

## Cultural Factors that Shape Investment Decisions

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**Abstract:** Models are abstracts of reality and the primary objective for 'modeling' is to provide us with the ability to manipulate reality without causing any destruction. But for a model to be useful it has to be requisite, that is, it must contain all the relevant variables of the reality it intends to represent. Usually, economic models do not spell out the procedures by which decisions of the economic unit are made; moreover they tend to be generic without any discrimination on aggregate variables for decision makers, like culture. If anything at all, behavioural models capture cultural influences implicitly. This study is the report of a study to establish and document how investment decisions are made, paying particular attention to the nature of the factors that determine how the prospective investor goes through the choice of investment instruments. It is an attempt to explicitly capture the influences of culture on the decision making process. An attempt to find an answer to the question as to why traders in Ghana engage in a savings which requires that they make a payment for the savings instead of depositing the money in a savings account with a bank where they would have received interest on it. The present study was motivated by the suspicion that a hidden cultural factor influenced this rather strange phenomenon. Generally Western thinking is that investment decisions must be fully analytical. Consequently, several organizations exist with the primary objective of providing information to assist in the careful and systematic analysis of investment opportunities. But this presupposes that the decision maker himself is analytical in his thinking, which is only true if considered in Western environments. Unfortunately, that may not hold true in other societies, as the observed phenomenon reveals is not the case in at least the Ghanaian environment. This preliminary investigation seems to suggest otherwise.

**Key words:** Decision making, Culture, Modeling, Investment

### Introduction

Decision scientists have provided both prescriptive and descriptive models on the fundamentals concepts of how individuals go through the choice process, and the basis for ordering preferences. The material describes decision making as a process of analysis involving a conscious and purposeful effort directed at determining what should be perceived as the *best* alternative (in the case of the prescriptive models), and in the descriptive models, room is made for the limitations of real life in a concept known as "bounded rationality". Invariably, the fundamental ingredients of both models are the same. They describe decision making as a series of logical steps that begin with the recognition of a problem followed by a search for alternatives, evaluation and selection. When applied to investment decisions, the inference is that the decision maker scans the environment for all the possible investment opportunities and evaluates them in a scientific way and then selects the best alternative. In other words, investors will strive to optimize. An inherent implication of this model is that investors possess the ability and are willing to scan the environment for information on investment opportunities but also must possess the ability and be willing to apply scientific tools in the evaluation of alternatives.

In the case of an investment decision the first of these steps is the recognition of an investment opportunity, followed by a logical analysis of this opportunity by considering appropriate risks and measuring them against the possible returns to be realized from the investment, same is done for other investment alternatives. Finally, the results of the risk - return analysis for the various alternatives are compared, and the alternative which provides the optimum value is chosen. Both models contain ingredients of how the pros and cons of each alternative in a decision are investigated and how information is sought to improve the selection process. Consequently, such models call for massive information support for the analysis and evaluation of alternatives. Of course there is also the so called "Garbage Can Model". According to this model sometimes decision making is haphazard and unpredictable. Some decision makers make random and unsystematic decisions. So rather than a step-by-step, systematic approach to arrive at a choice, the decision process is chaotic and very difficult to explain. Perhaps, this model can explain the craze with which people trooped to PYRAM and R5 (pyramid investment schemes) as soon as they become aware of those investment opportunities. Very few, if any at all, raised questions about why the interest rates should be so high and whether such high rates can be sustained forever. Indeed very well educated individuals put their funds in the pyramid schemes.

**Problem Statement:** In the recent past the introduction of pyramid financial schemes in Ghana received large

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patronage for no apparent reason. The level of patronage defied all logic. How those who took part assessed the risks involved in the investment was not exactly clear. Within only a few months of their existence, PYRAM and R5 (the two companies that operated the scheme) became the investment Centre for many households in Accra and Kumasi where they were first established. Their offices were filled with large number of investors daily, with several of them waiting long hours in the hot tropical sun to receive service. Interestingly, they would not do the same in a traditional bank. So what was it that attracted the large crowds to PYRAM and R5?

It is generally believed that the informal financial sector in Ghana is large and that if the formal sector can mobilize funds from this sector, capital can be made available for borrowing by industry. The formal sector has made attempts to do this by introducing new financial products to entice the informal sector to invest. Informal savings collectors for example are known to collect large sums of money from traders (Aryeetey and Steel, 1994). Informal savings collectors contract with their clients to collect a fixed amount daily (or at regular intervals). At the end of each month, the savings are returned to the depositors and the collector keeps one day's deposit or about 3% of the periodic payment. The question has been raised as to why traders engage in a savings of this type which requires that they make a payment for the savings instead of depositing the money in a savings account with a bank where they would have received interest on it. The present study was motivated by the suspicion that a hidden cultural factor influenced this rather strange phenomenon.

Other informal mechanisms for savings with long history also have been found to be popular in Ghana, even with some in the elite class. The Rotating savings and credit associations sometimes have members who are lawyers, medical officers, academicians and other businessmen who contribute a certain amount to a common pool at regular intervals. Each member receives the pool in turn. Despite the problematic nature of administering such schemes (they carry the risk of members who receive the pool early refusing to continue to contribute), rotating savings and credit associations continue to remain popular. An examination of this type of investment also reveals lack of scientific explanation, for the majority of the members (especially those receiving the pool late) do not have any real benefit in terms of interest on their monthly payments, whereas earlier receivers of the pool could take advantage of the time value of money if they invest.

The inability of the formal financial institutions to meet the credit demands of the self-employed and family enterprises, poor quality of services provided by formal institutions, the speed with which to get cash back when needed are but a few of what might appear to be the reasons for the preference for other informal investment alternatives. The commercial banks, historically and are still very much oriented toward large firms. They have been reluctant to extend unsecured lines of credit to individual customers within the small informal clients group.

A key element of the Structural Adjustment Program in Ghana is the introduction of financial liberalization. In particular the Special Financial Sector Adjustment has as a primary objective the institution of measures that will enhance increased savings mobilization and intermediation through the formal financial system, improved access to financial services, and increased investment by the private sector. However, it has become increasingly clear to policy formulators, researchers and the formal financial institutions that adoption of financial liberalization policy alone has not been sufficient to generate a strong response from the private sector to achieve any of the those objectives. This has prompted several researches to be conducted to examine the real problems of the financial sector (Aryeetey 1996). Most of these have been restricted to macro issues. This latest attempt is however directed to paying some attention to the micro issues, an attempt to reveal any hidden factors that influence the choices that potential investors in the Ghanaian environment made.

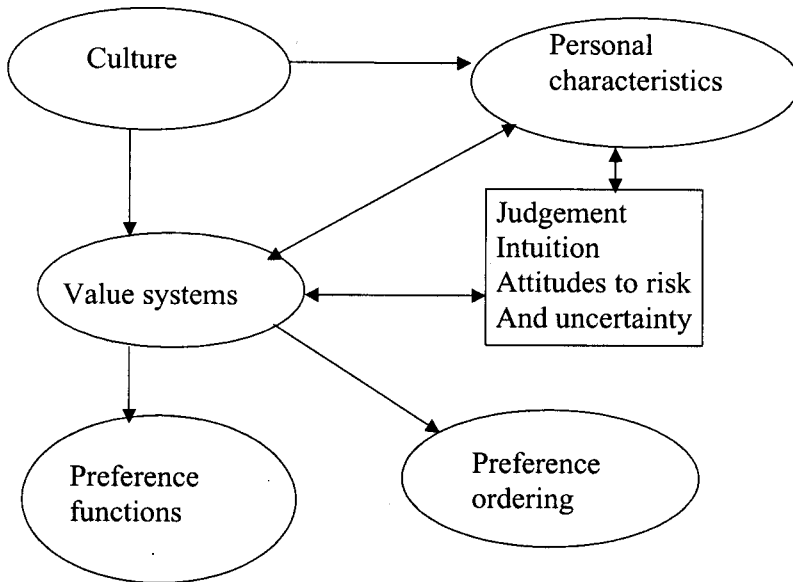
The formal financial institutions generally are uninterested in adapting financial products to meet the needs of the saving public. For sometime quite a number of them made a little effort to introduce new financial products. They tended rather to try to mould customers to their existing set of financial products, interest-free current accounts, savings accounts, time deposits, a selected number of bonds and Treasury bill. A few of them, the traditional banks introduced negotiable certificates of deposit. Just before it perished the Meridian BIAO Bank introduced the most innovative product on the financial scene, what it called The 'Gold Account'. This was open to both corporate and individual investors, the essential feature of which is the variability of the interest to be paid on the account. It was then the only interest-bearing current account in the country at that time. Recently the Standard Chartered Bank allows limited interest on current account provided the balance is in excess of ₵20 million in a quarter and this will attract interest payment of 5-8%.

There is a general belief that the lack of innovative financial products from the formal financial institutions, which is exemplified by a high degree of popularity of Treasury bills, has led to inadequate investment opportunities for potential investors. The institutions complain and contend that the return on Treasury bills is so high (reaching 43% in certain months) that an increasing number of their deposit customers used them for saving. The need to fill this gap is being offered by the emergence of saving and loan companies. It is interesting to note that such companies package their products along the traditionally known 'susu' system (Aryeetey op.cit ) with appreciably good success.

**Investment Decisions:** Generally western thinking is that investment decisions must be fully analytical. Consequently, several organizations exist with the primary objective of providing information to assist in the careful and systematic analysis of investment opportunities. The information is supposed to support the decision making of all kinds of investors, including those who rely solely on their intuition to arrive at investment decisions. The usefulness of such information to a large extent will depend on the ability of potential investors themselves to be analytical in their thinking. Being analytical will not necessarily require some mathematics to support the decision making process. Rather it refers to the need to explore existing investment alternatives carefully and examining expected returns on each alternative, together with the risks (possibility of losses or returns not coming up to expectations) associated with them.

Analytical thinking starts with the raising of issues and asking questions. When Isaac Newton say the apple fall he went straight into analytical thinking by asking questions as to why it must drop and not hang up there. That thinking of course led to the discovery of the laws of gravity. When interest rates begin to go up analytical investors ask why, and when is it likely to stop rising and take a downward trend. Simple questions like these get investors engaged in a reflective thought which helps them determine which investment vehicles to use as well as the duration for the investment. In other words, investment decisions which are driven by analytical thinking must necessarily be rational.

**The Cultural Connection:** Culture has been found to influence managerial behaviour (Kuada 1994) and since every aspect of managerial activity involves decision making, by implication decision making in general will have cultural dimensions, investment decisions included. Preference functions and preference ordering, the central concepts in decision analysis have embedded in them value systems (Boye 1999), which in turn are shaped by cultural factors. The fundamental premises of rational thought process relies on optimization procedures, a measure of effectiveness, preference relations, and laws of logic to arrive at a decision. Rational behaviour calls for two kinds of guesses; guesses about future consequences of current actions and guesses about future preferences for those consequences. Some decision scientists have added that the application of mathematics is a part of the rational thought process. But it need not be. A simple analytical reasoning which forces questions on the choices available will eventually call for some fundamental laws of logic to weigh alternatives and provide direction on the future consequences of current actions. It appears therefore that analytical thinkers must necessarily be rational in making decisions.



The dimensions of culture which formed the basis for this study are; uncertainty avoidance (Hofstede 1994), logic and decision rules (Baligh 1994), oral tradition and time conception (Van Ryckeghem 1996).

**Objectives of the Study:** The primary objective of this study was to establish and document how investment decisions are made, paying particular attention to the nature of the factors that determine how the prospective investor goes through the choice of investment instruments.

The interest is not so much in the quality of the decision itself as why an investor will prefer one particular investment

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instrument to the other. We sought to determine, for instance, why an individual investor will prefer a particular insurance product (e.g. a life policy) to that of a fixed deposit from a bank; or why a group of individuals will prefer a 'susu' scheme to that of buying a stock from the Ghana Stock Exchange. The primary focus was on how far individuals are willing to invest into the future, a consideration which will determine attitude towards future oriented events, which in turn will provide a measure of uncertainty avoidance dimension of culture.

Another principal objective was to measure the oral tradition dimension of culture. This will be manifested by the sources of information for investment decision making.

### Materials and Methods

We have relied entirely on primary sources for the data in this study. The questionnaire was designed to measure the extent to some selected dimensions of culture influenced the investment decisions of our respondents. The survey instrument was designed in two categories. One was targeted at the informal sector, i.e. traders and individuals that either own their own businesses or are employees of public and private organizations. There were 200 questionnaires sent out by four field workers into the commercial centre of Accra, tennis clubs in Accra and Tema and also the all popular Achimota Golf club, where the 'the big boys' relax on the weekends. 165 of that number responded, representing 82.5% responding rate. The other category was institutions that are engaged in investment activities as fund managers. These included commercial banks, merchant banks, discount houses, stock brokerage companies, and insurance companies. There were 50 questionnaires in this category out of which 39 were received, representing 78%.

The survey instrument sought information from the respondents on various aspects of investment activities. For a comprehensive coverage of investors we administered a separate instrument for institutional investors. These included commercial and investment banks, 13 responded, 9 insurance companies 3 leasing and financing companies, 9 stock brokerage firms (some of which are also located within the banks) and 5 others who are non-banking financial institutions like building societies and savings and credit firms. The individuals who responded on behalf of their companies have fairly good academic background with 41% having a first university degree of some sort, 23% of them have Masters degrees in business administration or in economics, 10% are chartered insurance practitioners and another 10% have diplomas from professional institutions of banking and accounting, the rest do not have any academic qualifications.

**Method of Analysis:** Single descriptive statistical analysis approach has been used in analyzing the data collected. Consequently we depended almost entirely on frequency distribution in making judgments about the relative importance of the factors that appear to influence how potential investors make decisions. However, we recognize that a further analysis with some other tools would be desirable in order to make deeper judgments about the relative importance of the factors.

For example, when an important factor has varying degrees of priority in investor's preference, imposing some type of ordinal ranking would be useful in providing more insight into investors' preferences.

### Results and Discussion

**Institutional Investors:** Among institutional investors we expected to find investment specialists who would be engaged in a rigorous risk-return analysis in their consideration of investment decisions. Our findings revealed the influence of other factors (mainly stemming from intuition - a culturally related) on the decisions that institutional investors make

Within the institutions it appears that investment decisions are made by individuals with the approval of another superior. Where the institution's main business is a fund management for clients, the client still influenced the decision made. It is only in few cases that the investment decisions are made by groups, that is, investment by committees (figure 1). A great number of institutional investments are short term, with more than 56% of such investments being within one-year period. One could assign a number of reasons to this phenomenon. One obvious one could be the lack of availability of long term investible funds, but the results of this investigation seems to point to the primary cause of the risk aversiveness of those making the decisions.

When viewed against the background of responses on choice of investment vehicle, the reasons given for the particular choice made, and how those making the decisions consider themselves as risk takers, one could deduce that risk aversiveness is a significant factor in the investment decision-making process. We found that a significant number of investors consider themselves to be only average risk takers and their main objective for making a decision is the preservation of their capital. Safety of the money is the primary consideration that determines where the money is put. Institutional investors are therefore more concerned with preserving what they have acquired first, rather than allowing capital growth or more income generation to motivate them in the investment decision. The reasons provided



for making the investment support very well the finding that risk aversiveness is the important factor that drives the investment decision. A significant number of our respondents view the volatility of the Ghanaian economy which may lead to loss of capital as a high risk factor to be considered in taking decisions on investment vehicles.

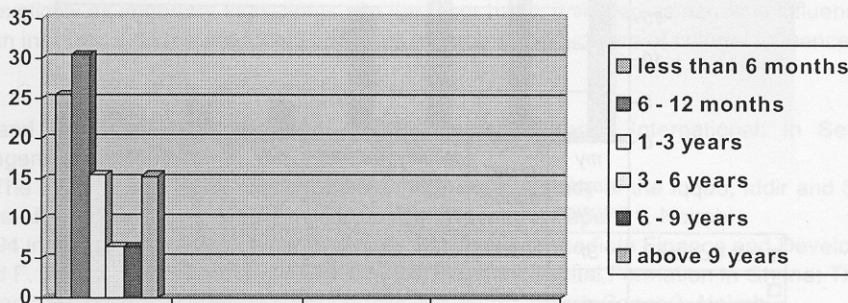
**Individual Investors:** This section formed the core of the study as the study sought to pull the reasons why individuals in this country invest money. Generally it has been assumed that the profit motive has been the driving force behind investment public. Classical economic theories have been used to support these assumptions. To pull out factors that drive investment among individuals we asked questions that drew out the main concerns for making the investment. The factors included the amount of profit made on the money; the speed with which one can get the money back when needed; the degree of safety for the investment (here we tried to distinguish between the sources of risk as well, e.g. inflation causing erosion of the investment, the money being squandered by the institution depreciation of the currency causing the value of the money to reduce in real terms). The study revealed that safety concerns were the most important factors that drove investment decisions. Most individuals were much concerned with the safety of their investment than the returns expected on the investment Tables 3 and 4 show the importance investors placed on safety rather than growth.

The study also tried to relate these factors to the type of investment choices made by various individuals. The investments opportunities identified include insurance policies, investment in foreign currency, trading, fixed assets-property, use of 'susu' system, fixed deposit, investment in bonds, buy a stock, and buy treasury bill. Again the study revealed a marked preference for safer investment vehicles like property; treasury bills; investment in foreign currency; and trading. The results portray a clearly high degree of risk aversiveness on the part the investing public in Ghana. This was supported by the fact that a high number of respondents indicated that the reasons for choice of investment institution like banks was familiarity as well as the size of the bank. It appears that most investors are comfortable with the bigger and older banks than the new ones. Another interesting revelation has to do with the reasons why people put their money in the bank. Most of our respondents indicated that they put their money in the bank just to keep it safe, ahead of making more money.

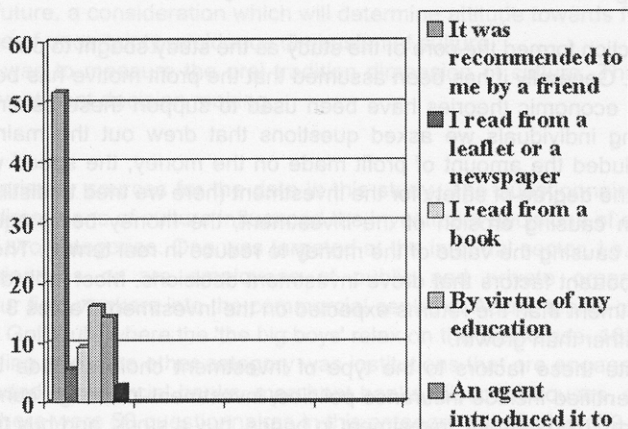
The capital preservation factor was underscored by responses to reasons for avoiding other investment vehicles like the purchases of bonds or stocks. A number of respondents 81% of them, indicated their awareness of bonds as a long-term investment vehicle, but will be unwilling to invest in bonds because they simply don't like it due to the uncertainty associated with how quick they can get their money back if they need it. Indeed most (88%) of our respondents indicated that when they invest money their main concern is how fast they can get the money back when it is needed, well ahead of their concern for the amount of profit they can make on the money. Another significant factor that seems to shape the investment decision is the familiarity with both the financial institution involved as well as the type of investment to be made. A great umber of the respondents consider it safer to use an investment that they are absolutely familiar with and use an institution that they know already.

We also found that a large number of individuals rely on their intuition rather than any systematic method (quantitative or non-quantitative) for their decisions. This is a highly significant finding since it underscores the relationship between culture and investment decision making.

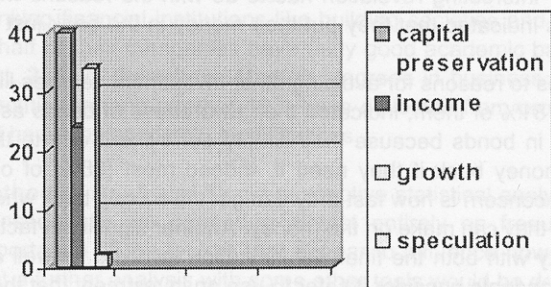
Investment Period



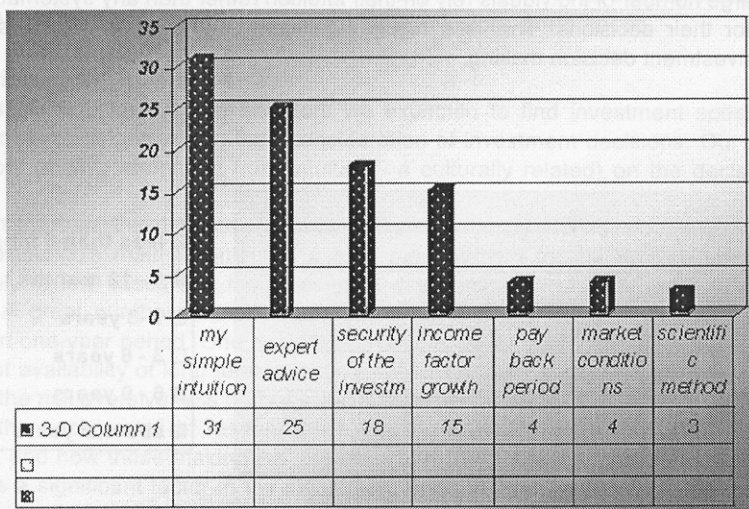
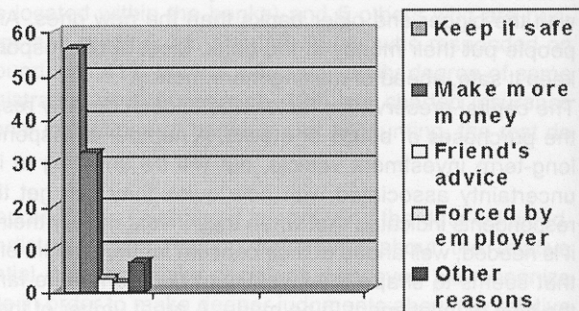
### Source of Information for Investment Decisions

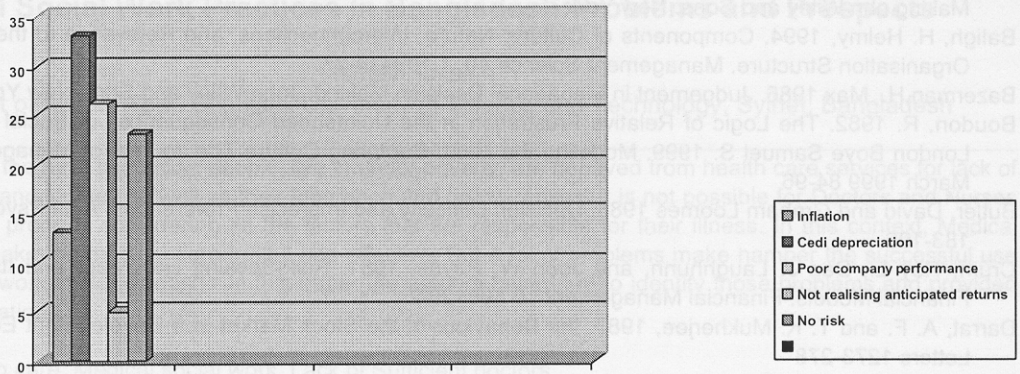


#### overall decision objective - for professionals



#### overall decision objective





Inflation	13			
Cedi depreciation	33			
Poor company performance	26			
Not realising anticipated returns	5			
No risk	23			

Risk assessment factors

Conclusions

There is significant reliance on intuition for investment decisions and this allows to a large extent cultural factors to dictate the choices that are made. This is because intuition and personal judgment are shaped by the personal characteristics of the individual. But these in turn are determined by the value systems and the cultural background of the individual. Cultural factors, such as uncertainty avoidance, time conception, cultural logic and decision rules as well as oral tradition seems to dictate how far into the future investors commit funds. Oral tradition in particular, seems to be very significant in determining how information for investment decision is passed on. For, most respondents' choices seemed to have been made on the information obtained from friends. Choice of banks, stocks to invest in whether to invest in Treasury bill or in fixed property are significantly influenced by friends.

Admittedly, this study is not entirely conclusive as it will require a complete cross-cultural analysis to determine the extent to which the identified cultural factors influence decision making by investors. It is perceivable that the tendency for capital preservation rather than capital growth to be the primary driver shaping investment choices may be attributed to other factors like the high volatility of the economy. Lack of availability of long term investment opportunities may also be a potential contributor the choice of short term investment vehicles rather than the cultural factor of uncertainty avoidance.

However, this preliminary investigation has raised interesting questions on culture's role in decision making. This investigation could also form the basis for proposing new models for the decision making process that captures the cultural factors explicitly as important ingredients. On the other hand, if viewed as negative influence, then should we rather suggest an insistence on the prescriptive models to force the avoidance of cultural influences?

References

Aharoni, Yair and Richard M. Burton 1994. Is Management Science International: In Search of Universal Rules. *Management Science* 40, 1, Jan., 1994:1-3

Aredo, Dejene The Informal and Semi-formal Sectors in Ethiopia: A study of the Iqqub, Iddir and Savings and Credit cooperatives African Economic Research Consortium, Research Paper 21, Nairobi

Aryeetey, E., 1994 Informal Savings Collectors in Ghana. Can they intermediate Finance and Development IMF, March

Aryeetey, E., and F. Gockel 1991. Mobilizing domestic Resources for Capital Formation in Ghana; The Role of Informal Financial Markets African Economic Research Consortium, Research Paper 3, Nairobi

Aryeetey, E., 1994. Formal Financial Institutions and the Development of Integrated Financial Markets in Africa; A case study from Ghana

Ayisi, Eric O., 1992. An Introduction to the Study of African Culture East African Educational Pubs. Nairobi



### **Boye: Cultural factors that shape investment decisions**

- Baird, Bruce F., 1989. *Managerial Decisions Under Uncertainty: An Introduction to the Analysis of Decision Making*. John Wiley and Sons. New York
- Baligh, H. Helmy, 1994. Components of Culture: Nature, Interconnections, and Relevance to the Decisions on the Organisation Structure. *Management Science* 40, 1, 1994: 14-27.
- Bazerman, H. Max 1986. *Judgement in Managerial Decision Making*. John Wiley and Sons New York
- Boudon, R. 1982. *The Logic of Relative Frustration in the Unintended Consequences of Social Action*. Macmillan London
- Boye Samuel S. 1999. Modeling the Mind: Capturing Culture *The Journal of Management Studies* 14 March 1999 84-96
- Butler, David and Graham Loomes 1988. Decision Difficulty and Imprecise Preferences. *Acta Psychologica* 68 1988. 183-196.
- Crum, Roy L., Dan J. Laughunn, and John W. Payne, 1981. Risk-Seeking Behaviour and Its Implications For Financial Models. *Financial Management* 10 1981: 20-2
- Darrat, A. F. and T. K. Mukherjee, 1987. the Behaviour of the Stock Market in a Development Economy *Economic Letters* 12: 273-278
- Fosu, Yefi K The Real Exchange Rate and Ghana's Agricultural Exports African Economic Research Consortium, Research Paper 9, Nairobi
- Green, Joshua and Delano Villanueva, 1991. Private Investment in Developing Countries; An Empirical Analysis IMF staff Papers 38, 133-58
- Hofstede, G. 1980. *Cultures Consequences*. Sage Publications. California
- Hofstede, Geert 1994. Management Scientists Are Human. *Management Science* 40, 1 Jan., 1994. 4-13
- Kuada J. E. 1994. Managerial Behaviour in Ghana and Kenya: A Cultural Perspective. Aalborg Univ. Press Denmark.
- Lefcourt, Herbert M. and Richard A. Steffy 1970. Level of Aspiration, Risk-Taking Behavior, And Projective Test Performance: A Search For Coherence *Journal of Consulting and Clinical Psychology* 34, 2, 1970 193-198.
- Lefcourt, Herbert M., 1965 . Risk Taking in Negro and White Adults *J. Personality and Social Psychology*. 2, 5: 765-770.
- Lefcourt, Herbert M. 1965. The American Negro: A Problem in Expectancies *Journal of Personality and Social Psychology* 1: 377-380.
- Libby, Robert and Peter C. Fishburn 1977. Behavioral Models of Risk Taking in Business Decisions: A Survey and Evaluation *Journal of Accounting Research* 15: 272-292.
- Mwega, F M, S M Ngola and N Mwangi Real Interest Rates and the Mobilisation of Private savings in Africa .African Economic Research Consortium, Research Paper 2, Nairobi
- Ndele, S M The Effects of Non-Banking Financial Intermediaries on Demand for Money in Kenya African Economic Research Consortium, Research Paper 5, Nairobi
- Osei, Kofi A Foreign Exchange bureaus in the Economy of Ghana African Economic Research Consortium, Research Paper 45, Nairobi
- Osei, Kofi A Analysis of factors Affecting the development of an emerging capital Market: The case of the Ghana stock Market African Economic Research Consortium, Research Paper 76, Nairobi
- Soyibo, A The Savings-Investment Process in Nigeria: An Empirical Study of the supply Side African Economic Research Consortium, Research Paper 12, Nairobi
- Syibo, Adedoyin The Transmission of Savings to Investment in Nigeria African Economic Research Consortium, Research Paper 48: Nairobi.