Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.6, No.23, 2015

The Impact of Risk on Investment Decision in Nigeria

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Abstract
The business world today is increasingly becoming aware of the fact that managing the risk of investment and capital projects is crucial to the economic viability of any organization. However, considering the murky nature of business environment in Nigeria and the general overview of the Nigerian economy, corporate organizations have to factor into their investment decision process, the volatility of global economic climate which often affects domestic economy tremendously. The objective of this paper is to examine the impact of risk on investment decision in Nigeria using descriptive analysis. In carrying out this study, we employed the use of primary data via the administration of questionnaires to respondents from various investment companies in Lagos, Nigeria. The data collected from the respondents were analyzed using Chi-Square. Findings from the study revealed that for organizations in Nigeria to remain competitive in business, it has to always carry out a thorough appraisal of any investment opportunity before putting money into it. In other words, organizations are advised to adopt best practices in their investment activities in order to keep abreast with the dynamics of global economic climate.
Keywords: Risk, Investment Decision, Uncertainty, Investment Companies, Nigeria.

1. Introduction

Investment decision is as old as man and it is now shrouded in the mystery of antiquity. The decision is born out of the desire to make provision for the future or prepare for the rainy days. The need to reduce the uncertainty associated with future outcomes of present actions made investment decision impeccable. However, the certainty of future outcomes had always been elusive consequent upon changes in seasons and environmental factors which underline the concept of risk.

Investment projects are essentially subjected to various forms of risk that can have impacts on the performance expected by beneficiaries. Factors such as external environment, endogenous specific factors, operational and functional structure of the investment objective can have, at a time, different manifestations than the one anticipated initially. Hence, the bigger the noticed deviation, the higher is the risk of the project to fail to ensure reaching the expected result. Managing the operational risk of investment and capital project is crucial to the economic viability of many organizations (Camelia and Vasile Burja, 2009)

With the deregulation of key sectors of the Nigerian economy and the recent volatility in financial markets, decision rules for managing investments and capital projects should consider discretion over timing and uncertainty in the underlying economic variables. Accounting for these features often yields significant results in terms of expected project values, optimal investment and operational policies. Individual organizations, however, differ in the way they react to risks. This risk behavior is reflected in the decision process of the organization, which is predicated upon the quality of their corporate governance.

Given the foggy nature of business and investment environment in Nigeria and the general overview of the Nigerian economy, it has become imperative for corporate organizations to pay adequate attention to the volatility in global economic climate before making any investment decision since failure to do this might have daring consequences. For instance, if we chronicle global occurrence in the recent times, the global economic crisis in year 2008 had a great toll on investment climates in many countries since many macroeconomic variables such as inflation and interest rates, faced serious contentions. The recent Euro Zone crisis also severely affected global economic performance which resulted into a fall in demand for commodities in both existing and emerging markets. Apart from bringing prices and growth down globally, the crisis also slowed down domestic growth drastically. Cumulatively, the crisis induced global economic weakness, protracted monetary tightening, poor performance of non-oil sectors and fall in world crude oil prices which at best weighed down the domestic output growth.

Due to the mono product nature of Nigerian economy, the removal of full subsidy on fuel at the wake of January 2012, coupled with the prohibitive fiscal policy on some commodities induced a higher inflation rate in the medium term and perceived reduction in the returns on investment. Lending rates have been edging up on the basis of contractionary monetary policy over the last one year. The private sector had continued to bear the brunt of high cost of capital and crowding out effect of public sector in the debt market. These salient economic issues have rippling effects on the business environment in Nigeria and have thus made accurate prediction of

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the outcomes of investment and capital projects skeptical. The increasing level of uncertainties in the nation's business environment has therefore called for a thorough analysis and investigation of the impacts of risk on investment decisions in Nigeria. The objective of this study is to examine the nature of business environment in Nigeria, with a view to assessing the risks associated with investment decisions for both individual and corporate investors in the country. The rest of the paper is organized in this way; section two is the theoretical framework and literature review, section three is the methodology section four is the result and data analysis while the last chapter is the conclusion and policy recommendation.

2. Theoretical Framework and Literature.

Financial and Economic Theories Underpinning Investment Decision.

Theories of Rational and Adaptive Expectation: These theories are the bedrocks upon which accurate investment decisions are based. The theory of adaptive expectation was popularized by economists such as Adam Smith (1776) Staut Mill (1955) and Milton Friedman (1948). Adaptive expectations are expectations formed from past experience or information only. For instance, expectation of inflation are typically viewed as being an average of past inflation rates. But this type of expectation has been faulted on the ground that past data can change. People use more information than just past data on a single variable to form their expectations of that variable. Hence, John Muth (1961) came up with the theory of rational expectation. He opined that expectations will be identical to the optimal forecast (i.e. the best guess of the future) using all available information than just the past data. The theory of rationality provides the necessary bedrock to understanding various factors which prompt investors to make investment decision. This theory is against the backdrop that investors are generally less able to objectively evaluate companies' risks and returns, and tend to be emotionally biased in their trading and investment decisions. (Baumol, 1957; Koutsoyiannis, 1963). An individual is said to be rational if he aims at maximizing his utility subject to the constraint imposed by his given income. In other words, a rational investor will want to maximize his returns and minimize the risk associated with such investment. If the investor behaves otherwise, his action is termed irrational. When this happens, such decisions could have been influenced by factors other than just risk and return analysis (Hunjra, 2011). Such investment decision could have been influenced by psychological or emotional factors. Better understanding of these factors would help the investors to select a better investment decision and to avoid repeating their mistakes in future by making conscious decisions in extracting the best option (Sitkin and Weingart, 1995).

Keynes's Liquidity Preference Theory: John Maynard Keynes (1930) postulated a theory of holding money which was divided into three motives. He identified the motives as transactionary, precautionary and speculative motives. The speculative motive of holding money is essential to the concept of investment decision because individual investors monitor or 'speculate' the economic and business environment before making any viable investment decision. They usually consider the state of the business environment to risk involved before making any investment decision in any sector of the economy. The same goes for corporate organizations whose huge investment decisions require thorough analysis.

Risk Propensity or Perception Theory: This theory regards attitude as the mediator in investors' investment decision. This theory analytically examines and categorizes investors' perception of risk and their tendencies to take them. Hunjra and Rauf-i-Azam (2012) theoretically categorized the various investors into three namely; risk averse, risk preference and risk neutral. Risk neutrality relates to the characteristics of an investor who has a linear utility function. This means he chooses investments strictly on the basis of returns. A risk neutral investor will be indifferent to an investment with a fair return but highly risky. Thus the marginal utility of an additional investment made is constant irrespective of the amount of naira the individual already has. The risk averse is an individual with a concave utility function or diminishing marginal utility. A risk averse individual will not be interested in a risky investment. The marginal utility of an investment is less than the utility of its return that is, the expected monetary value of the investment. The risk preference individual is the risk taker that has a convex utility function, that is, an increasing marginal utility. The individual will be ready to choose a highly risky investment but with a high return. This type of investor will be ready to invest in spite of daunting evidences of risks.

In considering the empirical implication of these theories however, Camelia and Vasile Burja (2009) studied the analysis for investment project decision in Romania. The study examined how some categories of risks could appear within investment activity and exemplified the risk analysis on the basis of studying the project sensitivity. It was discovered that since practice in Romania proved that the risk is an inevitable phenomenon in the life of investment projects, the risk analysis has a main objective of studying the potential economic alternative of the achievement probability and the resulted effects. They concluded that besides the fact that the investor knows the possible unfavourable consequences guides his attitudes towards the project, risk analysis becomes a quantitative analysis method that supplies investors with necessary instruments in making better decisions. In the analysis process of the projects from the perspective of the risks they involve, Berja *et al*, (2009) opined that identifying the risk category is a necessary step to start from in order to better know and

manage the produced impact. They concluded that using proper risk analysis methods increases the investors' chances to accurately justify a decision regarding the opportunity of certain investment projects in order to achieve its specific interest.

Rauf-i-Azam *et al*, (2012) found out that psychological factors affect investment decision in Pakistan. In a study to determine the impacts of psychological factors on investment decision making- mediating by risk perception, it was discovered that most critical challenge faced by investors is that they acted in a rational manner and usually followed their instincts and emotional basis while making investment decision. Using a model of risk propensity and asymmetry information, they found out that in Pakistan, investors' investment decision was dependent upon the mediating role of risk perception and how much weight was attached to each independent variable the investor considered important in their decision making. They concluded that investors' behavior was dependent on how the available information was presented to them and how much they were prone to taking risk.

Vicky Arnold *et al* (2007) investigated the impact of risk on investors' decision processes and outcome in the post-sox environment of the United States. The study categorized investment information analysis ability in relation to professional and non-professional investors. They found out that professional investors' predictions are better calibrated to their individual risk attitudes than the non-professional investors. The study also conceptualized risk as the likelihood of negative outcomes and not as variance in returns as is common usage in finance. The conceptualization of risk here implies that as investors' assessments of risk increases their expectations of future returns are diminished. The study therefore concluded that investors risk judgment will be negatively associated with their stock price prediction in the United States. Also risk-averse investors will predict lower stock prices than risk-seeking individual.

A study on risk disclosure and investment choices in the United States by Angela *et al*, (2010), showed that the provision of risk information has an impact on individual's confidence and their perception of risk, but the relationship between these and ultimate behavioural change is not overwhelmingly strong. They also found out that there seemed to be little evidence that provision of this information differently helps or hurts the less financially literate. The study concluded that risk information disclosure suggested an important trade-off. While summary risk-ratings are most appealing for consumers, they may also be the least straightforward to provide, requiring an explicit formula or an independent provider.

Despite these studies, there is still a gap in the literature as regards studies that specifically investigate investment decision analysis in the Nigerian situation to the best of our knowledge. This is the gap this study intends to fill.

3. Methodology

This section provides the description of the methodology employed in the course of this study. In an effort to examine the impact of risk on investment decision in Nigeria, both quantitative and qualitative data were used. These methods are outlined under the following sub-headings namely; sources of data used, method of data collection, and the method of data analysis.

A. Sources of Data

The required data used for this research work were obtained via the administration of questionnaires. Five investment companies in Lagos were randomly selected and a total of 100 questionnaires were issued out to their staff as respondents. The categories of staff covered include lower-level employees, middle-level managers, and top-level officers in the company. These people were selected because they not only represent the average individual and corporate investors but were also key operators in the investment sector.

B. Method of Data Collection

This involves the steps taken to ensure that valid and reliable data were collected. The first was to identify relevant sample units. The identification of sample units included considering different potential variables and identifying the ones that are relevant to the study. Then simple and adequate questions that were robust enough to capture the research interest adequately were framed and asked. These questions were structured in such a way that the main objective of the study would be realized. Interviews were also conducted in order to take care of some respondents with unique features. Then research areas were identified and grouped into smaller sample units in order to facilitate easy administration of the research instruments. Research instruments, that is, questionnaires were thereafter administered and relevant data were collected and structured in such a way that would be easy for analysis.

C. Reliability of the Instrument

The reliability of the instrument used for the study was ensured through a careful selection of the sample units unto which research instruments were administered. To ensure that the instruments were reliable, sample units, that is, respondents were categorized using different characteristics that were essential features of the variables being used for this study. This categorization served as the impetus needed for capturing the unique responses that were relevant to the study. The uniqueness of such responses is what guaranteed the reliability of the

research instrument. To further determine the reliability of the instrument, the test-retest method was adopted whereby the instrument (that is, the questionnaire) was administered to a small group of respondents. Later the same questionnaire was administered to the same group of people again and the responses received were comparably the same.

D. Method of Data Analysis

The responses obtained via the administration of questionnaire were analyzed using descriptive statistics such as percentages, frequency counts and so on. In testing the hypothesis which seeks to find out whether or not risk has any impact on investment decisions in business organizations, we used the data provided by respondents on Table 6 as Decision Benchmark. The Null Hypothesis (Ho) was tested using Chi-squared at 5% confidence level and (r-1) (c-1) degree of freedom, where the statistical significance of the variables used for the study was determined.

The formula of Chi-square is as follows:

$$X^2 = \text{Summation} \frac{(Fo - Fe)^2}{Fe}$$

Where X^2 = Chi-square value at 5% level of significance
Fo = observed frequency
Fe = expected frequency
Summation = Total sum of a statistical/mathematical set

4. RESULTS AND DATA ANALYSIS

This section shows the presentation and analysis of the responses obtained via the administration of questionnaire to the 100 respondents in the five selected investment companies listed above. This includes the distribution of the social economic characteristics of respondents and the distribution of respondents' views on the impact of risk on investment decision.

Table 1: Gender Analysis

RESPONSES	FREQUENCY	PERCENTAGES (%)
Male	60	60%
Female	40	40%
TOTAL	100	100%

Source: Researcher's Survey, 2014

Out of the 100 respondents that answered the questionnaire, 60% were male while 40 were female. This indicates that majority of respondents involved in the investment sector were male.

Table 2: Marital Status

RESPONSES	FREQUENCY	PERCENTAGES (%)
Single	30	30%
Married	70	70%
TOTAL	100	100%

Source: Researcher's Survey, 2014

Out of a total of 100 respondents that answered the questionnaire, 30% were single, 70% were married. Therefore, majority of the respondents were married.

Table 3: Position Held in the Company

RESPONSES	FREQUENCY	PERCENTAGES (%)
Junior staff	45	45%
Middle Management Staff	35	35%
Senior Management Staff	20	20%
TOTAL	100	100%

Source: Researcher's Survey, 2014

Out of a sample of 100 respondents that answered the questionnaire, 45% were junior staff, 35% respondents were middle management staff while the remaining 20% respondents were senior management staff. Thus based on the positional distribution of employment in the investment sector, majority of the respondents were junior staff.

Table 4: Age Analysis

RESPONSES	**FREQUENCY**	**PERCENTAGES (%)**
25-29 years	40	40%
40-49 years	35	35%
50 years above	25	25%
TOTAL	**100**	**100%**

Source: Researcher's Survey, 2014

Out of the 100 respondents that answered the questionnaire, 40% were between 25-29 years of age, 35% were between 40-49 years of age, while 25% were 50 years of age and above.

Table 5: Working Experience

RESPONSES	FREQUENCY	PERCENTAGES (%)
5-10	50	50%
11-20	30	30%
21 years and above	20	20%
TOTAL	**100**	**100%**

Source: Researcher's Survey, 2014

Out of a total of 100 respondents that answered the questionnaire, 50% of the respondents have between 5-10 years working experience, 30% of the respondents have 11-20 years working experience and 20% of the respondents have worked in the organizations for 21 years and above. This implies that majority of the respondents have between 5-10 years working experience in the organization.

Table 6: Respondents' views on the believe that risk has significant impact on investment decision in organizations operating in Nigeria**.**

RESPONSES	FREQUENCY	PERCENTAGES (%)
Strongly Agreed	30	30%
Agreed	50	50%
Undecided	10	10%
Disagreed	5	5%
Strongly Disagreed	5	5%
TOTAL	**100**	**100**

Source: Researcher's Survey, 2014

Out of a sample of 100 respondents that answered the questionnaire, 30% respondents strongly agreed with the research question while 50% respondents agreed while 10% respondents were undecided, and 5% respondents disagreed, and 5% respondents strongly disagreed with the research question. This means that majority of the respondents agreed that risk has significant impact on investment decisions in organizations operating in Nigeria.

Table 7: Respondents' views on whether the nature of business environment in Nigeria is favourable for sound investment decision**.**

RESPONSES	FREQUENCY	PERCENTAGES (%)
Strongly Agreed	35	35%
Agreed	47	47%
Undecided	-	-
Disagreed	10	10%
Strongly Disagreed	8	8%
TOTAL	**100**	**100**

Source: Researcher's Survey, 2014

Out of a sample of 100 respondents that answered the questionnaire, 35% respondents strongly agreed, 47% respondents agreed, and 10% respondents disagreed, and 8% respondents strongly disagreed with the research question which seeks to find out whether or not the business environment in Nigeria is favourable for sound investment decision.

Table 8: Respondents' views on whether or not investments in Nigeria associated with any identifiable risks**.**

RESPONSES	FREQUENCY	PERCENTAGES (%)
Strongly Agreed	20	20%
Agreed	50	50%
Undecided	-	-
Disagreed	20	20%
Strongly Disagreed	10	10%
TOTAL	**100**	**100**

Source: Researcher's Survey, 2014

Out of a sample of 100 respondents that answered the questionnaire, 20% respondents strongly agreed with the research question, 50% respondents agreed with the research question, 20% respondents disagreed, and 10% respondents strongly disagreed with the research question. The conclusion is that majority of the respondents agreed with the view that investment in Nigeria is associated with identifiable risks.

Table 9: Respondents' view on the notion that risk has direct impact on investment decision in Nigeria.

RESPONSES	FREQUENCY	PERCENTAGES (%)
Strongly Agreed	40	50%
Agreed	30	25%
Undecided	15	6.25%
Disagreed	10	12.5%
Strongly Disagreed	5	6.25
TOTAL	**100**	**100**

Source: Researcher's Survey, 2014

Out of a sample of 100 respondents that answered the questionnaire, 40% respondents strongly agreed with the research question, 30% respondents agreed with the research question, 15% respondents were undecided, 10% respondents disagreed with the research question, and 5% respondents strongly disagreed with the research question. The conclusion is that majority of the respondents agreed with the notion that risk has a direct impact on either individual or corporate investment decision in Nigeria.

A. TEST OF HYPOTHESIS

The following hypotheses were stated for the purpose of this study and shall be tested:

Ho: Risk does not have significant impact on investment decisions in organizations in Nigeria.

Hi: Risk has significant impact on investment decisions in organizations in Nigeria.

The decision rule for testing this hypothesis states thus: If the calculated value of chi-square X^2 is greater than the table value, we REJECT the Null Hypothesis (Ho) and then ACCEPT the Alternative Hypothesis (Hi).

Responses in Table 6 are hereby reproduced for testing the hypothesis:

Table 6: Respondents' views on the believe that risk has significant impact on investment decision in organizations operating in Nigeria

RESPONSES	FREQUENCY	PERCENTAGES (%)
Strongly Agreed	30	30%
Agreed	50	50%
Undecided	10	10%
Disagreed	5	5%
Strongly Disagreed	5	5%
TOTAL	**100**	**100**

Source: Researcher's Survey, 2014

Chi-Square is now calculated with the above data:

Variables	Fo	Fe	(Fo-Fe)	$(Fo - Fe)^2$	$\frac{(Fo - Fe)^2}{Fe}$
Strongly Agreed	30	20	10	100	5
Agreed	50	20	30	900	45
Undecided	10	20	-10	100	5
Disagreed	5	20	-15	225	11.25
Strongly Disagreed	5	20	-15	225	11.25
TOTAL	**100**				**77.5**

Source: Researcher's Computation, 2014

Fe = 100/5 = 20

X^2 table value at 5% level of significance (95% confidence level)

Degree of Freedom = (r – 1) x (c – 1)

(5 – 1) (5 – 1)

Where r = row

c = column

Thus: X^2 (0.05, 4) = 9.49 (Table Value)

Summary of Computation

X^2 Table value = 9.49

X^2 Calculated value = 77.5

DECISION RULE

Since the calculated value of Chi-Square (X^2 cal. 77.5) is greater than the table value (X^2 tab. 9.49), we REJECT the Null Hypothesis (Ho) and ACCEPT the Alternative Hypothesis (Hi). The result of the research provides an empirical evidence to prove that risk has significant impact on investment decisions in organizations operating in Nigeria. In other words, investments generally in the Nigerian economic environment are subject to risks.

B. DISCUSSION OF FINDINGS

Survey results revealed that 60 percent of the respondents in the section of the financial sector covered were males, who were married and above 30 years of age. This description conferred on them the emotional stability, mindset and the drive needed to take risky investment decisions. It was also found out that 90 percent of the respondents were gainfully employed and had risen to top management level where they could participate in investment decision making both at the corporate and individual levels. This is sequel to their years of experience in the profession. The level of education according to our survey is high in the sector since more than 60 percent of the respondents had above secondary school education. This perhaps is due to the level of sophistication in the sector. The dominant professions in the sector were those that have direct bearing on the financial sector include Finance, Accounting, Economics, Business Administration and Business management. However, those from other fields possessed relevant professional qualifications to fit in properly.

In terms of the perception of risk in investment, 90 percent of the respondents agreed that all investments are risky, and 65 percent opined that risk should be a critical factor to be considered before making any investment decision. Risk was also categorized according to sectors and about 78 percent agreed that real sector or the economy is the most stable investment destination. By inference, the level of risk is determined by investment destination and thus the level of risk disposition determines the level of investments. Quoted companies accounted for 60 percent of investment destination while investments in public companies took precedence over those in private companies as 75 percent of respondents believe that investing in private companies is highly risky due to poor corporate governance. It was also discovered that return on investment was a major incentive for making investment decision. However, since return on investment is always uncertain and devoid of accurate prediction due to trends in global financial climates and domestic economy, most investments are susceptible to risk which could wipe off the whole returns.

Survey results showed that 90 percent of respondents in the area covered are involved in top management decision making and thus attest to the need to carry out sensitivity analysis on projects before they are embarked upon. In fact, 70 percent preferred Net Present Value (NPV) as the best method of project appraisal in order to boost project performance. However, respondents asserted that the quality of a company's corporate governance always affects corporate disposition towards risk. Risk analysis and investment appraisal therefore require experienced and well trained consortium of individuals as the management team.

Findings also showed that private investment was differentiated from corporate investment in terms of financial outlay. The latter requires a huge financial outlay than the former. However, for a good performance, both should be subjected to thorough project analysis to reduce the risk.

The problem associated with the financial sector is the dynamism and trends in global financial climates which always transverse into domestic economy. Since it is practically impossible to isolate domestic investment from happening at the global scene, no investment decision could be void of risk. Essentially, according to the respondents, poor risk information and inadequate project appraisal, inadequate financial and risk analysts, and inability to regularize risk perception both at the corporate and individual levels affect investment decisions in Nigeria.

5. CONCLUSION AND POLICY RECOMMENDATION

Based on the analysis carried out in chapter four, it can be concluded that risk has a great implication on investment decision in Nigeria. In fact, the level of risk perception often determines the level of investment decision. Other than returns on investment, the ability to identify, understand, analyze and take risk will determine the level of investment decision to be made both at the corporate and the individual levels. Even return on investment is being administered by the level of risk involvement, as highly risky investments attract higher returns than low-risk investments. Also, adequate project appraisal is necessary in order to reduce the risk potentiality of an investment decision. Although corporate investment is different from private investment on the basis of the volume of financial outlay, they should be treated similarly in terms of thorough appraisal to estimate the underlying risk potential of an investment as well as ensure a good return on such investments. The dynamics of global financial climates which always transit into domestic economy might portend difficulty in accurately predicting investment returns, risk information and through analysis would reduce poor investment decision and increase returns on investment.

Modern organizations especially investment companies should know that risks abound in most investment projects in Nigeria. Businesses should therefore weigh and measure the risks and returns in any investment opportunity properly before putting their money into any venture. Furthermore, business organizations should seek advice from investment specialists in any investment proposal they are making to ensure that hard-earned capital is not invested in an unprofitable project.

In the light of the findings in this study, the following recommendations are made to guide policy formulation for the purpose of promoting a conducive, competitive and stabilized business and investment environment that will achieve the twin objectives of reducing risk and enhancing project and investment

performance:

1. The financial sector should be fortified to improve investment performance.
2. At the policy level, policy prescription should be made to stabilize the domestic economy in order to prevent it from the whims and caprices of the trends in global financial scene.
3. Individual investors and corporate organizations should internalize a process that would serve as a veritable tool for qualitative and thorough appraisal that is tailored towards improving project and investment performance.
4. As infrastructure is basic to business environment, government needs to provide the necessary infrastructure to predicate business activities upon a thriving platform.
5. There is need for corporate organizations to expose their staffs to up-to-date and relevant training that would enhance their ability to carry out thorough sensitivity analysis.
6. Corporate governance should be developed in all organizations to improve risk perception and general disposition towards risks.
7. Individual investors should internalize the habit of improving on their level of risk and investment information so that they can make better decisions.

References

Adam Smith (1776). An Inquiry into the Nature and Causes of the Wealth of Nations. *Edwin Cannan*, ed. London: Methuen and Co., 1904.

Ahmed Hunjra, Salman Qureshi and Kashif Rehman (2012). Factors Affecting Investment Decision Making of Equity Fund Mana gers. *Wulfenia Journal* 19.10 (2012): 280-291.

Baumol, W. J. (1957). Speculation, Profitability and Stability. *Review of Econoomics and Statistics*, 39: 263-271.

Camelia Burja and Vasile Burja (2009). The Risk Analysis for Investments Projects Decision. *Annales Universitatis Apulensis Series Oeconomica,* 11(1), 2009.

Friedman Milton, and Savage L.J. (1948). The Utility Analysis of Choices Involving Risk. *Journal of political economy*. Pp 279-304.

Hung, Angela and Heinberg, Aileen and Yoong, Joanne (2010). Do Risk Disclosures Affect Investment Choice? *RAND Working Paper* No. WR-788

Hunjra, A.I., M. Azam, G.S. Niazi, B.Z. Butt, K. Rehman and R. Azam, (2011). Risk and Return Relationship in Stock Market and Commodity Prices: A Comprehensive Study of Pakistani Markets. *World Applied Sciences Journal*, 13(3): 470-481.

Hunjra A.I. and Niazi G. S. (2012). Relationship between Decision Making Styles and Consumer Behavior. *Actual Problem of Economics* 2.4 (2012): 21-26.

John Maynerd Keynes (1930). The General Theory of Employment, Interest and Money. *New York Harcourt, Brace and Company*, PP 27-28.

Koutsoyiannis A. (1963). Demand Function. *Readings in applied economics* Clarendon Press, Oxford.

Lubna Riaz, Hunjra A.I. and Rauf-i-Azam (2012). Impact of Psychological Factors on Investment Decision Making Mediating by Risk Perception: A Conceptual Study. *Middle-East Journal of Scientific Research* 12 (6): 789-795, 2012.

Muth John (1961). Rational Expectations and the Theory of Price Movements. *Econometrica* 29, 315-335.

Sitkin, S.S. and Weingart, L.R. (1995). Determinants of Risky Decision-Making Behavior: A Test of the Mediating Role of Risk Perceptions and Propensity. *The Academy of Management Journal*, 38(6): 1573-1592.

Vicky Arnold, Jean Bedard , Jillian Phillips and Steve Sutton (2007). The Impact of Risk on Investor Decision Processes and Outcomes in the Post-Sox Environment. *Preliminary Working Paper* No 360.

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