rank Order Correlation Coefficient Analysis on the Relationship between Investment Monitoring System and Corporate Financial Performance.

		Payback Period	Net Present value	Corporate profitability	Return on Investment
Payback period	Correlation	1.000			
	Co-efficient				
Net present value	Correlation	*	1.000		
	Co-efficient	.730			
Corporate Profitability	Correlation	*	*	1.000	
	Co-efficient	.826	.946		
Return on Investment	Correlation	*	*	*	1.000
	Co-efficient	.984	.734	.642	

Source: survey Data, 2013.

N=121; *=correlation significant at 0.05 level (2 – tailed)

Statistics on investment monitoring systems dimensions.

	Payback period	Net present value
Mean	2.1487	1.9958
Standard deviation	.12519	0.3019
Skewness	-.238	1.398
Standard Error of skewness	.068	.068
Minimum	1.59	1.50
Maximum	2.38	2.05

Source: Survey Data, 2013

Statistics on corporate financial performance measures

	Payback Profitability	Return on Investment
Mean	2.2006	2.1219
Standard deviation	.2254	.02202
Skewness	-.176	.146
Standard Error of skewness	.068	.068
Minimum	1.70	1.60
Maximum	2.50	2.50

Source: Survey Data, 2013.