PERFORMANCE EVALUATION OF UNIT TRUSTS IN SOUTH AFRICA OVER THE LAST TWO DECADES.

By

OLUWOLE JACOB MIBIOLA

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SUPERVISOR:

PROFESSOR KALU OJAH

DECLARATION

I, *Oluwole Jacob MIBIOLA*, declare that the research work reported in this dissertation is my own, except where otherwise indicated and acknowledged. It is submitted for the degree of Master of Management in Finance and Investment in the University of the Witwatersrand, Johannesburg. This thesis has not, either in whole or in part, been submitted for a degree or diploma to any other universities.

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Oluwole Jacob Mibiola

Signed at	22 nd		May	
On the		Day of		2013

ABSTRACT

Unit trust investment looks cosy and attractive from the surface, but a detailed understanding of unit trust and its performance can be daunting. Having discussed the evolution of mutual funds in the US and other industrial and financially sound countries; it is concerning that not much has been done in terms of research works on the South Africa unit trust industry's performance. Several studies have been aimed at investigating the investment in mutual funds relative to mutual fund returns, but an extensive study on the performance of active unit trusts against their bench-marking index is still lacking. This study contributes to the debate by conducting a detailed study of the performances of mutual funds in the last two decades and also what the global investment fund witnessed over this period, with particular interest in the South African market. Another contribution of this study was to provide reasons for the slow growth of investment funds in South Africa; this study attempts to ascribe reasons as to why this has been so.

This study used three different performance measures (namely: the nominal returns, Sharpe Ratios and CAPM Alphas) to test the possibility of superior performance by the market or the funds. In order to carry out this detailed analysis of the performance of unit trusts, these performance tests were applied individually to the net returns obtained from a sample of 64 South African domestic general equity unit trusts, covering the 20-year period from January 1st 1992 to December 31st 2011. This 20-year period was further divided into 7 different periods of four 5-year periods, two 10-year periods and the whole 20-year period. This was done to avoid survivorship bias. In all of the periods, strong evidence of superior performance by the domestic general equity unit trust over the market could not be found. Furthermore, several reasons were deduced form the study as to investment funds continue to experience slow growth. Some of the reasons include the following: cost of index fund, investor's sentiments, and commissions amongst others.

Finally, having said all these, outperformance, perhaps may not be the main objective of unit trusts. The findings of this study may not have provided strong evidence of outperformance, it however reveal that there is a need for unit trusts to evaluate the costs and benefits involved in their trading activities in order to provide investors with maximum possible returns for the level of risk they take.

DEDICATION

This research report is dedicated to God, my Parents: **Mr and Mrs. Simon Adekunle Mibiola**; my Siblings: **Folasade Afonja, Ayokunle Mibiola and Oyedeji Mibiola** and my best friend **Oyebanji Funke.**

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TABLE OF CONTENTS

TITLE PAGE	
DECLARATION	2
ABSTRACT	3
DEDICATION	4
ACKNOWLEDGEMENTS	5
TABLE OF CONTENTS	6
LIST OF TABLES	9
CHAPTER 1	10
INTRODUCTION	10
1.1 BACKGROUND OF THE STUDY Error! Bookmark not	t defined.1
1.1.1 Global Evolution of the Unit Trust Industry	11
1.1.2 Evolution of the South African Unit Trust Industry	12
1.2 PROBLEM STATEMENT	13
1.3 RESEARCH OBJECTIVES	14
1.4 SIGNIFICANCE OF THE STUDY	14
1.5 PROPOSED METHODOLOGY	15
1.6 DEFINITION OF TERMS	15
1.7 OUTLINE OF THE STUDY	
CHAPTER 2	17
LITERATURE REVIEW	17
2.1 BRIEF OVERVIEW OF THE SOUTH AFRICAN UNIT TRUTS INDUSTRY	18

2.2 EVALUATION OF UNIT TRUST PERFORMANCE AND THE PERSISTENCE	IN
PERFORMANCE	19
2.2.1 The Case of Outperformance in the US Market	19
2.2.2 The Case of Persistence in Performance	23
2.3 DEVELOPMENT AND THE PERSISTENCE IN PERFORMANCE OF UNIT TRUS	TS
IN SOUTH AFRICA	26
2.4 PERFORMANCE OF INDEX UNIT TRUSTS VS ACTIVE UNIT TRUSTS	29
2.4.1 The Role of Expense on the Performance of Unit Trusts	.30
2.5 EFFICIENT MARKET HYPOTHESIS AND OTHE ALTERNATIVE THEORIES ON	[
ASSET MANAGEMENT	31
2.5.1 Efficient Market Hypothesis	31
2.5.2 Behavioural Finance: The Concept of Asset Management	32
2.5.3 Equilibrium Accounting	33
2.5.4 The Arithmetic of Asset Management	34
2.5.5 Diseconomies of Scale	35
2.6 SUMMARY Error! Bookmark not define	e d.
CHAPTER 3	37
RESEARCH METHODOLOGY	37
3.1 INTRODUCTION	37
3.2 SAMPLE DATA	37
3.2.1 JSE Indices	37
3.2.2 South African Unit Trust Data	38
3.2.3 Macroeconomic Information on South Africa	39
3.2.4 Data Analyses	39
3.3 MODELS AND STATISTICAL PROCEDURES	39
3.3.1 Nominal Performance Measures	39
3.3.2 The Sharpe Ratio	40

3.3.3 Jensen's CAPM Model	41
CHAPTER 4	44
RESULTS AND DISCUSSION	44
4.1 TEST OF PERFORMANCE	44
4.1.1 Appropriateness and Robustness of the Models	44
4.1.2 Nominal Performance Measures: Nominal Returns	46
4.1.3 The Sharpe Ratio	48
4.1.4 Jensen's CAPM Model	49
4.2 REASONS FOR THE SLOW GROWTH OF INDEX UNIT TRUSTS IN SOU AFRICA	
4.2.1 The Cost of Index Funds	51
4.2.2 Investor Sentiments	52
4.2.3 Enhanced Strategies	52
4.2.4 Commissions	52
4.2.5 Marketing	53
4.2.6 Performance of Active Funds and the Market Conditions	53
CHAPTER 5	54
CONCLUSION AND RECOMMENDATIONS	54
5.1 CONCLUSION OF THE STUDY	54
5.2 RECOMMENDATIONS FOR FURTHER RESEARCH	56
REFERENCES	58
APPENDICES	65
APPENDIX A DATA AND STATISTICAL RESULT OF UNIT TRUSTS	65
APPENDIX B FINANCIAL DATA ON JSE ALSI	.107
APPENDIX B DATA ON SOUTH AFRICA 90-DAYS BANKERS ACCEPTACNE RATE	109

LIST OF TABLES

Table A1	Summary Statistics of the Regression Intercepts and Independent Variable		
	over the 20-year period4		
Table A2	Summary Statistics of Model Robustness4		
Table 4.1	Summary of Returns of Unit Trusts versus the JSE ALSI Returns over the		
	Different Evaluation Periods		
Table 4.2	Summary for the period Ended 31 st December 201147		
Table 4.3	Summary of JSE ALSI Sharpe Ratio versus Trusts Sharpe Ratio48		
Table 4.4	Mean CAPM Alphas		

1. Introduction

There is a continuing cognition in the financial market as to whether investors choose unit trust (mutual funds) based on the different characteristics they possess or just on the premise of choosing the easiest way out by placing money in the so-called safe haven- unit trust. It has been observed over time that fund managers, who investors entrust their funds with are too greedy in their quest to make enormous gains rather than protecting the best interest of their clients. Warren Buffet once said, until professional fund managers clean up their act, one's best bet is to opt for an index fund or the type of fund that uses one's money to track a stock market, provided the initial and ongoing costs are low if you invest in shares.

A number of occurrences took place in the financial sector during the 1990s but the most outstanding of them was the explosion of unit trust. Jordan and Miller (2009) defined unit trust, otherwise known as mutual funds, as a simple corporation owned by its share holders whose major functions are to pool funds of large group of investors together and then invest the funds in stocks, bonds and other financial assets. The buy and sell decisions in a unit trust are made by professional fund managers who are compensated for these oversight and advisory services provided.

Unit trust provide individual investors who do not want to actively buy or sell securities on their own, the opportunity to still pursue their desire of investing in financial securities by acting as a form of financial intermediary. Unit trusts offer many enticing advantages that make the prospect of investing in unit trust attractive to investors. Some of the advantages include:

- Professional management of funds. The buy and sell decisions are made by professional managers, meaning that investors do not have to bother on how critical decisions on their funds are made.
- Unit trusts also offer the advantage of portfolio diversification. When you invest in unit trust, it is like investing in a basket of financial securities. Though this does not prevent the loss of investment completely, diversification of portfolio helps to reduce risk as unit trusts invest in hundreds (sometimes thousands) of asset under several portfolio; thus, if the value of one drops, the decline will only have a small impact on

the unit trust value because the value of another in the same portfolio may have increased.

 Most unit trusts offer the best initial purchase cost. Though this varies from fund to fund, it still offers the best initial purchase cost. With only \$2000 in the United State, for example, one can invest in big companies such as Coca Cola, General Motors, IBM, McDonalds etc.

Just like all other financial assets, unit trusts also have their own pitfalls and these include tax considerations, risk of specialized funds and high cost involved in investing in unit trust that is characterized by "churning".

1.1 Background of the Study

Unit trust has evolved over the years and this is well documented in several literatures (e.g., Sharpe, 1966; Klapper et al, 2004;....., and John and Miller, 2009) Therefore, it will be pertinent in this study to provide a general overview of the development of unit trust globally and particularly in South Africa, the focus of this study.

1.1.1 Global Evolution of Unit Trust Industry

Several literatures have documented the existence and evolution of unit trust and this date back to the last century. However, over the years, especially in the 1980s, there has been a tremendous and consistent development in the importance of mutual funds globally. Unit trust forms an important part of every county's financial sector these days and it has become one of the biggest contributors in the financial sector. According to Jordan and Miller (2009), as at the start of 2007, over 95million Americans in over 56 million households owned mutual funds. This was against what was obtainable in 1980 when there were just 5million households. Investors are said to have contributed \$474billion to mutual fund in 2006.

The growth of mutual fund in the U.S. and other high income countries has stimulated a large and ever growing literature on the facts that can best be used to explain their performances. Klapper et al (2003) examined the development of mutual funds (unit trusts) around the world and their result suggests that except for a few countries (mostly in Asia),

mutual fund have grown extensively in most countries during the 1990s. Over a period of six years, from 1992 to 1998, the fifteen member countries of the European Union then, witnessed an increase in their total mutual fund assets from \$1trillion to \$2.6 trillion.

Furthermore, not only did mutual fund asset grow extensively in the US over this six-year period, there was rapid growth of household ownership of mutual funds. An estimated 56million Americans can lay claim to mutual fund ownership. Moreover, mutual funds have grown tremendously in the Scandinavian countries especially in Sweden. Karlson and Persson (2005) stated that as at 2005, mutual funds have become one of the fastest growing financial intermediaries and has contributed significantly to the total wealth of the nation. Its contribution has increased from SEK 300 million at the beginning of 1970 to SEK 1 trillion in 2005. Klapper et al (2004) provided a justification for the increasing growth of mutual funds by suggesting that it might be due to the increasing globalization of finance and expanding presence of large multi-national financial group in a large number of countries and by strong performance of equity and bond market in the 1990s. Also, another factor said to have contributed to this significant rise was probably the demographic ageing that characterized the population of most high and middle income countries and the search for "safe haven"; that is their desire to hold safe and liquid financial asset that promises high long term return.

1.1.2 Evolution of the South Africa Unit Trust Industry

Unit trusts offer investors the advantages of portfolio diversification and lower cost of professional management of funds and as such, it has become an attractive investment plan to most investors who desire safe and liquid financial instruments. The history of unit trust in South Africa dates back to 1965, when the first unit trust was lunched. Sage Group lunched the first truly South African unit trust in 1965 and it was name Sage Fund. Gibertson and Vermaak (1982) published a list of the first eleven mutual funds that were operating in the country as at 1982 in their review of the performance of the unit trust industry. Some of the prominent name in the list includes: Sage Fund, SA Trust Selection, and Old Mutual Unit Trust. Also, Knight and Firer (1989) confirmed Sage Fund as the first unit trust in South Africa and suggested the appeal of such trust to investors lie in the fact that risk is spread through diversification.

Several literatures documented that the total asset of the four funds that were operating in 1966 had a total of R24 million in assets. This grew to R200 million by the end of 1968. However, there was a sharp decline in the industry at the beginning of 1969, accounting for over 32 percent share price drop. As a result of this decline, the industry suffered and was only able to experience an upswing in price at the start of 1977. Again, the market experienced a downturn in the early 2000 when the Johannesburg Stock exchange (JSE) and other global stock exchange endured a torrid time that lasted for three years. By April 2003, the unit trust market started picking up and recovered by over 40%. The industry over the years has proved very popular among investors who see it as a safe haven and this has resulted in the ever increasing number of mutual funds in the country. To buttress this fact, the number of listed funds in the country now has significantly doubled in the last 8 years. As at 2003, there were 466 listed funds, but today the figure stands at over 830 unit trusts in South Africa.

1.2 Problem Statement

Unit trust investment looks cosy and attractive from the surface, but a detailed understanding of unit trust and its performance can be daunting. Having discussed the evolution of mutual funds in the US and other industrial and financially sound countries; it is concerning that not much has been done in terms of research works on the South Africa unit trust industry's performance. Several studies have been aimed at investigating the investment in mutual funds relative to mutual fund returns, but an extensive study on the performance of active unit trusts against their bench-marking index is still lacking.

Previous works done on the performance of unit trust in South Africa is dated and the results obtained cannot be used to represent what is obtainable these days. One of such study was conducted by Brink in 2003. She made an attempt to show whether or not, South Africa unit trust industry is trending the global unit trust industry for the period of 1984 to 2003 but the study never reflected the perceived "safe haven" characteristics that unit trust supposedly has. Assessing the performance of unit trusts in South Africa is of interest to unit trust investors who have overtime been made to believing that investing in unit trusts is safe and offers the advantage of portfolio diversification, but they possess little knowledge of whether this perceived advantage is actually true.

Therefore, the proposed study aim to provide a detailed analysis of the unit trust industry in South Africa, such that it will show the trend behaviour of South Africa unit trust industry as compared to the global trends as well as bring to light, the performance behaviour of these trusts in the last two decades to aid investors in their decisions to invest in unit trusts.

1.3 <u>Research Objectives</u>

The major aim of this study is to present a detailed and comprehensive report that will attempt to represent the performances of mutual funds in the last two decades and also what the global investment fund witnessed over this period, with particular interest in the South African market. Another objective of this study will be to critically examine the advantages that can be derived from investing in active and index unit trusts. Finally, the growth of investment funds in South Africa has been somewhat limited; this study will attempt to ascribe reasons as to why this has been so.

In order to fully concretize the problem, the following research questions will be asked and if they are answered adequately, the objective of this study would have been achieved:

- What has been the trend of the performance of unit trust investments in the last two decades globally?
- Is the South African market trending the global market in terms of unit trust investment? If not, why?
- What are the factors responsible for the relative limited growth of index unit trust in South Africa as compared to the United States?

1.4 Significance of the Study

This paper aims to make empirical contribution to the body of knowledge by taking a critical look at the development of investment funds globally before narrowing it down to the South African market. This study will critically evaluate the performance of unit trust in South Africa. Furthermore, this paper will attempt to provide reasons for the slow growth of index unit trust in South Africa and also provide a justification or rationale for investor's preference for active funds. Another important reason for this study is to examine the trend in the global market and check whether or not the South African market is trending the global market.

Finally, the major contribution of this paper will be to give investors insight into the performance of unit trusts in South Africa in the last two decades, so that their investment decisions will be based largely on financially meaningful analysis, rather than on the relative self serving information provided by the fund managers.

1.5 Proposed Methodology

Having stated that the objective of this study will be to comprehensively examine and report the performance of unit trusts in the last two decades with particular focus on the South African market as well as provide justifiable reasons for the slow growth of index unit trust in South Africa, this study will be conducted on JSE and the unit trusts traded on the JSE. The data to be used in this study will span twenty (20) years, representing the period between 1991 and 2010.

Most of the data that will be used in this study will be obtained through researching and reading of financial papers on mutual fund performance during these years. Most of the data will be quantitative in nature as a vast majority of the data will be figures obtained for the JSE through the unit trust surveys and financial newspapers. Also, some of the performance data will be obtained will be obtained from the unit trust surveys that are frequently published by the University of Pretoria as well as from financial databases such as I-Net Bridge and Morningstar. Furthermore, the data collected will be evaluated using several statistical tools and procedures such as average, median rate of return, standard deviation as well as performance measure such as Jansen's Alpha and Sharpe ratio. Both parametric and non parametric statistical tests will be used to ascertain the statistical significance of the sample data. The statistical tests of T-test and Sign-test will be used to calculate the P-values of the sample group, from which significance can be confirmed. (I.e., P-value of 0.05 or smaller indicates a statistical significance between the returns at the five percent level.)

1.6 Definition of Terms

It is considered helpful to define certain terms that will be repeatedly used in this study. This is an effort directed towards avoiding confusion that may arise as result of using these terms and also to provide more clarity on the subject and overall presentation.

Unit Trust: These are investment companies who sell shares in a fund to the public and invest the proceeds in a diversified portfolio of securities. Oftentimes, the investment strategy opted

for by these companies range from high-risk active portfolio strategies to low-risk passive portfolio strategies.

The term 'unit trust' is mostly used to refer to both active unit trust and index unit trust.

Mutual Fund: This refers to the American term used to represent unit trusts. Unit trust will be used for all financial markets with the exception of the United State where the term 'mutual' fund will be used to replace unit trust.

Index Unit Trust: This is a trust that follows the structure of other unit trusts except that it is a passively managed fund aimed at producing returns of a specific market index (an example is the JSE all share index)

Investment Fund: this is a general term that will be used in this study to represent unit trusts, mutual fund, exchange traded funds and any other similar investment portfolio product.

Exchange Traded Fund: this is also similar to every other unit trust, except that it is traded like stock on the stock exchange.

Index Fund: this term will be used to refer to both index unit trust and exchange traded (index) fund.

1.7 Outline of the Study

The rest of the paper will be structured in the following ways as outlined below:

- Section 2 provides a detailed literature review of this study by looking at the several literatures on the evolution of unit trusts globally as well as in South Africa
- Section 3 describes the methodology for the study, which will empirically provide answers to the research questions and ultimately meet the objectives of the study. Also in this section, the statistical tools and models to be used in evaluating the performance of unit trusts in South Africa are discussed.
- Section 4 discuses the results obtained from the analyses carried out in the preceding section as well as address the research question with specific attention given to the reason for the slow growth of mutual fund in the country. Also, this section will provide justifiable reasons for investors preferring to invest in active funds rather than index trust funds.
- Section 5 provides logical conclusions or inferences about the study and subsequently makes recommendations for future research.

2. Literature Review

The evaluation of the performance of mutual funds (unit trusts) is continuously topical and thus has been extensively discussed over several decades. There is an extensive library of academic research on the topic internationally, however previous research works done on mutual funds in South Africa is somewhat limited. Ever since the evolution of unit trusts in the early 1960s, the question on its performance and the skills of fund managers have not failed to generate a debate among academic researchers. The research on unit trusts performance has gathered pace in the past few years and it represents an important topic in the field of investment.

Over the past years, there has been a continuous cogitation as to whether active management of unit trust provides more benefit than index (passive) fund. Several literatures, both recent and long-standing, have suggested that indexing provides more advantages than active management of funds. On the other hand, the presence of thousands of professional fund managers in actively managed funds suggests that there must be some benefits in it. Furthermore the role that expense play in the performance of these funds is critically important and has been extensively discussed. Some are of the opinion that the relationship between mutual fund expenses and performance is always inverse while some researchers believe that low cost funds are not a guarantee to perform well and high cost funds do not always perform poorly.

This chapter reviews past literatures that are relevant to this study and it is organised as follows: Section 2.1 provides a brief overview of the South African unit trust industry; Section 2.2 reviews past literatures on the evaluation of mutual fund performance and the persistence in performance; Section 2.3 discusses past literatures on the development of mutual funds in South Africa and the persistence in their performances; Section 2.4 provides an avenue to review the international literature which compares the performance of index (passive) unit trust to a benchmark; Section 2.5 reviews theories that describes active management of funds such as the Efficient Market Hypothesis (EMH) and its implication for active management of funds. Furthermore, other theories that support or criticize the efficiency of active management will also be discussed in this section.

This section will also discuss briefly, the role that expense play in the performance of these funds and finally Section 2.6 summarises the literature reviews of the study.

2.1 Brief Overview of the South African Unit Trust Industry

As discussed in chapter one, the history of unit trusts in South Africa dates back to 1965 when the first unit trust was lunched. Sage Group lunched the first truly South African unit trust in 1965 and it was named Sage Funds. As at June 14, 1965 when it was lunched, the initial asset was worth just over R600, 000. By the end of the year, there were two funds with a combined asset value of R3million. Oldert (2005) stated that the aim of the first fund was to offer investors the following advantages: (1) professional management of funds to ordinary investors who do not want to trade on their own; (2) low initial investment costs; (3) diversification of portfolio and (4) provide investors with the opportunity to liquidate their investment at short notices.

As a result of the market crash of 1969, only a handful of new funds were launched between 1965 and 1980. By December 1990, the industry has grown to 36 funds worth R7.5billion. By December 2000, a total of 334 different funds have been lunched, with a combined asset of R128.4billion. The last decade (2001-2010) has also witnessed a significant rise in the number and value of funds. As at December 2010, a total of 943 registered funds exist, pooling a combined asset value of R938billion (Pretorius and Wolmaran (2006); Association of Savings and Investment South Africa, (2000; 2005; 2010)). According to the Association of Savings and Investment South Africa (ASISA), there are two categories that funds can be placed. The first cadre of this category includes Domestic, Foreign and Worldwide. Domestic funds invest in South Africa while foreign funds invest largely outside the shores of the country. World wide fund is a hybrid of the first two as it invests in a mixture of domestic and foreign market. At the other end of the category, funds are classified as equity funds, fixed interest rate funds, real estate funds and asset allocation funds. The equity trust funds remain the most widely traded as it gives an investor over 75% exposure to the stock market.

2.2 Evaluation of Unit Trust Performance and the Persistence in Performance

This section presents the findings of previous research as regards the performance and persistence of mutual funds (unit trust) in the united state and outside the united sates. This was done by evaluating past researches that have tested whether there have been a case of outperformance in the US market. Furthermore, the persistence of performance of these funds will also be critically evaluated from the US point of view.

2.2.1 The Case of Outperformance in the US market.

According to Sharpe (1966:121), there exists the possibility of active managers beating or outperforming the index being managed passively as much as they would underperform the same index. He further noted that the only rationale for consistent poor performance against the index can be attributed to the large expenditure on the fund's asset relative to the continued search for mispriced securities, which most of the time are needless. Friend, Brown, Herman and Vickers (1962) conducted the first extensive research on mutual fund performance by studying 152 mutual funds in the US. The study involves the creation of Standard & Poors of five securities which serves as the benchmark. Based on this benchmark, it was found that the mutual funds earned an average annual return of 12.4% as against the benchmark which earned 12.7%, thus showing that the funds performed poorly against the market during the time period considered.

Soon after the emergence of the Capital Asset Pricing Model (CAPM), a pricing framework designed to analyse performance, several studies started to emerge in the areas of measuring the performance of portfolio of funds. Some of the most prominent early researchers in this area are Sharpe, Jensen and Treynor. Treynor (1965) advocated for the use of a performance measure that takes into account the risk-adjusted return and also the notion that all investors want to maximise their expected return based on the risk they take on each unit of securities purchased. Sharpe (1966) on the other hand, evaluated the reward-to-variability ratio for 34 mutual funds in the US during 1954 and 1963. The result revealed that the fund sample has a ratio lower than that calculated for the Dow Jones index over the same period by 0.4%. Jensen (1968) developed further on the works of Sharpe by using the asset pricing model to evaluate the performance of 115 US mutual funds over a period spanning 10 years, from 1955 to 1965; and a second sample of 56 funds between 1945 and 1965 (20 years).

He found that active managers were unable to outperform indexing strategy because they couldn't predict securities well enough to be able to beat the market. It can be inferred from the studies of both Sharpe and Jensen that from a statistical point of view, returns on mutual funds investment is relatively lower that the returns from a risk-adjusted index portfolio. This conclusion would then later become a reference point for other researchers testing the performance of mutual funds. Furthermore, another study was conducted by Treynor and Mazuy (1966), testing whether any of the funds in their sample of 57 funds showed any evidence of market-timing abilities for a time period of 1593 to 1962. They used a non-linear version of CAPM, whereby they increased the upside risk of the portfolio and decease the downside risk of the portfolio thus transforming the model to a non-linear function. The result however, showed no evidence of market timing abilities by any of the funds considered for the time period. Friend, Blume and Crockett (1970) conducted another study on mutual fund performance which mirrored the study conducted by Friends et al (1962). They published a result indicating that the average performance on NYSE produced a return of 12.4% index when index was equally weighted as against 9.9% when value-weighted method was used. This difference in returns was attributed to the relatively better performance of small stocks in the time period considered.

Carlson (1977) revisited the results of Sharpe (1966) and Jensen (1968) by examining 82 equity mutual funds in the US between 1948 and 1967. The results obtained contradicted those of Jensen and Sharpe. His result on the funds outperforming the market was statistically significant, which was the exact opposite of the results of Jensen and Sharpe. He stated that results obtained may be dependent on the time period covered, type of fund chosen and the benchmark used. Shawkey (1982) also reported a result that contrasted those of Sharpe (1966) and Jensen (1968) but consistent with that of Carlson (1977). The study was carried out on 255 mutual funds in the US for a time period of 1973 to 1977. He employed the CAPM equation and found an alpha of -0.43% which was deemed statistically insignificant and hence he concluded that the mutual fund as a whole showed no evidence of outperformance. Berkowitz, Finney and Logue (1988) used quarterly data over 1976 and 1983 time period to evaluate the performance of mutual funds. The employed the CAPM equation with an S&P 500 market portfolio and estimated an average alpha of 0.68% which is statistically different from Zero. However, they did not provide an intuitive interpretation of the alpha value; they only measured an alpha for growth funds.

Grinblatt and Timan (1989) employed an approach whereby they stated that before using a benchmark to reach a conclusion on mutual fund performance, the benchmark must first be evaluated to determine whether it will generate a positive or negative alpha for a single index fund. They concluded that their benchmark of eight-portfolio will produce the most efficient test of mutual fund performance. Their result posited that superior performance may indeed exist among aggressive growth funds with small net asset value. They also revealed that these funds had higher expenses such that their actual returns did not exhibit abnormal performance. They claim that any abnormal return is captured by the fees paid to the fund managers. Though they were able to support the argument that mutual expenses are not essentially wasted, they failed to use their result to support that mutual funds are able to earn equal or higher than the indexed market portfolio. This result was critically analysed in terms of its credibility by Malkiel (1995). Malkiel (1995) found that while general equity funds do not produce excess returns after expenses, those funds may earn to sufficiently cover the fund's expenses. He analysed a data spanning 10 years from 1982 to 1991 and found that on the average, alpha was found to be positive when gross returns were used and negative when the net returns were used. He concluded by stating that fund managers are not able to beat the market in general.

In an attempt to support the notion of active management, Marcus (1990) evaluated the possibility of top performing mutual fund in the US producing significant positive performance. He revealed that based on maximum of the sample covered; there is enough evidence statistically to suggest that very top performing funds do outperform the market indices. Moreover, there have been more recent academic studies which evaluated the performance of mutual funds in a different way which involves the use of "Conditional Performance Evaluation". Ferson and Warther (1996) employed the use of publicly available information on interest rate and dividend yields. This approach improved the performance of fund managers on the average by matching the market returns. The conclusion of their study was that on the average, fund managers are not able to produce outperformance but they also, they do not produce significant inferior performance. Jones (1998) analysed the median of the performance of institutional managers. He discovered that three variables can be used to explain the median return relative to the S&P 500. These variables are: market return, smallcap versus large cap stock and value stock versus growth stock. He concluded that there is a bias exhibited towards small stock and towards growth stock by managers who owns some cash.

Before expenses are deducted from profits made, it was concluded by Warner (1997) that mutual fund managers are capable of choosing stocks that beats their benchmarks. This is evident in the growth funds category where there was an average of 2.5% returns over their benchmarks before expenses were deducted. Also, Daniel et al. (1997) evaluated the quarterly holdings of over 2500 mutual funds in the US from 1975 to 1994. They fund that there is significant evidence to support positive average performance which was about 1.5%. However, this result was only for growth and aggressive funds over the time period considered. Grinhold and Khan (2000) however suggested that these results should be used carefully as it does not take into account transaction cost and fees. Their own study was based on returns to quarterly buy-and-hold portfolios with no quarterly rebalance charge. The conclusion was that there no enough evidence to show that growth or aggressive funds delivered any sort of outperformance.

Malkiel (2003) further analysed the issue of outperformance by considering all the general equity mutual funds that were available and benchmark them against the Vanguard S&P 500 index funds. The results showed that 71% of actively managed funds over the 10-year period produced returns that were inferior to those obtained by passively managed funds. He made a strong point against the notion that active management outperforms indexing (passive management). Some researchers have also shown their support for active management of funds. One of such is Kosowski (2005:3) who attributed luck to the case of fund managers of income oriented fund outperforming the indexing approach. He stated that due to the huge number of funds appearing after 1960, active managers who are not even skilled enough appeared to have performed well, but all of the success can be attributed to chance. Fama and French (2008) evaluated the trading cost incurred by active funds. Their argument was based on the fact that other researchers did not include trading cost to gross returns. Their overall conclusion was that, on the average, active fund managers are capable of achieving minimum returns that will at least cover their trading cost.

Based on past studies on the evidence of outperformance in the US mutual fund industry, it can be inferred that there is no conclusive evidence to support the notion that active managers are able to produce exceptional returns, far in excess of the returns produced through passive management of funds.

2.2.2 The Case of Persistence in Performance.

The question frequently asked when analysing performance over a period of time is "whether past performances can provide an intuition for what is to be expected in future or whether past good performance can guarantee future success. Several agencies such as Raging bull and Morningstar have over the years compiled the rankings of mutual performance and they widely followed around the world. This section of the document examines studies relating to the persistence in the performance of mutual funds over the years.

The first research conducted in this field is dates as far back as the 1965. Treynor (1965:67) stated that "it is interesting that when one talks about historical pattern of performance of fund, one is looking at the past: but when one considers the preferences of individual investors and their choices among funds, one is talking about their appraisal of the future". Despite the little research work carried out testing whether there is persistence in performance prior to the 1990s, the early studies did show that there exist some element of persistence. Grinblatt and Titman (1988) performed a study on the 157 mutual funds in the US between 1975 and 1984 and found evidence of persistence. Similar results were obtained by Brown et al (1992) and Lehmann and Modest (1987) by looking at 130 mutual funds between 1968 and 1982. One distinctive feature of the early studies was the use of long selection period which was between 10 to 12 years.

Grinblatt and Titman (1992) concluded that one of the reason for the somewhat lack of research in study of persistence in performance of mutual funds was that the traditional benchmarks such as CAPM do exhibit some biases. This is evident in CAPM which favours small capitalization and high dividend-yield stock. Based on this reason, small firm funds and dividend-paying funds were able to consistently outperform other funds. Sharpe (1966) was arguably the first to evaluate the relationship between fund performance and fund size and expense ratios. A high correlation was observed among mutual fund returns suggesting most fund managers are skilled enough in diversification. He stated that the differences in performance can be explained by the difference in expense ratios among funds and also the difference in the abilities of fund managers to identify mispriced securities. Sharpe (1966) went on to argue that funds with significant asset are able to obtain a given level of security analysis by spending a smaller part of their income than the funds with small asset size.

Based on the result of his studies, Sharpe (1966) cautioned against accepting wholesomely the notion that the average fund manager are able to successfully select portfolios that can rival the Dow Jones index. He argued that this may be the case or not before or after expense has been deducted. The studies that followed those of Sharpe which has demonstrated that past performance is not a good indicator of future outlook showed that based on different asset classes and time periods, persistence in performance does not exist. Kritzman (1983) performed a study on 32 fixed-income funds based on the total returns from two successive five-year periods. He found no evidence of persistence just as Dunn and Theisen (1983) found no evidence of such by considering 201 institutional portfolios from 1973 and 1982. However, Lehman and Modest (1987) examined the persistence of fund using several performance measures such as alphas based on both the CAPM model and APT model, and also the total returns) and found an evidence of persistence. Though they reported an evidence of persistence, they note that their results are highly dependent on the performance metrics used. Levy and Lerman (1988) extended on the works of Levy and Sarnat (1984) by using the same data set but different holding period and their result suggested that there exist a pattern of persistence in performance if ex post information is used in place of ex ante portfolio selection.

Further studies have been done in the 1990s and 2000s to further elaborate on the issue of persistence in performance. Goetzmann and Ibbotson (1991) examined funds for the period 1974 and 1988 and obtained a result that strongly favours the persistence in performance. They later extended on the study by choosing a lager sample for period 1976 to 1988 and the result was still in favour of persistence of performance. Grinblatt and Titman (1989) used an eight-portfolio benchmark and found strong evidence to support the claim that there is persistence in performance of mutual funds. They argued that irrespective of the sources of performance; information on past performance on funds can be useful to prospective investors. Hendricks et al (1993) examined the quarterly returns data on a sample of openend, no load, growth and equity funds from 1974 and 1988 and found short-run persistence in performance relative to a number benchmarks to be statistically significant. Hendricks et al (1993) also examined the possibility of making profits by incorporating past performance into investment strategies. They found that substantial gains could have been made during 1975 to 1988 from "making mutual fund investment equivalent of the past year's pennant winners"

Jegadeesh and Titman (1993) looked at stocks and their past returns. They published a result that suggested that the strategy of buying stocks that have performed well in the past and selling stocks that have performed poorly in the past provided a significant positive returns over 3- to 12- month holding period. Though they did not exactly measure mutual fund performance; their result did show that fund managers employing "momentum" strategies should be able to beat the market (benchmarks). Goetzmann and Ibbotson (1994) examined the monthly total returns of 728 mutual funds between 1976 and 1988. They found persistence in the performance of the mutual funds and also stated that past returns can be a useful guide to predicting future returns. Carhart (1997) further expanded the works of Jegadeesh and Titman (1993) and concluded that fund managers that earned higher one-year returns do so not because they follow the momentum strategies but because some funds just happen by chance to hold relatively larger position in the past year's winning stocks. Daniel et al. (1997) acknowledge the studies that have found evidence of persistence in the performance of mutual funds but suggested that while superior "hot hand" fund managers may exist, they argued that much of the persistence can be explained by the benchmark errors and survivorship bias that are evident in the past studies. Wermers (1997) conducted a study on 784 mutual funds and found evidence consistent with those of Carhart (1997) and Daniel et al. (1997) that the persistence in performance of mutual fund may be due to the use of simple momentum strategies, rather than the notion that some fund managers possess "hot hands" that enable them to select winning funds. Zheng (1999) provided a report that supports the notion that investors were able to select funds by shifting from poor performing stocks to good performing stocks. He however stated that no abnormal returns were recorded over the market while constructing a portfolio of funds with net inflows.

The cogitation on the persistence in performance of mutual funds continued to generate interest in the last decade as scholars continually tested for persistence in performance of mutual funds. Chen et al. (2000) conducted a study on the holdings and the trades of mutual funds from 1975 to 1994 in order to investigate the persistence in performance. While they found persistence in the unadjusted returns on mutual fund portfolios, there was no enough evidence to support performance persistence. Davis (2001) also conducted an examination on the relationship between the style employed by a fund manager and the equity fund performance. He used the Fama-French alpha as his performance measure and did not find any positive abnormal returns over the 1965 to 1998 time period.

Although he did find some evidence of short-term persistence, the persistence did not go beyond one year. Furthermore, Jua and Hung (2003) examined the persistence in performance for the time period 1961 to 2000. Their study revealed that persistence appears to be prominent among the equity funds while the reverse was the case for all categories of fixed-income funds. On the issue of whether investors can rely on past performance to predict the future, Malkiel (2005) showed an example where investors were disappointed with their performances after relying on past performance. The top 20 equity funds in the US which generated returns of 50% or higher than the benchmark between 1996 and 1999 produced a negative returns almost three times worse than the market over the subsequent 4-year period. He argued that although it may be true that fund managers can achieve a higher return than the index, it is difficult to know in advance who these managers will be. Moreover, Fama and French (2008) claim that the traditional persistence in performance all has these same shortcomings, that is they only allow inferences about the existence of inferior or superior funds. This means that it is almost impossible to identify skilful individual mangers since there is a large no of funds that produces some extreme values of alpha simply by luck or chance. More recently, Parati (2009) explained the main idea behind Bayesian approach that has become increasingly common among several researchers who have started using the Bayesian alphas as a performance measure to evaluate the performance of mutual funds. He stated that the Bayesian approach includes prior information related to issues such as fund expenses, investor belief about the manager's skills, benchmarking factors, benchmark pricing abilities in arriving at an estimate.

In conclusion, it can be seen that while some studies found no persistence in performance, others showed persistence at least in the short-term. These contrasting conclusions can be attributed to the different evaluation techniques and methods used, the time period studied, effect of survivorship bias and whether fees were accounted for or not.

2.3 Development and Persistence in the Performance of Unit trusts in South Africa

Several studies have evaluated and provided different conclusions on the persistence in the performance of unit trust in South Africa. While these studies date back to the early 1970s, the findings of these early works (e.g. Gilbertson, 1976; Taylor 1977; and Gilbertson and Vermaak, 1982) were tainted by some forewarnings.

Some of these include:

- The unit trust industry was still at the embryonic phase and therefore only limited data was available for analysis.
- There were no sophisticated performance criteria tools to analyse the available data.
- The stock exchange (JSE) as at that time was informationally inefficient and can be said to belong to the weakest form of Efficient Market Hypothesis (EMH).

The earliest studies include the works of Gilbertson, Taylor and Vermaak to name a few. Gilbertson (1976) evaluated the performance of eleven unit trusts over the period of seven years, from 1970 to 1976. The result showed that on the average, unit trusts earned 1.10% less than the market on a risk-adjusted basis. The study revealed that only two unit trusts outperformed the market but the performance was statistically insignificant. Taylor (1977) evaluated the performance of ten unit trusts over the same period as Gilbertson. The analysis was based on Sharpe, Treynor and Jensen measures and it revealed that the funds earned 2.40% on the average less than the market on a risk-adjusted basis. However, at 5% level of significance, the results were statistically insignificant. Furthermore, Gilbertson and Vermaak (1982) performed a study on the available unit trust which was eleven in number over eight years. The study involved the application of Supervisorship Bias over the period of the study. The result showed no statistical correlation at 5% level of significance despite the unit trust underperforming against the all share index by 2% on the average. They therefore concluded that there was no persistence in the performance.

Moreover, Knight and Firer (1989) provided an update on the works of Gilbertson and Vermaak (1982). They evaluated 10 of the 11 unit trusts in existence from 1977 to 1986. The findings were that some of the unit trusts outperformed the market on a non-risk adjusted basis. However, on the average, the unit trusts earned 2% returns less than the market. Risk-adjusted testing was performed using Sharpe, Treynor and Jensen measures and the beta estimates were found to be stationary and stable. The study also revealed that five companies managed to significantly outperform the market at 5% confidence level. The Biger and Page's (1993) study also showed no correlation between ranking based on different models by using single and multi-factor regression models. The result demonstrated the importance of the choice of benchmarking in performance studies. Also, Garvin (1995) used benchmarking approach to solve the problem that surfaced in the studies of Beiger and Page (1993).

He performed the study on the 32 equity unit trusts and he found no evidence of persistence in performance. Garvin (1995) disagreed with the view that fund managers were unable to outperform the market on a constant basis. Meyer (1998) performed a study on a sample of 84 unit trusts over a period of ten years. Meyer found that the result are comparable to those obtained in much bigger markets and that some persistence in the performance of unit trusts in South Africa does exist, although not significant. Furthermore, Von Wielligh and Smit (2000) provided a study that suggested the evidence of the persistence in the performance of South African unit trust industry. They used three models of performance measurement. The study showed that both in the short and long term, there is persistence in the performance of the poorer performing general equity funds. Another study was conducted on this topic by Firer (2001) who demonstrated the short run persistence in performance, showing that an investment strategy of selecting past superior performance may improve investment returns. His results suggested that the 2-year selection and holding period strategy may be the best for investors looking for positive outperformance. The conclusion of the study was that the selection based on past performance is possible, but a more detailed analysis taking into account switching cost need to be made. Oosthuizen and Smit (2002) applied the evaluation technique used by Zheng (1999) to establish whether South African unit trust investors have the ability to invest in funds such that they would perform better. The study revealed that on the average, investors display a weak but statistically significant skill in identifying winning funds and managers. A further study was carried out by Collinet and Firer (2003). They studied the relative performance of general equity trusts over a period of twelve years. The study revealed that there is a positive but weak relationship between past and future rankings. The study displayed high sensitivity to the holding period length, the time period studied and the end dates of the analysis. The most important part of this study was that individual unit trusts did not perform consistently for a length of time.

Oldham and Kroeger (2005:81) represents a fairly recent study and it was restricted in terms of sample size and time period over which they were able to test performance. Their study evaluated the performance of unit trusts using the Capital Asset Pricing Model (CAPM) and APT tests. The study revealed that only 4 out of 20 unit trust managers were able to beat the market as measured by both CAPM and APT models while 6 funds showed negative and inferior performance in terms of both models. The rest of the funds (10) exhibited performances that showed no special management ability. Pretorius and Wolmarans (2006) found that general equity funds appear to be outperforming the broader JSE ALSI

successfully over the period of 1988 to 2005. The study showed that by timing the market and selecting better performing shares; unit trust managers were able to earn an average of 19.5% per annum as compared to 18% for the market as a whole. However, after accounting for all costs, the average return to investors was a mere 12.4%.

The persistent tests of South African unit trust performance are inconclusive. It appears that the findings of previous researchers were sensitive to the time period analysed. Also the difference in the results of all the studies may be attributed to the size of the data used under different time periods. Furthermore, the disparities may be due to the different methodologies that were used in testing the performances at different time periods and to the risk adjustment measures used by different researchers. All of these reasons make the performance test to be inconclusive and therefore demand further research.

2.4 Performance of Index unit trust versus Active unit trust.

Elton et al (1996:134) put forward the following question: "assuming that there are sufficient index funds to span most investors' risk choices; that the index funds are available at low cost and that the low cost of index funds means that a combination of index funds is likely to outperform an active fund of similar risks,..... Why select an actively managed mutual fund? This question has generated a huge debate among scholars and it is well documented.

According to Sharpe (1966), Treynor (1966) and Jensen (1968), the performance of mutual funds net of expenses and after been adjusted for risk, are poorer than what most investors could achieve using a strategy that involves buying and holding for a period of time. Lee and Rahman's (1990) studies revealed that only a limited number of professional fund managers have the skill of accurate market timing and the ability to choose winning funds that are capable of beating the market. In addition to this revelation, Malkiel (1995) and Bogle (1998b) both concluded that without prior knowledge of these so called "superior" fund managers, investors are likely to do best by staying with index funds. Furthermore, Sharpe (1991) asserts that on the average, active fund managers cannot better the returns obtained from passive management strategy. The reasoning behind this assertion is that the performance of the index equals the weighted average of both active and passive investors before expenses are deducted. This shows that active management of funds is merely a Zerosum game. Also, going by the studies of Malkiel (1996), about 70% of active equity managers have been outwitted by the S&P 500 stock index over the past 25 years.

Malkiel's sentiment is that index funds allow investors to buy from different basket of securities with minimal expense and huge tax savings. Malkiel (1995:569) concluded by suggesting that most mutual fund investors would be better off by purchasing a low expense index fund than trying to select a presumably "hot-handed" active fund manager who is believed to possess "magic wound" in selecting winning funds in an accurate market-timing fashion. Moreover, the studies of Frino and Gallagher (2001) showed that S&P 500 index mutual funds earned a better return than actively managed funds after been adjusted for risk and expenses.

Having said all these, it is important to note that index funds are by no means unanimously superior to actively managed funds. Minor (2001) noted that it is possible to find periods of dominance of active funds over index funds (i.e. when active funds outperform index funds). Minor stated that this is possible depending on the time horizon of data. Minor's result contradicted that of Bogle (1998) after using the same sample and methodology but different time period. This debate continued with Fortin and Mickelson (1999; 2002) conducting a comprehensive analysis with a large sample of funds classified by investment objective over a longer period of time. The result of their study revealed that there are significant advantages to indexing as they found that the indices significantly outperform active mutual funds in 25 out of 30 possible cases. An important contribution of this paper is to provide a more conclusive contribution to the debate about whether indexing outperforms actively managed funds or not.

2.4.1 The Role of expense on the performance of Unit trusts

A well-established relationship exists between mutual fund expense and performance and this relationship has been extensively discussed. Chordia (1996) stated that fund fees are closely related to asset allocation strategies. Chordia (1996) opined that aggressive growth funds tend to charge higher entry and exit fees to discourage redemptions because they hold more of the smaller less liquid stocks. Carhart (1997) also suggested that funds that underperform heavily have very high expense ratios while funds that are successful do not increase revenue by increasing their fees but benefit from the increased size of their funds. The studies of Sharkansky (2002) revealed that the higher the cost paid for investing in unit trust does not purchase superior returns; instead, it reduces the expected returns on such funds. This means that on the average, the higher the fund's cost, the lower its returns.

The cost will add up overtime and it is capable of consuming a considerable part of the investor's wealth. Sharkansky (2002) also studied the long term performance of several types of mutual funds. The study showed that with higher fund costs come lower expected returns, lower chances for outperformance and a greater risk of underperformance. The study advised that the most reliable way an investor can better his lots is to invest in low cost, high turnover and tax efficient investment vehicle of the most appropriate asset classes.

2.5 Efficient market Hypothesis and Other Alternative theories on Asset Management

This section describes the Efficient Market Hypothesis (EMH) and other alternative theories to EMH as regards active asset management. Some of the alternative theories covered in this section are Behavioural Finance, Equilibrium Accounting, Arithmetic of Asset Management and Diseconomies of scale.

2.5.1 Efficient Market Hypothesis

Malkiel (2003a:3) described Efficient Market Hypothesis as a hypothesis which claim that financial markets are "informationally efficient". This means that financial markets are extremely efficient in the sense that the stocks and the stock market in general reflect all available information about them. Malkiel (2003a) suggested that neither fundamental nor technical analysis would help investors to identify mispriced securities and make returns higher than those obtained by merely selecting a portfolio of individual stocks randomly. There are three basic forms of EMH, namely; strong, semi-strong and weak. The strong form of EMH states that it is unlikely for investors to beat the market as market prices reflects all relevant information about them, both public and non public. The semi-strong form of EMH states that it is unlikely that investors will beat the market by using only publicly available information on prices. The weak from of EMH states that it is unlikely for investors to beat the market by using only publicly available information on prices and volume.

The concept of EMH is associated with the idea of "Random Walk" model which states that price movements from one period to another are independent and as such they are said to follow a random walk. The idea behind the random walk model is that if the information flow is unhindered and stock prices quickly reflects all information, tomorrow's price change will reflect only tomorrow's news and will be independent of the change in price today. This theory has been backed by a large number of empirical evidence and this shows that it may be a herculean task to identify mispriced securities. If this theory holds, it means that it will be a futile venture by fund managers to devote large amount of resources to the search of mispriced securities (Sharpe, 1966). According to Ippolito (1993), the concept of EMH suggests that active investors will obtain alphas that are equal to the negative of the cost they incur as a percentage of the assets. Furthermore, Malkiel (2003b:10) argues that it likely that investors are able to produce higher returns by employing the indexing strategy than they are likely to produce through active management of funds.

Despite the continued support of EMH by researchers, especially in the 1970s and 1980s, cracks began to appear in the model in the early 1990s (Malkiel, 1995). The increasing use of fundamental variables such as initial dividend yields, market capitalization, price-earnings ratios etc. to predict stock returns suggested that returns on stock may not actually be independent over time. Ippolito (1993) analysed the performance of mutual funds and argued that the result obtained do not agree with the notion that research fees and trading expenses are wasted. Due to the lack of alternative theories in the 1990s to reject the claims of EMH, researchers are unable to wholesomely reject the theory. Malkiel (2003b) suggested that the strategy of managing a fund passively can only be justified if the market is inefficient. When information about an individual stock surface, such information is usually reflected in market prices almost immediately, thus passive management may become attractive as the markets appear to be efficient in digesting information and adjusting to them.

In conclusion, the advocates of EMH and the random walk theory suggest three important conclusions. One is that future performance cannot be predicted by mere use of past performance. The second conclusion is that top managers may not be able to beat the market in the future and lastly, active fund managers may not be able to make higher returns over the passive strategy. The summary is that fund managers or professional investors do not necessarily need to have superior skills to identify securities or time the market.

2.5.2 Behavioural Finance: The Concept in Asset Management

The concept of behavioural finance is a concept that contrasts the EMH which assumes that market participants are rational all the time. Shiller (2000) and Malkiel (2003b, 2005) introduced the concept of behavioural finance and suggest that some market participants exhibit irrationality when investing in the financial market. Furthermore, the advocates of EMH believes that investors cannot make clear arbitrage opportunities. Ross (2002) stated that despite several attempts to draw out some predictability out of asset return data, financial asset returns are very close to being uncorrelated and as such follow a random walk.

Malkiel (2003b) states that large errors can be made in the valuation of financial securities by the market and there are strong evidences to support this claim. Examples of such claim include the global financial crisis of 2007 and the bubble of 1990 where there was clear evidence of financial irrationality. De Bondt (1995) conducted a research work on the concept of behavioural finance and suggests that stock prices do often deviate significantly from their intrinsic values. Also, Shiller (2000) suggest that market prices are usually set by irrational traders who under react or overreact to market information thereby creating arbitrage opportunities for other market participant to exploit. This view was also corroborated by Malkiel (2003). Malkiel (2003) suggested that rational investors who are driven by the incentive to beat the market and who possess an avalanche of resources should have little troubles in identifying these arbitrage opportunities and taking advantage of it.

2.5.3 Equilibrium Accounting

This is another alternative theory to EMH in the areas of asset management. Equilibrium accountings refer states that equity investors in total should receive the value weighted equity market return less than their investment. This is a theory that supports the notion that the struggle to choose between passive and active management is merely a zero sum game at the end of the day. This means that the aggregate alpha is zero before cost is factored into it. The moment cost is factored into the scheme of things, active style of management then becomes a negative sum game. Furthermore, Malkiel (2003b) suggested a theory that is in support of equilibrium accounting. He states that passive management is only effective if the market is inefficient. The most important point of this theory is that all investors cannot experience above average performance, otherwise there will be no arbitrage opportunities to be exploited. Malkiel (2005) conducted an extensive theory on equilibrium accounting by taking cost into account. He stated that active management is more expensive due to the amount of trading cost, brokerage cost and administrative cost. Thus, the evidence of poor performance that is often seen in active management of funds can be attributed to all these costs. Fama and French (2008) stated that there is a possibility of making abnormal returns by investing in the mutual fund industry. This suggests that it is still possible for mutual fund industry to gain at the expense of other investments held outside the funds

2.5.4 The Arithmetic of Asset Management

Sharpe (1991) describes the reason why the average active returns should not exceed the passive returns. He stated that since the market return is equal to the weighted average of the returns of both active and passive parts of the market, and since it is expected that each passive manager should earn precisely the market returns, it is therefore logical to conclude that returns obtained from active management of funds must be equal to the market returns before cost are removed, at best.

Three reasons were provided by Sharpe (1991:2) as to why rational investment professionals continue to go against the sensible and obvious relationship between returns and cost incurred. Firstly, the so-called passive managers may not actually be passive as some of them simply sample the market of their choice, rather than hold securities in market proportion. In fact, some even charge a higher fee which ultimately makes the total cost to be higher than those of active managers. Secondly, many empirical studies categorize only professional or institutional active managers as active managers. It is therefore possible for the average institutional manager dollar to beat the average passively managed dollar, after cost has been deducted. Sharpe (1991:2) then argues that ordinary investors must be "foolish" to pay any added costs to the institutional active manager after posting poor or inferior performance.

The third reason is the fact that the summary statistics for active managers may not fully reflect the performance of the average active manager. Different studies use different comparison measures. Some use a simple average of the performance of the managers while some use the median performance. The effect of this different measure is that there will be some element of bias in the results. The preference for small-capitalization stock by equity fund managers with small amount of money may also have an effect on measuring the performance of active managers. This means that the average active funds may perform poorly during periods when the small-cap stocks lags behind the large-cap stock in terms of performance, but may outperform the market during periods when the small-cap stock performs well. In conclusion, Sharpe (1991) suggested that the empirical studies that object to the notion that actively managed funds must underperform the passively managed fund may be due to the use of improper measurements.

2.5.5 Diseconomies of Scale

It is a common knowledge that there are advantages to scale, recent studies have shown that the size of a fund might undermine its underline and erode its performance. Chen et al. (2004) conducted a study into the effect of scale on performance and found strong evidence to conclude that fund size is capable of compromising performance, especially in the active management context. In their study, they found that funds with large asset base may have their profit eroded because of the behaviour called "benchmarking hugging" as well as the trading costs associated with liquidity. Larger funds tend to hold larger cash balances and may not be able to invest in the less liquid, smaller stocks, meaning that they may not be able to optimise their investment in such stocks. Chen et al. (2004) argue that the liquidity problem often faced by funds with large asset base is capable of eroding their performance relative to smaller funds with smaller asset base.

Furthermore, "benchmark hugging" refers to the situation whereby active managers try to minimise the tracking error by investing in the same stock in the same weights as their underlying performance benchmarks and then take a position on only a small portion of their fund. It is therefore likely that managers with superior stock skills may decide to rely on the benchmarks as a way of precaution. Berk (2005) used expected returns and the effect of fund size on returns to explain how in equilibrium and over time, all actively managed funds should produce a return that is similar to the expected return of a similar passive strategy. In his studies, he assumed that expected returns are inversely related to the size of the fund. Over time, the difference between the different skill levels of different managers and past investment performance begins to materialize. This then lead to a situation where investors begin to react by giving preference to fund managers who have exceeded their expectations. This will continue as long as the investor believes that they are capable of producing similar or higher returns in future. However, there will be cut in the flow of funds to these managers once the managers have so much money under management that are no longer pressured to produce superior performance. A similar case is experienced in a situation where investors who had invested with poorly performing managers will continue to withdraw their funds until when the amount of capital under management is reduced to a level where the investors believe that these managers can at least produce a return that will match the benchmark expected return.

2.6 Summary

Despite the considerable amount of empirical evidence that suggests that active funds do not earn significant returns in excess of comparable indices, investors still continue to favour the actively managed funds. In spite of the advice given by different scholars to prefer low expense index funds, actively managed funds continue to prove popular. While most of the researches done on unit trust suggests that active fund managers do not have superior selectivity skills, but instead incur extra costs that penalise shareholders, analysts have not examined the inherent problems in indexed investments.

The general consensus is that money managers cannot beat the market on a risk-adjusted basis. However, managers who continue to beat the market claim that academic studies do not accurately measure performance. By comparing performance with the S&P 500 index which many researchers do, it may reflect inaccurate results because not all managers invest exclusively in S&P 500 stocks. (Or other representative market indices).

In addition, the size of the industry and the number funds available represent a major difference between the US and the South African unit trust industry. This difference has made local research difficult because of the small size of the market and the shorter period of performance history that is available for research purposes.

3. Methodology

3.1 Introduction

Based on the extensive literature research on the US mutual fund industry presented in the preceding chapter of this document, it is found that most actively managed mutual fund outperform their benchmark index. Despite the fact that most academic scholars are of the opinion that indexing (passive management of funds) is a better option for managing funds, investors still prefers to put their money in active funds. While this study made attempts to look into the debate between passive and active management of funds, the main objective of this empirical study is to compare the performance of general equity unit trusts in South Africa to a benchmark: i.e. the JSE All Share Total Return Index ("JSE ALSI TR"). Furthermore, this study will provide reasons for the slow growth of index unit trust in the South Africa unit trust industry as compared to the international markets. The study is conducted on the Johannesburg Securities Exchange (JSE) and the unit trusts that are been traded on the exchange.

3.2. Sample Data

In order to carry out detailed analyses of these subjects in this section of the study, data are sourced from various databases. These databases include I-Net Bridge, Morningstar South Africa and BFA McGregor. The data collected from these databases cover the period 1st of January 1992 to 31st December 2011 and it relates to the South African Domestic General Equity Unit Trust, the indices published by JSE and some economic data such as the 90-day Banker's acceptance rate. Moreover, the data used in this study, which covers the sample period of 20 years is broken down into 7 sub-sample periods such that evaluation intervals of varying lengths ranging from 5-year to 20-year period are used.

3.2.1. JSE Indices

These are indices published by the JSE and the ends of the month/year values for the JSE All Share Total Return Index are sourced from the I-Net Bridge data base. The returns on the index are calculated using the relationship below:

$$\mathbf{R}_{i} = (\mathbf{V}_{t-1} \mathbf{V}_{t-1}) / \mathbf{V}_{t-1}$$
(1)

Where R_i = Discrete Return on the index; V_t = Value of the index at the end of month/year t for which the return is being calculated and V_{t-1} = Value of the index at the start of the month/year. The values observed on the indices have all the dividends declared by the constituent shares incorporated in them.

3.2.2 South African Unit Trust Data

The following information regarding the unit trusts in South Africa are obtained from the Morningstar South Africa database:

- End of the month/year total returns.
- Annual expense ratios as at 31at December 2011.

For a unit trust to be included in the sample data sourced from the data base, it has to be a domestic general equity unit trust that is trading on the JSE. However, funds of funds are excluded from this study based on the premise that including them would lead to double counting since they do not represent new investments. Furthermore, a decision on how to include funds which has not existed over the entire period covered in this study was taken in such a way that no attention was given to the fact that not all the funds existed over the 20-year period. As said earlier, the 20-year period was broken into seven sub-periods and performance was evaluated over these periods. By doing so, the subject of survivorship bias creeping into the sample is avoided.

The 20-year period is broken into:

- Four 5-year periods: 1992-1996; 1997-2001; 2002-2006; 2007-2011
- Two 10-year periods: 1992-2001; 2002-2011 and
- A 20-Year period: 1992-2011

The monthly/yearly return reported in the database of Morningstar is calculated based on Net Asset Value (NAV) per unit at the end of the month/year to NAV per unit at the beginning of the month/year. This shows that all distributions declared by a unit trust are used to calculate the total return and are assumed to be re-invested at NAV per unit on the date of re-investment as stipulated by the trust manager. Also, the annual expense ratio as reported by Morningstar shows the percentage of assets deducted each year for the unit trust expenses.

These include: administrative fees, management fees, operating fees and some other cost associated with the running of the trust. However, costs such as brokerage costs, portfolio transaction fees and the initial or deferred load fees are excluded from the expense ratio.

3.2.3 Macroeconomic Information on South Africa.

The Risk free rate of return used in this study is the 90-day (3-month) Banker's acceptance rate and is obtained from the I-Net Bridge database. The use of the 90-day Banker's acceptance rate as a proxy for risk-free rate is in line with works of Oldham and Kroeger (2005). These 90-day Banker's acceptance rates are first converted to a continuously compounded rate. The arithmetic averages of these yearly rates are found for each of the seven sample periods to be evaluated for performance.

3.2.4 Data Analyses

The data in this study are analysed using Microsoft Excel 2010. All analyses including descriptive statistics, regressions and test for significance are carried out using this tool. Also, all the outputs obtained from the various analyses are manually analysed.

3.3 Models and Statistical Procedures.

The primary focus of this study is to compare the performance of general equity unit trusts in South Africa to a benchmark, the JSE All Share Total Return Index ("JSE ALSI TR"). Therefore, the procedures, both statistical and model-based to test for this performance is detailed in the following sections.

3.3.1 Nominal Performance Measures

The nominal return (raw returns in which the differential risk factors have not been taken into consideration) for each of the unit trust evaluated is compared to the market return using the seven different evaluation intervals of four 5-year, two 10-year and 20-year periods. The unit trust in this study is evaluated on the basis of gross returns and the return on any unit trust is only computed if it existed over the particular evaluation period. This study will adopt a different approach to past research works that used the JSE All Share Index (JSE ALSI) as a proxy for the market returns. These past studies include the works of Meyer (1998), Older and Kroeger (2005). The JSE ALSI TR has been adopted in this study to serve as a proxy for the market return and as the benchmark portfolio since the total returns for each trust is been used.

This means that for a unit trust to display a superior performance, the trust must have produced a return that is greater than the returns posted by the market during the period of evaluation. In this situation, the trust is said to "beat" the market for that evaluation period. However, if the return posted by the trust during an evaluation period is lower than that of the market, the trust is said to have displayed inferior performance; hence, poor performance relative to the market.

For all the periods, the mean return, median rate of return and standard deviation (risk) of return are calculated and are compared to those of the market. It is important to note that the mean of the returns is not used for comparative purposes in this study due to its susceptibility or sensitivity to extreme values. I.e. if there are many extremely large numbers in the returns and the average returns is used for comparative purposes, these large numbers would in effect have an influence on the value of the mean. The median rate of return is considered to be a better measure of the performance of a population; hence it is used in this study.

3.3.2 The Sharpe Ratio

When evaluating the performance of a unit trust, it is not sufficient to take only the returns into consideration, the risk that the average investor is willing to accept for investing her money in a trust must be accounted and adjusted for. Sharpe (1966) proposed an evaluation model that explicitly adjust for risk and as such can be used to test whether unit trust managers in South Africa are able to produce superior return in excess of what the market has produced. The Sharpe ratio which is otherwise known as the reward-to-variability ratio can be calculated using the following equation:

$$\mathbf{S}_{\mathbf{p},\mathbf{t}} = (\mathbf{R}_{\mathbf{p},\mathbf{t}-}\mathbf{R}_{\mathbf{f},\mathbf{t}})/\sigma_{\mathbf{p},\mathbf{t}}$$
(2)

Where $S_{p,t}$ is the Sharpe Ratio; $R_{p,t}$ is the return of the unit trust, p, over a specific period of evaluation; $R_{f,t}$ is the risk-free rate of interest over the same period of evaluation; and $\sigma_{p,t}$ is the total volatility of the unit trust over the same period of evaluation as measured by its standard deviation. The Sharpe Ratio is calculated for each unit trust in the sample period using the seven periods of evaluation. The need to use longer periods of evaluation originates from the desirability of more data points for the estimation of the standard deviation.

It is a common practice by past researchers (such as Collinet and Firer (2003)) when evaluating the standard deviation of short intervals to measure the volatility over a specific number of months preceding the short evaluation interval to ensure that a more precise standard deviation is obtained. However, this approach might be misleading as the volatility of the period could be markedly different from the volatility during that evaluation period. It is important to note that some periods do witness large fluctuations in their volatility as seen during the recent credit crisis (2007-2009). Therefore, the approach adopted by Collinet and Firer (2003) could lead to a situation whereby the volatility of returns for a particular evaluation period can be grossly misstated and misleading. Hence, this study has adopted a methodology in which the Sharpe Ratio for any trust is only estimated for a particular evaluation period if the trust existed over the entire period.

To determine whether a trust has delivered superior performance, the Sharpe Ratio for each of the unit trust is calculated and compared to the Sharpe Ratio of the market (JSE ALSI TR). If any of the trust has a Sharpe Ratio in excess of the Sharpe Ratio of the market, the trust is said to have delivered superior performance. However, if the Sharpe ratio of the unit trust is lower than that of the market, the trust is said to have delivered inferior performance, hence, poor performance relative to the market.

3.3.3 Jensen's CAPM Model

The CAPM model was developed in 1968 by Jensen, who adapts the works of Lintner (1965) and Sharpe (1966). The model in its ordinary form, states that the expected return on any security (or portfolio or fund) should exceed the risk-free rate of return by an amount that is proportionate to the undiversifiable risk (systematic risk or beta) of that security relative to the market or the benchmark being used. Sharpe (1966) had developed a single –period CAPM but Jensen advanced on this and extended the model to a multi-horizon CAPM in which investors are allowed to have heterogeneous horizon period. Also, it allows for security trading taking place continuously through time. The Jensen model is described by the following relationship:

$$\mathbf{R}_{it} - \mathbf{R}_{ft} = \alpha_{i} + \beta_{i} \left(\mathbf{R}_{mt} - \mathbf{R}_{ft} \right) + \varepsilon_{it}$$
(3)

Where R_{it} is the return on the unit trust, i, for month t; R_{ft} is the risk-free rate of return; β_i is the undiversifiable risk of the unit trust, i; α_i is the measure of performance called the Jensen's Alpha; R_{mt} is the market return; $(R_{mt} - R_{ft})$ is the market risk premium and ε_{it} is the error term or residual of the regression analysis.

The Jensen's alpha is the intercept of the regression line that measures the average return of the unit trust that is in excess of the return predicted by CAPM for any given beta and market return. Jensen (1968) stated that a positive value of alpha indicates that the unit trust has a return that is greater than that implied by its level of undiversifiable risk, hence the unit trust is said to have delivered superior performance. Similarly, a zero or negative value indicates neutral or inferior performance by the unit trust relative to the market. Akinjolire and Smith (2003: 41) suggested in their research work that the Jensen's alpha is an important parameter which allows inferences to be made as regards the statistical significance of any value of alpha since its sampling distribution is known from a regression analysis. Akinjolire and Smith (2003) posited that the CAPM model in its simplest form is subjected to a number of assumptions which may not always hold in the real world. Some of these assumptions include: (1) All investors are risk-averse and are only interested in the returns of one period; (2) There are no taxes and transaction cost incurred; (3) All investors have the same investment horizons and homogenous expectations regarding investment opportunities; (4) All investors are able to choose among portfolios solely based on the expected returns and the variance of returns; (5) The Capital market is in equilibrium and (6) All assets are infinitely divisible.

The gross monthly/yearly total returns for each unit trust are regressed against the corresponding returns of the market, being the JSE ALSI TR using the CAPM relationship described in this section for the different seven evaluation periods. The regression analysis is only done for any unit that exists throughout the entire period that is been evaluated. In other to arrive at a conclusion of whether a positive alpha in any sample of unit trust return is not just due to chance or luck but rather to the superior forecasting ability of the unit trust manager, the methodology adopted by Jensen (1968:394) is also used in this study to test for significance, using T-statistics. The alpha values were tested for significance at 5% level of significance. A regression result which shows a beta value of 1 and an alpha value of zero coupled with a measure of fit of the regression line (\mathbb{R}^2) of 100% would mean that the unit trust manager has chosen a unit trust portfolio that contained exactly the same amount and proportion of assets as those making up the JSE ALSI.

Therefore, such unit trust manager would not be able to achieve superior performance if he tracks the market based on the test for alpha. In order to achieve a significant positive alpha, the manager must construct her portfolio by choosing assets that exhibits bias towards the sectors of economy which has experienced above average returns.

4. Results and Discussion

4.1 Test of Performance.

The test to determine whether there is an evidence of outperformance or underperformance was carried out in absolute terms. From an investor's point of view, it is desirable to have a performance that would beat the market in absolute terms (e.g. greater nominal returns and positive alpha.). The appropriateness and robustness of the model used in this study are presented; thereafter the results of each performance measure for each of the periods are reported and discussed.

4.1.1 Appropriateness and Robustness of the Models.

The appropriateness and robustness of the regression models used for evaluating the equallyweighted average returns of the unit trusts as a whole over the 20-year period are evaluated. The summary statistics relating to the regression intercepts and independent variables of the CAPM model are presented in Table A1. These are the coefficient values, t-statistics at 5% significance level, the p-values and the standard errors.

Table A1 Summary Statistics of the regression intercepts and independent variables over the 20-year period											
		Intercept			Rm-Rf						
Performance Measure	Coefficient	Std Error	t-Stat	P-values	Coefficient	Std Error	t-Stat	P-values			
САРМ	0.145	0.134	1.38	0.198	0.768	0.025	32.239	0			

It can be observed from the table that the variations in the returns of unit trust over the different periods are predicated mainly on the market returns less the risk-free rate. While this may be the case, it is quite possible that fund managers during these periods may merely be investing large part of their portfolios in a manner that mimics the market (JSE ALSI TR) and thus can be referred to as "benchmark-huggers". This claim however, does not have the required support in terms of empirical evidence, hence, further research study can be undertaking in this regard. Having said this, it is important for trust mangers to use the model described in this study with caution as the pricing factors incorporated into the model has

limited ability to explain the variations in the returns of the trust and thus the returns might be relatively insensitive to such factors.

Furthermore, the measure of fit of the model is also reported in table A2. This describes the robustness of the model and hence the results.

Table A2	Summary s	statistics of	model R	obustness
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Performance Measure	R-Squared	Multiple R	Adjusted R
CAPM	0.7531	0.7843	0.7512

From the table, it can be seen that the statistical measure of fit, R^2 -values, is greater than 0.75 and from a statistical point of view, it shows that the regression model used are able to explain 75% of the returns on the unit trusts for the different evaluation periods. Therefore, the returns on the unit trusts can be said to be adequately explained by the model used and as such, the model can be said to highly robust.

Furthermore, giving that the models used in this study were mainly developed in the US, where the markets can be considered to be efficient due to its semi-strong form of EMH nature, the efficiency of the South African market relative to the US market is then brought into question. From earlier sections of this study, it was reported by some researchers in the 70s and 80s that the JSE was informationally inefficient. Some of such studies include the works of Gilbertson (1976) and Gilbertson and Vermaak (1982). However, some recent studies found the JSE to be efficient. Studies by Smith et al (2002) and Smith and Jefferis (2002) found the JSE to be of the weak form of EMH. Also Mabhunu (2004) stated in his studies that the JSE can be said to of the semi-strong form of the EMH after the effects of "thin trading" has been discounted. In the same light, the introduction of the Share Trading Transactions Totally Electronics (STRATE) System and the stock Exchange News Service (SENS) has helped to improve the efficiency of the South African stock exchange. The information environment of the JSE has improved over the year since the introduction of SENS. Also, the lags in trading have been reduced after the introduction of STRATE through automated trading, thus contributing to the improvement of the market liquidity. This improvement in trading has led to the JSE been ranked the 16th largest stock exchange in the world at the second quarter of 2009 with an annual turnover of 19.3% of total market capitalisation.

Though this is less than that of the other 15 individual exchanges, much of this low turnover can be accounted for by the thin trading described by Mabhunu (2004). Therefore the model used for the evaluation of the performance of unit trusts in this study is in order with respect to the South African market conditions

4.1.2 Nominal Performance Measure: Nominal Returns

The nominal total returns (net of fees) of the unit trusts and the market (JSE All Share Index) was obtained from the data bases of Morningstar and I-net Bridge and the mean performances is calculated using Excel spreadsheet descriptive statistics tools. It is important to note that the mean of the returns is not used for comparative purposes in this study due to its susceptibility or sensitivity to extreme values. That is, if there are many extremely large numbers in the return series and the average returns is used for comparative purposes, these large numbers would in effect have an influence on the value of the mean. The median rate of return is considered to be a better measure of the performance of a population; hence it is used in this study. The summary of the median performance of all the unit trusts sampled in this study on the basis of nominal total return and that of the market is reported in Table 4.1.

Evaluation Period	Unit Trust Median Rate of Return	JSE ALSI Median Rate of Return
1992-1996	1.4204	4.7023
1997-2001	0.9828	5.4791
2002-2006	2.0482	10.2733
2007-2011	15.5042	30.4465
1992-2001	1.2061	5.1907
2002-2011	10.0543	22.7277
1992-2011	10.5291	9.8716

Table 4.1 Summary of Returns of Unit Trusts versus the JSE ALSI over the Different Evaluation Periods

The table shows the median performances for all the seven periods of evaluation. For example, the unit trusts achieved a median total return of 1.42 for the first 5-year period i.e., from 1992 to 1996. Also for the period, the market returned median return of 4.70. In the same vein, the unit trusts posted a median return of 10.53 when the whole evaluation period of 20 years (1992 to 2011) was considered while the market returned 9.87 over the same period.

Table 4.2 describes in details the returns achieved by the unit trusts and the market in periods 1992 to 1996, 1997 to 2001, 2002 to 2006, 2007 to 2011, 1992 to 2001, 2002 to 2011 and 1992 to 2011 and also describe the Sharpe ratios of the trusts as well as the market. These ratios will be explained in later part of this section.

Period	JSE ALSI Return	Unit trust Medain Rate of Return	JSE ALSI Sharpe Ratio	Trust Sharpe Ratio
1992 - 1996	4.7023	1.4204	0.8092	0.2751
1997 - 2001	5.4791	0.9828	-5.6589	0.1814
2002 - 2006	10.2733	2.0482	0.7956	0.5243
2007 - 2011	30.4465	15.5042	4.9453	0.106
1992 - 2001	5.1907	1.2061	-0.1065	0.2073
2002 - 2011	22.7277	10.0543	1.3089	0.2149
1992 - 2011	9.8716	10.5291	0.4101	0.2042

Table 4.2Summary for the Period Ended 31st December 2011

For all the seven performance periods evaluated, there was a marked difference between the returns of the index and the returns on the general equity unit trust. In all the seven periods, the general equity unit trusts underperformed the index except for one period which was the whole 20-year period based on nominal returns performance measure. In this case if an investor invested for the whole 20-year period from 1992 to 2011, he would have gained 10.52 percent which is only about 0.75 percent more than what the JSE ALSI returned over the same evaluation period (9.87 percent). The other six periods show a considerable difference in returns. In period 1997 to 2001, the unit trusts returned 0.98 percent which is markedly lower than 5.47 percent posted by the market. Also, unit trusts in 2002 to 2011 evaluation period show a return of 10.05 percent as against 22.73 percent returned by the market. In all these periods where the unit trusts underperformed the market, the average investor is better off if he invested in a fund that tracked the return on an index than he would have been if he had invested in an actively managed fund. Therefore, the unit trusts underperformed the market for all the periods except for the 20-year period from 1992 to 2011.

A logical conclusion that can be inferred from these results is that an average investor would be better off investing in a passively managed fund that tracks an index than investing in actively managed fund. Also, the results go a long way in confirming the notion that investing in mutual funds for longer periods yield more returns than investment that are of shorter time periods. It is also important to note that maximum costs in the performance percentages of the actively managed funds have already been taken into account; hence the return on an index fund would likely be less than that of the index due to the costs that still have to be taken into account for market tracking fund.

4.1.3 The Sharpe Ratio.

The Sharpe ratio is a ratio that adjusts for risk of the returns for all the periods evaluated. It is inadequate to look at the returns alone, it is necessary to explicitly adjust for the risk involved in investing these unit trusts. Some explanation surrounding the calculation and analyses of the Sharpe ratio is necessary at this point before considering the results of the Sharpe ratios. In arriving at a figure, the measure of total risk of the unit trust used is the standard deviation; hence diversification is not an important part of the performance analyses. This means that the Sharpe ratio is a useful measure for an investor that only invest in one fund, thus, only the total risk is important. Sharpe ratio being an absolute measure, can take both negative and positive figures. However, negative values can be difficult to interpret because risk in the context of Sharpe Ratio is the volatility of returns. One would then expect to favour portfolios (unit trusts) with less volatility (less risk). This however is not the case with negative Sharpe ratios, investors would not accept larger negative returns for accepting to take more risks. Therefore, while positive market returns is desirable, it is impossible to consistently post positive returns; hence negative Sharpe ratios are unavoidable.

Having said these, the results of the Sharpe Ratios are now discussed in details. The mean Sharpe ratios for all the periods evaluated are presented in the last two columns of Tables 4.2. The calculation of these ratios can be found in the appendices. The Sharpe ratios for the unit trusts and the JSE All Share Index for all the periods are summarised in Table 4.3.

Period	JSE ALSI Sharpe Ratio	Trust Sharpe Ratio
1992 - 1996	0.8092	0.2751
1997 - 2001	-5.6589	0.1814
2002 - 2006	0.7956	0.5243
2007 - 2011	4.9453	0.106
1992 - 2001	-0.1065	0.2073
2002 - 2011	1.3089	0.2149
1992 - 2011	0.4101	0.2042

Table 4.3 Summary of JSE ALSI Sharpe Ratio versus Trust Sharpe Ratio

From the table, it can be seen that the mean Sharpe ratio was higher for the JSE All Share Index for all the periods except for the periods 1997 to 2001 and 1992 to 2001.

A Sharpe ratio of 0.809 is observed for the unit trusts for period 1992 to 1996 as against 0.275 for the market over the same period. This difference is slightly over 66 percent in percentage terms, showing that the market outperformed the unit trusts over this period. Considering period 1997 to 2001, it can be seen that the ratio observed for the market was negative (-5.658), which is much lower than that observed on the unit trusts (0.181). This result shows that the unit trust outperformed the market on the basis of Sharpe ratio. Much like the results obtained on the basis of nominal returns, the mean Sharpe ratio for the market exceeds that observed on the unit trusts for all the periods except for two periods. Even though the essence of the Sharpe ratio is to adjust for the risk, the result obtained is quite similar to that obtained on the basis of nominal return except for the fact that it was one period that the unit trust was able to beat the market on the basis of nominal returns. In both cases, market performed better than the unit trusts based on the seven periods of evaluation.

In summary, one can safely infer from the results that the unit trusts do appear to underperform the market, albeit not all the time. These results are consistent with the findings of past empirical works. Gilbertson and Vermaak (1982) found evidence of outperformance on the part of unit trust while using Sharpe ratios but five years later, Treynor (1987) stated in his studies that unit trusts are incapable of beating the market on the basis of Sharpe ratios. In spite of the conflicting results obtained from interpreting the result made on the basis of Sharpe ratios, it can be concluded that the inferences drawn from the results are consistent with past research works and hence, can be considered credible.

4.1.4 Jensen's CAPM Model

The Jensen's alpha is the intercept of the regression line that measures the average return of the unit trust that is in excess of the return predicted by CAPM for any given beta and market return. Jensen (1968) stated that a positive value of alpha indicates that the unit trust has a return that is greater than that implied by its level of undiversifiable risk, hence the unit trust is said to have delivered superior performance. Similarly, a zero or negative value indicates neutral or inferior performance by the unit trust relative to the market. However, before discussing the alpha observations, it is necessary to comment on the way the observations

were made. The numbers of observations for each of the evaluation period used in arriving at the alpha and intercept values go a long way in determining the credibility of the values.

For example, the frequency of observation for each of the four 5-year periods (60 data points) may not be sufficiently large by statistical standards, thereby throwing the credibility of the alpha values into doubt. However, the two 10-year periods (120 data points) and 20-year period (240 data points) would allow for credible inferences to be drawn from examining these four 5-year evaluation periods. Furthermore, CAPM been a single-factor model, the issue of multicollinearity as well as the problems associated with multiple-factor models is absent. The alpha values are reported in the appendices while Table 4.4 presents the summary of the mean alpha values for the different periods of evaluation. The mean alpha are calculated for each unit trust that existed during that particular evaluation interval and therefore, the mean alpha values in this study as a whole is calculated as the equal-weighted average of the individual unit trust's mean alpha values.

Table 4.4Mean CAPM Alphas

		Mean Alphas (per evaluation interval) as Measured by CAPM Model										
		Four-year	Preiods		Ten-year	Periods	Twenty-year period					
	1992-1996	1997-2001	2002-2006	2007-2011	1992-2001	2002-2011	1992-2011					
Mean Unit Trust Alpha	0.1467	0.0618	0.1416	0.3111	0.0848	0.2459	0.231					

From Table 4.4, it can be seen, on the basis of nominal, returns that the mean CAPM alpha value is +0.231 for the entire 20-year sample period when the 20-year returns are evaluated. Furthermore, the first five year period (i.e., 1992 to 1996) have a mean alpha value of +0.146, indicating that the unit trust has a return that is greater than that implied by its level of undiversifiable risk for that period, hence the unit trust is said to have delivered superior performance over this period. It is interesting to note that the irrespective of the evaluation period used, the mean alphas were all positive values. This clearly indicates that there is a strong evidence to support the notion that unit trust mangers do exhibit some expert investment skills. However, these positive alpha values does not indicate whether or not they were able to outperform the market (JSE ALSI), it only indicates a non-zero value of expert investment sills that they were able to "bring to the table" over these periods.

In summary, the results obtained from the use of CAPM model is in line with those of past researchers which found that unit trust managers are unable to outperform the market on the basis of CAPM alphas. One of such is the works done by Gilbertson and Vermaak (1982) who found evidence of outperformance in the late 1970s

4.2 Reasons for the Slow Growth of Index Unit Trusts in South Africa

The main objective of this study is to evaluate the performance of unit trusts in South Africa with the benchmark been the JSE ALSI TR. However, another objective of this study is to provide justifiable reasons for the slow growth of index unit trust in South Africa. Despite the considerable amount of empirical results supporting passive management of funds (indexing), investors continue to favour the actively managed funds. The following reasons can be offered for the slow growth of indexing.

4.2.1 The Cost of Index Funds.

Bogle (1998) questioned why we pay fund managers fees when we can match the index for a couple of basis points since most active managers typically do not add value? Even when the fund managers outperform the index on a risk-adjusted basis and after transaction cost, it has been shown that the management fee is in most cases still larger than the amount by which the index was outperformed. It has been observed in the US market that index funds have consistently outperformed active funds' managers by 100 to 200 basis points. This outperformance can be attributed to the absence of trading cost and management fees in indexing. Since the stock market is always less than perfect, active management will not be able to achieve gross returns exceeding the market as a whole. Malkiel (2001) argued that on the average, active unit trusts underperform market indices by the amount of their expenses and transaction cost disadvantages.

4.2.2 Investor Sentiments

Oftentimes, active managers argue that index trading can be seen as a case of giving up before even getting started; they believe that the market has already defeated investors who are buying into this kind of funds. Many investors therefore see index unit trust as being unattractive and a less glamorous way of investing than active unit trusts. It is a part of

human nature to believe that we are the best and as such most investors believe they have the ability to choose unit trust that will do better than the index. The South African market is still relatively small when compared to the US market and because of this, investors in South Africa are yet to accept indexing as a better way of investment because they still harbour the belief that they have substantial chance of picking a winning fund that would yield a higher return above the average such as that of an index fund.

4.2.3 Enhanced Strategies

This is another reason for the slow growth of the index unit trusts. Fund managers tend to build investment funds that offer enhanced index returns. The aim of these funds is to achieve a premium on top of the returns on the index by taking positions in certain assets. The effect of this method is that it shifts their portfolios away from the benchmark index. This kind of investment strategy is quite cheaper than the regular active management of funds. These funds place special emphasis on the risk-adjusted returns, rather than on the returns alone. The argument used by fund managers in this type of investment strategy to sell their products is that the products are transparent, repeatable and rigorous.

4.2.4 Commissions.

It is still a common practice among investors in South Africa to trust the "expert" knowledge of their stock brokers; hence they will always consult them before buying into any fund. Based on this, some fund managers have established selling agreements with stock brokers and financial planners so that they can convince the clients to buy into their funds. These selling agents receive a commission for selling the funds. This is very popular in South Africa and as such can be adjudged to be a major reason for the slow growth of the index unit trusts as stock brokers do not advise their clients to invest in it.

4.2.5 Marketing.

It is safe to say that only a few individuals have the required skills and expert knowledge to make good investment decisions on their own, thereby necessitating the need of investment companies. Based on this, investment houses use advertising campaigns to lure investors into buying their funds. Investors are therefore only exposed to actively traded funds because the

index unit trusts are not as profitable as active unit trust for the investment houses. What investors in active funds do not realize is the fact that they are eventually responsible for the cost of these expensive advertising campaigns as a result of the reduction in their earnings.

4.2.6 Performance of Active Funds and the Market Conditions

The results presented in the earlier parts of this section shows that on the average, the market always produced higher returns than the unit trusts on the basis of nominal returns. Even when a risk-adjustment measure (Sharpe Ratio) was used, the unit trusts only outperformed the market during 2 periods in all the 7 periods evaluated.

If we assume the index unit trust produced the same result over the 20-year period, then the expenses associated with index unit trusts must still be taken into consideration. This would therefore reduce the results obtained and the argument in favour of indexing would no longer be strong. Also, there have been several occurrences in the market over the past two decades and the market has experienced its own fair share of problems. As a result of this, it is quite difficult for fund managers to predict the direction the market would take. A major disadvantage of indexing is the fact that when the market is on the downward turn, it will also experience the same downturn. However active unit trust can over this period, take advantage of any anomalies in the market and still post good returns. This is something index funds are incapable of doing, thus active management of funds still prove popular among investors.

In conclusion, there is no distinct reason for the slow development of index unit trust in the South African investment industry. The size of our market coupled with shorter period of the existence of index unit trust when compared to the US market has rendered irrelevant some of the reasons adjudged to be responsible for this slow growth.

5. Conclusion and Recommendations

5.1 Conclusion of the Study

Grinold and Khan (2000), in their study of active portfolio management, posited that the art of investing is evolving into the science of investing. According to their study, as new generations of increasingly scientific managers come to the fore-front, there would more reliance on analysis, process and structure than on advice and intuition. This however does not mean that individual investment insights would become a thing of the past, rather, it means that managers would apply those insight systematically in their attempt to beat the market.

The results of this study is consistent with the findings of earlier studies in the sense that it has also failed to produce a strong evidence to support the notion that the South African domestic general equity unit trust managers, on the average, are able to produce superior returns over the returns posted by the market, which in this study is the JSE ALSI TR. Over the years, the level of sophistication, size and complexity involved in active management of funds has increased and as a result of these developments, one would expect active unit trust managers to deliver superior returns. However, this has not been the case as there is no strong evidence to show that they have delivered superior performance. Moreover, the results obtained in this study show periods when the unit trust outperform the market and also when the unit trust underperformed based on different performance measures. It appears that the direction of the result depends on the particular performance measure deployed as well as the methodology. Based on nominal returns, the unit trusts were only able to deliver superior returns over the market during one period (1992 to 2011) out of the seven evaluation periods. Over the other six evaluation periods, the market delivered superior returns high and above those observed on the unit trusts. This shows that on the basis of nominal returns, the unit trusts underperformed the market and as such it can be concluded that an investor who had invested in any of the period apart from the entire 20-year period, would have been better off investing in an index fund.

Furthermore, on the basis of risk-adjusted returns, the unit trusts delivered superior performances only in two of the seven evaluation periods, which are periods 1997 to 2001 and 1992 to 2011. Despite the adjustment for risk using the Sharpe ratio, the results obtained show that the unit trusts still underperforms the market and this is consistent with results obtained by past researchers such as Gilbertson (1976) and Gilbertson and Vermaak (1982). On the issue of individual fund manager's performance, the observations recorded on the CAPM alpha does not show enough evidence to support the notion that fund managers do outperform the market. Though in all the seven evaluation periods, the alpha values were all positive indicating that the unit trust has a return that is greater than that implied by its level of undiversifiable risk. It does not however show that the trust has outperformed the market; it only shows that the unit trust managers exhibited some expert investment skills over these periods. Whether this is down to luck or skill is another debate which has not been considered in this study.

This results obtained and consequently, the conclusion inferred from this study are unaffected by supervisorship bias as this phenomenon has been countered by dividing the total evaluation periods to seven different periods of five, ten and twenty-year periods. This is done in order to accommodate funds that were not in existence for the entire study period or delisted. If non-surviving funds were included in the sample, the mean returns on the unit trusts would probably have been lower and less persistent, thus compromising the credibility of the conclusions reached.

The results of this study are consistent with the theories of arithmetic of asset management which was discussed in good details in the earlier sections of this paper. Fama and French (2008) conclude that the process of active management of funds is merely a zero sum game before costs. Moreover, the findings of this study is also in line with the concept of EMH to a certain extent, which means that successful active management should not be possible and also that past performances is not a guarantee for better performance in the future. Behavioural finance as well as modern portfolio theory supports the fact that prices can move up as much as they can decline, therefore, managers do not necessarily have an idea about the future direction of prices. Though fund managers would take advantage of any information that would help them better their returns, it however appear that the art of asset management is more than merely predicting future movements of prices or searching for mispriced securities (Mabhunu, 2004). It is not unusual for the performance of individual unit trusts to

differ from one another, the essence of unit trust as an investment vehicle is to provide investors with acceptable and inflation-beating returns in the long term. Furthermore, unit trust investment has been used successfully by investors to supplement their retirement funds. Thus, unit trusts can be described as an investment vehicle that provides a necessary function to the society as well as provide exposure to equity market for investors who are unable to successfully manage their own portfolio of stocks.

Having said all these, outperformance, perhaps may not be the main objective of unit trusts. The major advantage it provides investors is the way it minimises the insurable risk borne by investors though holding large diversified portfolios. Therefore, the findings of this study may not have provided strong evidence of outperformance, it however thus show that there is a need for unit trusts to evaluate the costs and benefits involved in their trading activities in order to provide investors with maximum possible returns for the level of risk they take.

5.1 Recommendations for Future Research

The findings of this study are subject to a number of assumptions and limitations and as such there are rooms for future research. Some of these limitations include the sample been limited only to South African general equity unit trusts. Therefore the findings of this study cannot be extended to other categories of unit trusts within the South African market. Another limitation of this study is the frequency of data. Monthly returns on the unit trust are collected and used for the different evaluation periods. For the 5-year periods with 60 data points, the credibility of the regression results may be questioned based on statistical standards. Other assumptions include: the sentiment that the sample is free of supervisorship bias; how the net unit trust returns are calculated based on annual expense ratios obtained as at 31st December 2011 and used retrospectively, thereby assuming that they were constant over time; the appropriateness of the benchmark (JSE ALSI TR).

Having described some of the limitations and assumptions of this study, the following are suggested for research studies:

The frequency of data could be weekly. This is required to increase the number of data points, thereby increasing the robustness of the regression analyses. Furthermore, the evaluation of the performance of unit trust could be extended to other categories of unit trusts in South Africa such as value funds, fixed-income funds etc. Another suggestion is that

though the sample used in this study is assumed to be free of supervisorship bias to a certain extent, a sample totally free of supervisorship bias could be explored, examined and analysed. Moreover, the use of annual expense ratios retrospectively in the calculation of net returns could be discontinued and a better way of calculating the net returns should be explored. Lastly, an updated study on the appropriateness of benchmark could be carried out. Further research is thereby needed to determine the quality of management performance, especially where an absolute benchmark is used.

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Mean Median	1.5386 2.0251	1.7151 1.0387	1.0229 1.0767	1.0679 1.5882	0.8147 0.6226	1.3995 1.7003	1.0175 1.1827	1.2589 1.7489	1.2032 1.4204	0.6970 1.6904	0.9175 0.7485	1.1574 1.5260	1.0652 1.1507
Mean	1.5386	1.7151	1.0229	1.0679	0.8147	1.3995	1.0175	1.2589	1.2032	0.6970	0.9175	1.1574	1.0652
	1.160%	0.374%	0.378%	-0.835%	-1.129%	0.258%	-2.648%	-0.048%	-1.085%	-0.895%	0.105%	0.012%	0.254%
	0.698%	-1.114%	-2.393%	-1.792%	-2.986%	-0.366%	-3.333%		-3.448%	-3.158%	-1.060%	-2.710%	0.929%
	2.066%	2.922%	1.077%	-0.249%	-0.805%	-0.148%	1.428%	1.561%	3.252%	0.318%	1.118%	0.380%	4.175%
	4.849%	0.842%	2.652%	4.858%	3.690%	4.860%	4.853%	3.865%	2.933%	3.504%	3.406%	2.431%	2.143%
	-0.040%	0.727%	0.745%	0.593%	0.757%	1.515%	-0.926%	1.765%	1.184%	1.048%	1.522%	3.268%	1.338%
	-1.697%	-0.634%	-3.768%	-4.985%	4.772% -3.675%	3.932% -5.315%	-2.931%	-5.634%	-5.110%	-3.857%	-5.210%	-6.019%	-0.795%
	-2.507% 2.072%	-3.574% 0.953%	-0.987% 2.082%	-1.137% 2.166%	-1.660%	-0.898%	-3.833% 3.762%	-1.148% 4.011%	-2.071% 1.152%	-2.110% 1.482%	-2.106% 2.418%	-0.753% 2.455%	-1.141% 4.310%
	1.264%	6.831%	2.718%	2.823%	1.961%	3.016%	-0.576%	2.104%	3.927%	1.889%	0.132%	2.406%	1.914%
	0.063%	-1.255%	-1.166%	1.159%	0.254%	-0.893%	-2.724%	1.427%	1.203%	1.492%	0.182%	2.733%	-0.951%
	-1.000%	- <mark>2.</mark> 836%	-2.876%	-4.129%	-1.007%	-2.325%	-1.392%	-1.553%	-2.697%	-3.499%	-2.760%	-2.057%	-2.209%
	6.955%	8.255%	8.610%	8.487%	7.893%	6.292%	5.624%	3.531%	7.462%	5.384%	6.609%	4.411%	8.639%
	3.577%	0.402%	4.323%	5.141%	4.821%	4.721%	2.987%	4.685%	3.683%	4.350%	4.128%	5.266%	6.667%
	3.401%	6.411%	2.907%	1.610%	3.290%	5.007%	4.571%	3.795%	3.332%	2.522%	2.946%	3.295%	6.955%
	2.025%	6.631%	1.685%	3.385%	1.389%	4.981%	5.150%	4.798%	2.972%	3.262%	1.890%	2.416%	4.906%
	2.365%	2.553%	1.482%	3.483%	1.951%	2.153%	3.855%	2.800%	2.312%	3.507%	0.986%	3.796%	2.069%
	3.470%	2.075%	2.774%	2.330%	1.742%	2.868%	3.309%	2.663%	1.638%	2.076%	1.838%	0.463%	3.121%
	1.089%	-2.021%	0.881%	-0.854%	1.050%	-0.649%	-2.201%	-1.0011%	-0.252%	1.292%	0.050%	0.238%	0.112%
	-0.816%	-2.021%	0.808%	-0.433% -1.022%	-0.380% -0.213%	1.186% 0.048%	2.340%	0.503%	-0.232%	0.787%	-0.233%	0.338%	0.699%
	1.346% 1.442%	2.345% 6.082%	3.519% 0.808%	3.373%	3.747%	4.217%	2.773% 2.340%	4.655%	3.409% 0.048%	3.563% 0.787%	-0.033% 0.749%	3.024% 0.338%	2.252%
	2.143%	1.029%	0.754%	1.833%	3.570%	4.120%	2.579%	4.052%	3.272%	3.180%	4.095%	5.033%	1.214%
	0.809%	-3.108%	1.209%	1.528%	0.961%	-0.314%	-0.272%	-0.594%	_	2.726%	-0.215%	1.963%	1.014%
-	10.957%	-7.865%	-9.348%	-11.853%	-12.295%	-7.920%	-9.040%	-9.915%		-12.268%	-11.393%	-13.108%	-8.499%
	2.642%	2.930%	1.402%	1.970%	3.277%	1.467%	2.829%	1.361%		1.935%	2.241%	2.828%	2.077%
	2.197%	2.821%	1.076%	3.345%	1.068%	2.910%	3.754%	3.135%		3.109%	-1.060%	1.274%	1.824%
	2.169%	-0.478%	1.427%	1.001%	-1.150%	1.504%	1.420%	0.382%		2.266%	0.765%	2.232%	1.920%
	-2.092%	-4.134%	-3.678%	-1.202%	-1.257%	-3.015%	-3.680%	0.298%		-1.906%	-3.978%	-1.702%	-4.876%
	3.601% 5.704%	3.322% 5.958%	4.434% 3.471%	5.822% 2.029%	4.333% 3.573%	1.727% 4.265%	0.177% 3.001%	0.000% 2.342%			2.685% 5.079%	1.395% 1.616%	1.435%
	0.438%	-1.846%	1.183%	-1.421%	0.119%	1.959%	0.452%	0.635%			-0.231%	1.118%	0.246%
	5.328%	15.212%	1.071%	1.588%	-0.559%	3.877%	4.434%	3.001%			6.116%	-1.510%	0.247%
	7.435%	3.888%	6.682%	9.579%	5.915%	9.476%	7.604%	7.004%			5.732%	7.371%	4.660%
	4.267%	5.149%	1.361%	2.700%	0.623%	2.774%	2.541%	2.393%			0.382%	2.659%	-1.992%
	2.412%	0.954%	1.651%	1.942%	0.975%	1.104%	3.877%	1.840%			3.069%	2.089%	1.273%
	-0.753%	0.669%	-2.998%	-2.154%	-3.455%	-4.681%	-3.136%	-2.316%			-2.585%	-1.624%	-1.589%
	10.727%	7.259%	14.967%	17.452%	13.729%	15.378%	9.190%	11.622%			11.427%	10.137%	6.387%
	8.009%	7.242%	6.340%	4.932%	6.524%	5.050%	5.914%	5.748%			7.095%	5.163%	6.022%
	3.027%	2.581%	3.980%	1.885%	-1.158%	2.034%	4.802%	1.766%			2.120%	0.863%	2.753%
	-0.818%	-2.759%	-6.842%	-1.937%	-2.722%	-0.640%	-2.239%	-3.399%			-2.324%	-0.931%	-3.880%
	-0.467% -0.818%	-3.837% -2.759%	-0.404% -2.177%	1.265% -1.957%	-0.520% -1.691%	-1.053% -0.640%	-3.627% 1.267%	-1.635% -1.401%			-0.654% -2.524%	-1.221% -0.931%	0.912%
	3.890%	4.722%	1.472%	2.661%	2.006%	4.053%	1.899%	1.599%			3.042%	3.616%	2.221%
	8.146%	1.048%	5.203%	4.997%	4.813%	3.989%	0.811%	5.945%			4.519%	4.939%	3.703%
	-2.941%	-2.765%	2.542%	1.082%	-1.221%	0.750%	0.104%	2.433%			-0.933%	2.541%	0.408%
	2.595%	0.269%	-0.848%	3.858%	0.575%	1.651%	0.646%	3.355%			0.422%	2.983%	-1.227%
	0.559%	0.865%	0.144%	-1.839%	-0.028%	1.836%	2.155%	1.749%			-0.329%	0.451%	1.546%
	5.450%	4.055%	4.664%	3.671%	3.508%	2.078%	-5.287%	5.478%			4.376%	0.062%	3.085%
	6.241%	7.982%	3.226%	2.222%	2.738%	3.998%	2.778%	2.690%			3.952%	4.739%	3.937%
	-5.961% 2.502%	1.110% 1.677%	-4.488% 4.136%	-8.621% 6.018%	-6.649% 4.124%	-4.738% 5.620%	0.662%	-5.016% 3.060%			-5.290% 3.332%	-3.663% 4.677%	-3.286% 3.136%
	4.377%	3.144%	-0.041%	2.321%	4.286%	3.679%	0.930%	3.059%			4.542%	4.489%	-3.535%
	-5.364%	-0.569%	-3.360%	-7.051%	-6.364%	-8.458%	1.018%	-4.251%			-3.756%	-3.428%	-3.266%
	-6.980%	4.308%	-2.985%	-6.847%	-5.204%	-8.538%	1.098%	-6.492%			-3.971%	-6.546%	-2.829%
	-1.162%		-0.509%	-2.372%	-2.015%	-0.933%		0.684%			-1.484%	-2.682%	-1.348%
	9.210%		6.987%	7.069%	7.567%	6.068%		6.528%			5.851%	9.243%	6.481%
	-5.078%		-4.277%	-4.530%	-4.028%	-1.812%		-3.135%			-2.717%	-1.770%	-1.818%
	-1.229%		-1.085%	-0.463%	-0.654%	1.700%		-2.255%			1.062%	-0.917%	-0.901%
	1.857%	0111[02]	-0.299%	OMTL[CL] 1.056%	-0.708%	1.627%	000[02]	0.093%	0101[00]	0001[00]	-0.229%	1.526%	0.0009

Table A1.1 Statistical Results for Returns on unit trust over the period 1992 to 1996

UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio	
INVESTEC EQUITY- METF[CL]	1.5386	2.0251	3.9606	0.3549	
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	1.7151	1.0387	3.9788	0.3977	
ABSA GENERAL- ABSA[CL]	1.0229	1.0767	3.7857	0.2351	
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	1.0679	1.5882	4.4963	0.2080	
SIM GENERAL EQUITY- SNTR[CL]	0.8147	0.6226	3.9647	0.1720	
OLD MUTUAL TOP COMPANIES- OMTC[CL]	1.3995	1.7003	4.0810	0.3104	
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.0175	1.1827	3.4569	0.2559	
MOMENTUM EQUITY R- RMEF[CL]	1.2589	1.7489	3.5537	0.3169	
STANLIB INDEX- STBI[CL]	1.2032	1.4204	2.8420	0.3766	
STANLIB SA EQUITY- GDBT[CL]	0.6970	1.6904	3.5006	0.1612	
MARRIOT DIVIDEND GROWTH- HLMK[CL]	0.9175	0.7485	3.6370	0.2158	
STANLIB EQUITY R- GDBK[CL]	1.1574	1.5260	3.7047	0.2766	
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	1.0652	1.1507	3.1643	0.2947	
Mean Return for the period	1.1443				
Median Rate of Returns for the period	1.4204				
Standard deviation of Returns for the period	0.4066				
Mean Sharpe Ratio for the period	0.2751				

 Table A1.2 Mean Sharp Ratio of returns over the period 1992 to 1996

	AGEF[CL]	OMHY[CL]	PRUO[CL]	METF[CL]	OCEF[CL]			FNBG[CL]	FEWS[CL]	OMGR[CL]		OMTL[CL]	
				3.635%		2.954%	3.606%				0.986%	1.112%	1.0579
				2.243%		3.340%	5.098%				4.723%	5.665%	6.7729
				1.208%		-1.021%	1.147%				0.025%	-0.389%	0.6049
				1.840%		-2.051%	-0.909%				0.385%	0.690%	0.5719
				0.356%		-0.474%	0.009%				-1.784%	-0.738%	-2.240
				7.745%		5.183%	3.835%				4.994%	6.395%	-0.336
				4.364%		2.220%	0.181%				1.958%	1.218% -4.331%	-0.336
				-1.048%		-5.224%	-4.155%				-3.386%	-4.331%	-1.041
				-7.083%		-6.634%	-5.933%				-6.476%	-1.003%	-2.070
				-0.089%		-6.419%	-2.674%				-0.747%	-1.736%	-3.474
				-1.238%		-5.444%	-2.141%				-3.148%	-1.704%	-0.146
				7.593%		2.325%	4.738%				7.902%	7.481%	6.265
				10.086%		12.065%	13.376%				17.451%	9.604%	10.101
				4.340%		4.132%	8.866%				8.426%	6.979%	6.627
				7.770%		14.721%	4.085%				6.939%	6.499%	6.158
				-2.406%		-4.290%	0.960%				4.546%	-1.852%	-2.017
				-8.949%		-10.646%	-4.832%				-7.732%	-8.634%	-8.656
				4.790%		3.645%	6.476%				8.215%	5.150%	4.4819
				-34.880%	1.149%	-26.675%	-17.662%				-38.032%	-36.923%	-29.4499
				1.331%	2.991%	1.180%	-3.443%				-1.243%	3.604%	2.118
				12.331%	6.176%	1.992%	6.396%				13.614%	18.401%	10.4899
	2.458%			-2.405%	2.458%	-5.236%	-4.539%	12.566%			-7.690%	-5.754%	-5.2179
	1.349%			-0.892%	1.893%	0.508%	-0.714%	6.733%			2.423%	-0.506%	0.1599
	7.389%	1.897%		7.129%	4.328%	4.826%	6.482%	3.869%			8.028%	6.078%	6.843
	4.448%			1.913%	6.168%	5.023%	1.521%	5.468%			2.760%	1.916%	1.6665
	17.603%			9.468%	11.214%	7.363%	8.894%	14.860%			3.027%	6.827%	7.2499
	17.825%			1.843%	7.068%	7.919%	4.430%	3.456%			1.881%	6.073%	2.945
	-4.697%			-6.209%	-1.861%	-8.736%	-5.007%	-3.976%			-9.566%	-7.111%	-6.8739
	11.977%			7.389%	7.072%	6.989%	6.233%	5.549%			3.288%	9.941%	8.4969
	2.743%			-0.953%	3.063%	4.156%	1.147%	-1.354%			-3.393%	-1.791%	-1.6379
	3.886%			-2.636% -0.639%	2.020%	-3.573%	-4.356%	-5.889% -2.518%			-8.073%	-6.066% -3.207%	-3.5229
	6.033%			4.320%	4.708%	2.038% -0.857%	-4.716% 5.828%	9.334%			-7.556% 2.959%	7.588%	-3.9769 5.0409
	5.431%			6.181%	3.785%	2.818%	6.835%	4.712%			3.171%	7.058%	6.3039
	10.005%			13.051%	9.044%	7.865%	10.627%	10.293%			14.001%	14.839%	12.3809
	4.878%			-0.372%	3.171%	1.414%	0.495%	0.730%			1.559%	-1.204%	-0.6129
	-5.279%			-4.919%	-4.807%	-6.409%	-3.368%	-4.845%			-9.629%	-2.882%	-3.019
	-4.601%			-1.360%	-0.502%	-4.939%	-0.207%	-1.333%			-2.566%	-1.552%	-0.758
	-3.314%			-7.036%	-3.403%	-6.650%	-7.819%	-6.065%			-7.124%	-7.535%	-7.1189
	-2.483%			-0.959%	0.000%	0.850%	-2.258%	-1.432%			-3.541%	-1.476%	-2.058
	4.286%	5.328%	4.456%	2.478%	4.270%	4.432%	2.422%	3.125%			2.246%	3.183%	4.605
	1.380%	-2.471%	-1.888%	0.798%	1.562%	0.582%	0.562%	-3.310%			-0.694%	0.335%	1.1399
	9.302%	7.046%	10.621%	7.008%	7.775%	9.349%	8.463%	6.350%			7.412%	8.549%	9.613
	0.209%	-2.737%	-1.773%	-2.412%	0.305%	-0.838%	-2.042%	-3.732%	-1.758%		-3.269%	-1.453%	-3.422
	-1.521%	-5.927%	-4.555%	-6.468%	-0.662%	-6.110%	-4.804%	-6.104%	-1.231%		-4.706%	-5.018%	-5.010
	2.702%	-1.637%	-1.249%	-6.986%	0.873%	-0.527%	-1.494%	-2.672%	-4.974%		-2.323%	-2.594%	-4.134
	2.154%	8.203%	8.491%	7.986%	1.973%	4.752%	5.011%	9.848%	4.936%	8.139%	5.913%	7.515%	8.424
	7.303%	3.609%	5.304%	6.443%	7.038%	9.091%	5.470%	5.072%	4.742%	5.933%	7.706%	4.796%	6.247
	2.440%			-0.818%	3.304%	4.613%	-1.979%	-3.251%	-1.735%	-6.116%	-1.704%	-2.427%	-3.129
	-4.379%				-2.241%	-0.576%	-7.905%	-7.009%	-8.644%	-7.789%	-7.054%	-6.537%	-10.036
	7.394%			6.522%	4.389%	6.624%	6.126%	6.536%	9.311%	6.738%	8.700%	8.110%	6.941
	4.150%			5.277%	4.515%	6.046%	4.579%	5.856%	4.264%	3.813%	3.900%	4.977%	5.170
	4.332%				0.802%	3.926%	-0.708%	2.069%	-2.773%	1.600%	-0.337%	-0.056%	-0.563
	-2.481%			-2.790%	-1.046%	-4.124%	-5.289%	-4.645%	-8.158%	-3.958%	-6.392%	-7.335%	-6.712
	5.733%			4.231%	6.325%	8.017%	3.810%	4.694%	3.155%	3.356%	5.194%	4.947%	3.693
	-3.980%			-7.430%	-3.380%	-4.630%	-6.945%	-8.135%	-8.879%	-6.978%	-8.188%	-7.582%	-10.204
	0.163%			5.006%	3.752%	3.265%	3.352%	5.842%	3.830%	2.074%	2.469%	4.811%	2.529
	4.436%				9.314%	8.425%	6.056%	9.361%	8.432%	5.305%	9.043%	6.535%	7.336
	3.736%	3.277%	9.373%	9.931%	9.159%	3.110%	7.414%	6.095%	9.403%	4.566%	8.320%	8.395%	6.319
Moor	2 1552	1 0105	1 5005	1 1100	2 0029	0.0261	0.0524	2 0020	0.6201	1 2022	0.4250	0.9626	0.659
Mean	3.1552	1.8106 1.5248	1.5835 1.1430	1.1100 1.2694	3.0028 3.0633	0.9261 2.0149	0.9531 0.7611	2.0039 3.2906	0.6201	1.2833 3.3555	0.4359 1.2726	0.9626 0.5125	0.6686
Median	3.2396												

Table A2.1 Statistical Results for Returns on unit trust over the period 1997 to 2001

	OMTC[CL]	CGMG[CL]	SAFF[CL]	RMEF[CL]	PSGG[CL]	OMAA[CL]	STBI[CL]	GDBT[CL]	GDSE[CL]	HLMK[CL]	PTST[CL]	GDBK[CL]	MTLE[CL]
	0.616%	3.909%		-0.498%			-0.632%	-0.903%		-0.398%		-2.477%	3.1629
	4.316%	5.901%		4.619%			6.324%	6.552%		4.910%	6.389%	6.221%	4.0569
	0.154%	4.170%		1.223%			-0.545%	-0.764%		2.310%	0.796%	-0.776%	0.3109
	2.549%	2.528%		2.497%			0.381%	2.263%		2.002%	2.008%	2.227%	0.6089
	-0.342%	3.854%		-1.103%			-0.911%	-1.407%		-0.970%	-1.376%	-0.609%	0.8169
	8.349%	5.625%		6.664%			4.580%	4.405%		5.598%	7.400%	4.095%	5.899%
	-0.674%	-1.633%		-0.772%			0.051%	0.197%		1.414%	-0.989%	0.177%	0.086%
	-1.897%	1.301%		-1.627%			-1.442%	-1.430%		-1.296%	-2.659%	-2.199%	-0.330%
	-2.450%	-2.048%		-0.981%			-1.560%	-1.955%		-1.096%	-1.901%	-2.375%	-2.637%
	-4.577%	-2.171%		-4.171%			-9.280%	-7.770%		-5.026%	-5.850%	-8.386%	-4.427%
	-1.273%			-0.932%			-3.426%	-0.745%		-1.955%	-2.822%		1.401%
	-1.299%	0.450%		-1.159%			-1.472%	-0.165%		-2.132%	-1.641%	-0.071%	1.974%
	4.263%	4.454%		3.324%			3.050%	3.503%		2.368%	4.135%		8.991%
	8.415%			8.817%			7.658%	7.464%		9.012%	9.641%		14.575%
	8.981%	8.274%		4.441%	9.494%		7.823%	8.609%		8.805%	5.827%		7.393%
	5.796%	6.008%		6.199%	7.203%		7.131%	8.351%		7.575%	5.221%	5.936%	10.462%
	-4.443%	2.570%		-4.895%	2.140%		-10.509%	-6.546%		-3.376%	-7.109%	-9.863%	-2.707%
	-9.896%	-11.120%		-10.043%	-3.583%		-7.971%	-12.077%		-8.410%	-11.249%	-11.625%	-6.989%
	2.712%	4.219%		2.371%	2.110%		1.565%	-2.128%		-0.387%	2.884%	-1.019%	9.015%
	-34.709%	-34.249%		-33.511%	-28.054%		-27.460%	-30.228%		-26.155%	-30.836%	-26.510%	-32.206%
	1.277%	6.943%		-0.471%	-2.345%		5.440%	2.621%		3.410%	3.755%	5.771%	2.342%
	17.172%	11.477%		15.569%	12.481%		13.836%	11.291%		12.470%	15.665%	10.715%	11.681%
	-5.638%	-7.518%		-3.855%	-4.373%		-3.577%	-2.975%	-3.554%	-1.304%	-3.400%	-2.100%	-8.505%
	-1.449%	-0.666%		0.518%	-1.632%		-2.991%	-1.259%	-2.243%	-2.593%	-3.087%	-3.589%	0.514%
	5.337%	3.149%		5.357%	7.721%		5.336%	4.216%	6.198%	3.690%	5.876%	3.121%	7.702%
	1.669%	1.636%		3.496%	1.989%	2.070%	2.680%	3.039%	2.190%	4.607%	1.607%	3.695%	1.020%
	7.216%	4.353%	6.114%	6.083%	5.061%	7.615%	8.053%	7.200%	7.542%	9.637%	6.987%	5.321%	5.327%
	4.299%	0.465%	6.537%	3.496%	1.698%	2.082%	10.254%	7.860%	7.540%	2.771%	9.718%	7.949%	0.940%
	-5.435%	-6.283%	-5.784%	-4.925%	-5.894%	-5.707%	-7.505%	-4.911%	-7.044%	-6.493%	-6.182%	-4.763%	-8.002%
	8.177%	4.852%	4.757%	6.766%	8.087%	7.065%	8.559%	9.240%	9.079%	7.007%	10.592%	9.612%	6.152%
	-2.664%	-1.819%	-0.043%	-3.310%	-2.359%	-1.864%	0.859%	-0.319%	1.505%	-1.450%	-0.626%	-2.555%	-2.402%
	-5.076%	-3.429%	-2.855%	-3.108%	-6.678%	-4.053%	-1.603%	-2.335%	-2.784%	-2.880%	-3.262%	-1.487%	-4.513%
	-5.664%	-3.817%	-2.611%	-3.943%	-6.142%	-2.877%	-0.951%	-0.909%	-1.648%	-3.726%	-0.498%	0.125%	-3.197%
	7.166%	2.958%	4.132%	6.356%	8.873%	5.495%	4.321%	5.652%	6.428%	6.267%	5.911%	6.336%	4.731%
	9.346%	7.610%	8.718%	7.653%	3.764%	5.864%	5.742%	5.952%	5.525%	9.430%	6.799%	5.465%	8.411%
	12.505%	13.612%	10.964%	13.500%	13.789%	12.338%	12.630%	14.203%	13.721%	11.461%	13.763%	11.186%	12.044%
	-2.045%	-2.274%	1.733%	1.288%	0.979%	-0.553%	-2.401%	0.769%	-2.227%	-1.513%	-1.152%	-3.047%	0.215%
	-2.068%	-4.298%	-1.704%	-4.498%	-3.865%	-4.538%	-4.343%	-5.446%	-6.130%	-7.392%	-2.800%	-5.153%	-0.985%
	-2.345%	-2.223%	-2.665%	-1.711%	-3.169%	-1.297%	0.461%	-1.825%	0.559%	-3.576%	-1.386%	-0.256%	0.357%
	-7.879%	-5.989%	-5.241%	-4.124%	-7.255%	-6.001%	-5.255%	-6.095%	-5.692%	-4.757%	-5.930%	-4.879%	-9.531%
	-1.597%	0.457%	-3.722%	0.244%	-5.257%	-1.290%	-0.934%	-1.957%	-1.276%	0.277%	-2.493%	0.312%	-0.224%
	4.260%	6.043%	0.474%	5.120%	3.632%	3.932%	4.807%	4.789%	5.207%	2.736%	3.581%	4.718%	5.530%
	0.514%	-1.938%	-0.825%	-2.168%	0.933%	-1.473%	-0.673%	0.208%	0.884%	0.733%	0.050%	-0.651%	1.704%
	9.273%	10.141%	7.546%	6.923%	6.061%	8.125%	9.374%	8.928%	10.011%	6.073%	8.473%	10.310%	7.988%
	-2.107%			-4.020%			-1.782%	-1.883%	-1.786%	-4.546%	-3.163%		-1.672%
	-4.660%	-2.504%		-5.366%	-7.551%		-1.789%	-4.073%	-2.966%	-1.520%	-2.863%		-4.329%
	-4.119%			-3.252%			-3.538%		-2.160%	-8.009%	-3.647%		-0.909%
	6.827%		5.621%	9.165%			7.072%	7.840%	7.525%	8.183%	7.233%		6.458%
	4.943%			5.171%			6.535%	5.884%	4.061%	5.363%	5.744%		6.095%
	-5.100%		7.988%	-3.205%			-0.601%		-0.757%	-6.446%	-3.085%		-4.299%
	-8.339%			-6.894%			-8.418%	-6.791%	-8.270%	-10.978%	-8.473%		-6.770%
	7.862%		7.257%	6.912%	7.243%	7.962%	9.806%	7.334%	9.718%	7.981%	9.644%		7.0359
	5.449%			5.036%			4.164%		3.925%	4.434%	4.022%		3.8389
	0.494%			1.299%		0.985%	-1.933%	2.407%	-0.675%	0.259%	-0.921%		-1.2339
	-6.576%			-6.420%			-8.031%	-6.156%	-6.414%	-7.958%	-8.556%		-9.8929
	1.540%			4.196%			4.306%	3.789%	4.899%	2.866%	4.073%		3.9859
	-6.942%			-8.898%			-8.384%	-7.914%	-8.164%	-10.424%	-10.116%		-9.9099
	3.095%			5.483%	1.154%	4.122%	5.004%	3.204%	4.332%	3.659%	4.258%		5.456%
	6.768%			9.812%		6.972%	9.985%	7.729%	9.231%	6.660%	6.052%		9.9149
	6.623%		6.456%	5.963%		7.131%	10.061%	6.973%	9.206%	4.518%	8.009%	10.218%	8.333%
	0.02370	0.701/0	0.40070	5.56370	0.00770	,.131/0	10.001/0	0.073/0	5120070	4.510/0	0.0007/0	10.210/0	0.000/
Mean	0.6116	1.0250	1.0180	0.7616	0.4201	1.0721	0.9655	0.8256	1.7235	0.5287	0.8142	0.7649	1.1809
	0.5039	1.0250	0.8071	0.7010	1.4262	0.9852	0.9655	0.8256	1.1944	0.5287	0.8142	0.1049	0.9804
Median			0.0071	0.0700									

Table A2.1 Statistical Results for Returns on unit trust over the period 1997 to 2001(continued)

	Risk-free Rate	12.625	0.12625	
UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio
ALLAN GRAY EQUITY- AGEF[CL]	3.1552	3.2396	5.5347	0.5473
OLD MUTUAL HIGH YIELD- OMHY[CL]	1.8106	1.5248	5.2927	0.3182
PRUDENTIAL EQUITY- PRUO[CL]	1.5835	1.1430	5.7771	0.2522
INVESTEC EQUITY- METF[CL]	1.1100	1.2694	7.1238	0.1381
OASIS CRESCENT EQUITY- OCEF[CL]	3.0028	3.0633	3.7637	0.7643
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	0.9261	2.0149	6.4450	0.1241
CORONATION EQUITY- CORG[CL]	0.9531	0.7611	5.5054	0.1502
FNB GROWTH- FNBG[CL]	2.0039	3.2906	5.9590	0.3151
ANALYTICS MANAGED EQUITY- FEWS[CL]	0.6201	0.9624	6.0719	0.0813
OLD MUTUAL GROWTH- OMGR[CL]	1.2833	3.3555	5.3315	0.2170
ABSA GENERAL- ABSA[CL]	0.4359	1.2726	7.9292	0.0390
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	0.9626	0.5125	7.6760	0.1090
SIM GENERAL EQUITY- SNTR[CL]	0.6686	0.5874	6.8042	0.0797
OLD MUTUAL TOP COMPANIES- OMTC[CL]	0.6116	0.5039	7.3102	0.0664
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.0250	1.9154	6.9986	0.1284
SMMI EQUITY FoF- SAFF[CL]	1.0180	0.8071	5.0377	0.1770
MOMENTUM EQUITY R- RMEF[CL]	0.7616	0.8706	6.9751	0.0911
PSG EQUITY- PSGG[CL]	0.4201	1.4262	7.6866	0.0382
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	1.0721	0.9852	5.3320	0.1774
STANLIB INDEX- STBI[CL]	0.9655	0.2161	6.9032	0.1216
STANLIB SA EQUITY- GDBT[CL]	0.8256	0.2026	6.7749	0.1032
STANLIB MM EQUITY- GDSE[CL]	1.7235	1.1944	5.7610	0.2773
MARRIOT DIVIDEND GROWTH- HLMK[CL]	0.5287	0.5050	6.5648	0.0613
GRYPHON ALL SHARE TRACKER- PTST[CL]	0.8142	0.0499	7.2212	0.0953
STANLIB EQUITY R- GDBK[CL]	0.7649	0.1040	6.5095	0.0981
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	1.1809	0.9804	7.2502	0.1455
Mean Return for the period	1.1626			
Median Rate of Returns for the period	0.9828			
Standard deviation of Returns for the period	0.9726			
Mean Sharpe Ratio for the period	0.1814			

 Table A2.2 Mean Sharp Ratio of returns over the period 1992 to 1996

andard Deviation	4.2990	3.4736 stical F	4.3530	3.7109	4.7219	4.0131	3.9115	4.2855	4.2163	3.5152	3.7836	3.9383	4.1157	4.43
Median	3.443	2.658	2.563	2.373	2.258	2.060	2.307	2.181	2.230	2.266	1.606	2.051	1.639	3.32
Mean	3.312	2.973	2.514	2.136	2.816	2.177	2.364	2.007	2.107	1.946	2.047	1.872	2.141	3.45
	5.443%	7.029%	6.887%	5.245%	4.033%	6.562%	4.664%	5.976%	5.115%	4.527%	3.303%	5.947%	6.286%	4.650
	3.379%	4.023%	4.496% 5.256%	3.216%	2.067%	5.025%	3.712%	4.712%	3.357%	2.459%	3.124%	4.280%	4.090%	2.05
	1.251% 3.379%	1.685% 4.023%	3.401% 4.496%	2.584% 6.531%	2.311% 4.122%	-0.297% 8.048%	1.179% 6.061%	0.815% 6.128%	1.423% 3.357%	2.314% 5.805%	1.328% 3.124%	1.743% 5.573%	4.698% 1.964%	0.52 3.42
	5.351%	4.114%	3.539%	4.470%	5.289%	3.843%	5.662%	4.908%	6.337%	5.279%	4.981%	3.438%	4.387%	4.23
	-0.885%	-1.565%	-0.507%	0.572%	-1.958%	-1.679%	-0.677%	-1.044%	-1.546%	-0.140%	-3.031%	-0.096%	0.842%	-0.34
	0.467%	2.699%	2.992%	1.127%	4.720%	-3.373%	-0.845%	-0.972%	0.861%	2.949%	5.100%	-0.382%	-1.438%	0.76
	-4.448%	-3.219%	-2.684%	-3.450%	-2.220%	-7.563%	-4.479%	-3.218%	-4.099%	-1.599%	-3.560%	-5.110%	-2.920%	-2.96
	2.250%	1.987%	0.796%	-0.373%	2.180%	1.741%	1.972%	2.303%	1.945%	-0.502%	2.069%	0.790%	1.002%	1.84
	6.080%	-0.959%	-2.203% 6.622%	-0.241% 4.905%	-4.274%	3.000%	4.654%	5.792%	-2.491% 5.683%	-0.792%	-1.951% 5.744%	4.589%	4.821%	-2.74
	9.976% 0.270%	7.930% -0.959%	8.823% -2.263%	7.370% -0.241%	8.898% -4.274%	8.227% 3.000%	11.003% 0.964%	7.576% 1.982%	9.407% -2.491%	7.141% -0.792%	8.607% -1.951%	8.442% -1.142%	7.928% -0.103%	14.0 -2.7
	8.473%	7.170%	8.248%	6.469%	8.022%	8.439%	7.207%	7.227%	9.493%	5.166%	4.592%	7.080%	8.568%	8.3
	2.536%	4.937%	6.421%	3.412%	1.701%	3.425%	3.302%	3.277%	2.809%	3.597%	3.520%	2.015%	1.738%	3.2
	-4.481%	-2.571%	-3.429%	-1.583%	-2.437%	-2.338%	-2.344%	-2.480%	-4.354%	-1.245%	-0.499%	-3.388%	-2.132%	-4.0
	7.280%	6.705%	11.088%	6.498%	10.319%	4.405%	7.778%	7.054%	8.415%	7.265%	9.668%	4.976%	6.056%	6.2
	2.632%	1.559%	1.241%	1.236%	1.961%	1.057%	2.605%	2.393%	1.919%	1.600%	1.551%	2.174%	0.209%	4.5
	10.113%	7.349%	6.615%	6.998%	6.730%	5.846%	9.093%	8.207%	7.965%	6.567%	3.853%	9.621%	8.386%	10.3
	6.400% 2.410%	10.893% 2.292%	9.793% 2.996%	6.334% 2.163%	2.888%	3.284%	3.142%	5.713% 1.042%	6.718% 3.424%	6.322% 1.812%	1.371%	7.099% 3.552%	6.005% 1.790%	7.1
	-3.903%	-3.478%	-3.625%	-5.047%	-8.174% 10.338%	-2.255% 3.284%	-1.605% 7.205%	-2.088%	-4.649%	-5.270%	-3.548% 7.617%	-3.130%	-1.360%	71
	-4.567%	-1.316%	-2.056%	-1.400%	-0.493%	-2.588%	-2.091%	-3.015%	-3.366%	-0.792%	-0.567%	-2.306%	-2.437%	
	3.507%	3.390%	4.388%	2.977%	5.808%	1.416%	3.859%	3.727%	4.247%	3.258%	3.457%	4.215%	0.238%	
	-0.553%	1.583%	0.939%	0.379%	1.138%	-3.157%	0.085%	0.556%	-0.468%	0.866%	1.019%	2.086%	1.484%	
	6.234%	2.617%	3.072%	3.975%	1.047%	4.929%	2.733%	4.210%	4.508%	2.856%	1.118%	4.253%	6.095%	
	11.925%	7.728%	6.051%	4.158%	6.865%	11.419%	6.515%	4.517%	10.444%	6.095%	5.025%	7.412%	8.118%	
	8.379% 6.565%	5.826% 3.296%	6.333% 2.729%	5.119% 4.138%	5.413% -1.846%	6.968% 7.461%	4.221% 2.307%	6.601% 4.917%	7.289% 3.381%	2.179% 4.788%	2.622% 5.823%	6.398% 3.487%	7.178% 7.583%	
	5.273%	7.212%	7.827%	6.937%	9.267%	5.423%	8.790%	6.446%	5.893%	6.385%	7.622%	6.536%	5.692%	
	3.938%	0.666%	-1.059%	0.541%	2.205%	-0.544%	1.585%	-0.189%	2.005%	-0.041%	-1.340%	2.143%	-1.143%	
	0.686%	0.981%	-1.455%	0.591%	-3.276%	3.129%	-0.310%	2.556%	1.273%	-0.019%	0.294%	-0.530%	1.038%	
	0.182%	0.099%	-0.066%	-2.514%	0.898%	-1.678%	-0.228%	0.567%	0.355%	-3.597%	-0.817%	-0.292%	-0.332%	
		0.557%	-2.849%	0.013%	-5.750%	0.540%	-1.272%	-0.983%	-3.431%	1.160%	-0.509%	-1.031%	-1.397%	
		1.565%	-2.360% 1.491%	0.361%	-1.988%	3.566%	0.401%	2.060%	1.186% 2.433%	-0.992%	0.805%	0.003%	0.386%	
			4.256%	3.903%	5.308% 0.546%	0.281%	2.821%	0.730%	2.026%	3.247% -0.992%	1.208%	3.706% 0.003%	0.084%	
			6.252%	6.021%	8.406%	8.123%	6.821%	7.146%	6.471%	6.631%	7.646%	5.678%	6.621%	
			2.302%	0.217%	-1.024%	1.437%	1.184%	3.558%	4.824%	0.105%	-0.637%	3.121%	5.134%	
			7.052%	9.005%	10.060%	8.054%	6.401%	9.041%	7.344%	8.547%	6.934%	6.005%	7.483%	
			-0.535%	-1.684%	-3.378%	0.463%	-1.345%	-0.905%	-0.878%	-1.091%	-0.935%	-1.156%	-0.544%	
			6.307%	3.118%	4.733%	4.408%	3.561%	2.898%	4.356%	4.011%	9.179%	2.106%	3.252%	
			-0.423% 4.312%	-0.367% 4.589%	10.510%	2.217%	-0.140% 4.460%	3.714%	4.929%	-0.396%	-1.283% 1.989%	0.580% 5.607%	6.583%	
			13.948% -0.423%	11.674%		8.962% 1.903%	9.859%	10.596% 1.606%	8.319% 3.502%	10.737% -0.396%	11.868%	11.353% 0.580%	11.522% 1.540%	
			-0.570%	-3.809%		-0.386%	-5.991%	0.105%	1.010%	-5.255%	-2.503%	-0.747%	1.375%	
			-7.210%	-7.207%		-5.681%	-1.807%	-7.540%	-4.603%	-6.269%	-5.862%	-6.924%	-7.389%	
			-4.402%	-2.771%		-4.739%	-3.152%	-5.183%	-5.113%	-3.356%	-3.164%	-2.237%	-2.112%	
			-2.556%	-1.419%		-3.030%	-3.099%	-4.193%	-3.198%	-1.684%	-3.548%	-2.548%	-3.218%	
			1.860%	-2.492%		-1.345%	-2.549%	-2.914%	-2.440%	-0.992%	0.203%	-1.462%	-3.205%	
			1.287% 5.936%	3.232% 5.437%		3.331% 5.651%	2.172% 5.820%	-0.025% 4.047%	-0.182% 3.060%	2.619% 3.041%	6.208% 3.163%	-0.550% 3.457%	1.294% 5.155%	
			2.325%	1.802%		1.632%	0 1 7 10/	0.625%	-0.228%	2.218%	-1.809%	-0.712%	0.931%	
			2.397%	3.254%		3.785%		1.010%	4.003%	2.989%	1.662%	3.540%	2.869%	
			-2.844%	-1.011%		-1.212%		-9.773%	-9.264%	-1.998%	-2.363%	-8.536%	-9.343%	
			-4.618%	-2.082%		-3.037%		-5.229%	-2.520%	-1.010%	-0.492%	-3.262%	-3.079%	
			8.739%	4.217%		3.789%		2.741%	1.173%	3.077%	3.890%	0.494%	1.935%	
			3.450% 5.131%	2.065% 4.174%		0.348% 5.810%		0.757% 5.491%	2.601% 0.958%	3.609% 0.377%	2.154% 4.770%	0.478% 3.507%	0.031% 6.703%	
			1.259%	2.828%		0.288%		2.579%	5.106%	2.690%	4.055%	1.818%	2.237%	

Table A3.1 Statistical Results for Returns on unit trust over the period 2002 to 2006

	4.0811	4.0811	3.6285	5 4
4.032				
	2.080			
3.285	1.685	1,685	2 225	
6.317%	4.783%	4.783%	0.31/%	66.
4.032%	3.672%			
1.807%	3.405%			-
4.737%	2.189%			
4.289%	4.488%			
0.943%	-0.592%			
-1.847%	0.289%	0.289%	-1.847%	6 -1
-2.733%	-3.947%	-3.947%	-2.733%	
1.009%	1.972%			
4.835%	5.574%			
	-0.954%		-0.173%	
7.991%	9.031%			
1.751%	2.321% 7.485%			
	-3.202%		-2.134%	
6.099%	7.031%			
0.263%	1.529%			
8.357%	8.202%			_
1.778%	2.724%			
5.976%	6.828%			
	-4.015%		-1.424%	
	-2.212%		-2.408%	
0.480%	2.957%			
1.263%	-0.211%	-0.211%	1.263%	6 1
6.096%	3.957%			
8.678%	8.539%			
7.666%	3.216%			-
7.348%	5.930%			
5.711%	6.420%		5.711%	
	1.218%			-1
	-0.221%			-0.
	0.029%			-0.
	-2.008%			-1
	0.519%			2
	3.184% 0.519%			0.
	5.200%			6
	2.766%			5
	6.628%			7.
	-1.398%			-0.
	2.958%			2
	5.076%			4
	1.117%	1.117%		2
	10.263%	10.263%		10
	-1.156%	-1.156%		1
	-7.378%	-7.378%		-6
	-4.236%	-4.236%		-2
	-3.737%			-3.
	-3.089%			-4
	3.986%			5
	-0.647%			0.
	3.723% -1.777%			1.
	-10.176%			-9.
	-3.839%			-2
	1.491%			2
	2.776%			6
	1.507%			-0.
	2.771%			3.
		-2.585%		-3.

Table A3.1 Statistical Results for Returns on unit trust over the period 2002 to 2006(continued)

	PSGG[CL]	OMAA[CL]	CAEF[CL]	STBI[CL]	INDT[CL]	GDBT[CL]	GDSE[CL]	HLMK[CL]	PTST[CL]	GDBK[CL]	MTLE[CL]	MOEF[CL] MSSR[CL]	VAGE[CL]
	-3.769%	-3.963%		-2.167%		-3.682%	-4.011%	-4.291%	-4.068%	-2.930%	-4.734%			
	-3.476%	2.382%		4.867%		5.702%	3.071%	0.913%	2.609%	5.707%	1.911%			
	1.085%	1.073%		1.094%		0.253%	0.841%	0.201%	1.272%	1.161%	1.911%			
	6.524%	3.314%		0.151%		4.759%	3.404%	4.943%	2.949%	0.912%	1.672%			
	3.808%	1.094%		2.588%		2.236%	1.013%	2.265%	0.262%	0.666%	0.278%			
	-4.815%	-3.887%		-5.551%		-3.844%	-5.030%	-5.356%	-5.962%	-3.558%	-5.449%			
	-7.072%	-9.313%		-12.672%		-9.967%	-9.210%	-10.601%	-10.469%	-9.909%	-10.735%			
	4.872%	2.662%		2.026%		4.057%	2.061%	-0.651%	1.554%	2.923%	2.821%			
	2.943%	-0.520%		-0.687%		0.715%	-0.986%	-2.638%	-1.745%	-1.306%	-1.482%			
	-0.188%	1.201%		-0.363%		2.415%	0.892%	3.159%	0.673%	-0.152%	0.307%			
	4.828%	3.589%		1.200%		3.723%	4.094%	5.664%	3.713%	2.243%	2.619%			
	-4.097%	-2.795%		-2.250%		-2.644%	-4.280%	-4.402%	-5.039%	-3.646%	-3.063%			
	-0.261%	-4.615%		-5.978%		-5.134%	-4.755%	-5.546%	-5.884%	-5.395%	-4.356%			
	-0.314%	-4.054%		-5.295%		-3.324%	-3.949%	-3.582%	-4.114%	-4.261%	-4.003%			
	-10.050%	-6.527%		-7.962%		-7.113%	-8.986%	-5.186%	-6.896%	-5.971%	-6.518%			
	0.948%	-0.291%		-1.705%		0.738%	0.369%	4.127%	-0.445%	1.264%	-1.091%			
	10.921%	10.989%		14.235%		8.727%	12.550%	7.836%	12.454%	10.363%	12.467%			
	2.139%	-0.082%		-2.039%		-0.566%	-0.714%	2.816%	-2.383%	0.688%	-1.784%			
	7.323%	3.374%		3.118%		3.462%	4.874%	4.994%	3.338%	2.168%	3.286%			
	4.198%	3.279%		4.909%		3.248%	2.768%	0.864%	4.116%	1.417%	4.354%			
	-2.377%	-1.355%		-2.230%		-1.022%	-1.089%	-1.876%	-2.509%	-1.654%	-0.685%			
	8.833%	8.313%		8.295%		7.342%	8.058%	5.137%	10.102%	7.583%	8.049%			
	3.842%	1.739%		-1.127%		1.015%	2.378%	3.051%	-0.921%	0.632%	0.078%			
	8.249%	6.655%		7.011%		7.320%	6.735%	5.446%	7.362%	8.069%	6.535%			
	3.608%	1.680%		3.363%		1.706%	2.011%	-0.555%	4.320%	2.135%	3.752%			
	0.688%	0.342%		0.407%		1.557%	-0.402%	2.724%	0.007%	0.298%	-0.682%			
	0.139%	0.285%		-1.597%		-0.331%	0.462%	0.595%	-1.154%	-1.752%	-0.091%			
	-0.223%	-0.730%		-1.819%		-2.933%	-1.157%	0.917%	-2.066%	-0.393%	-0.840%			
	1.014%	-0.481%		0.074%		0.108%	-0.244%	-1.590%	-0.551%	-1.679%	-0.346%			
	-0.227%	0.561%		-1.605%		0.437%	0.072%	1.439%	-1.551%	-0.150%	-1.792%			
	1.527%	-1.227%		-1.056%		-0.644%	0.179%	0.534%	0.716%	-1.226%	-0.524%			
	7.597%	7.592%		9.339%		7.295%	7.274%		9.644%	7.916%	7.404%			
	5.906%	6.143%		5.250%		6.995%	5.854%		3.612%	5.499%				
	3.112%	4.405%		-0.267%		3.746%	3.732%	6.552%	-0.067%	2.627%				
	8.279%			6.683%		8.936%	8.164%		6.910%	9.408%				
	1.806%	3.936%		1.953%		3.223%	4.188%		1.955%	3.329%				
	0.920%			0.195%	3.041%		-1.287%		1.228%	0.240%				
	4.772%	2.393%		5.294%	3.482%	5.457%	2.885%	2.140%	5.231%	3.161%				
	-0.426%	-2.511%		-0.427%	-3.301%		-2.250%		-1.663%	-1.299%				
	-4.156%	-2.528%	-2.410%	-5.037%	-2.925%		-3.293%		-4.664%	-3.303%				-3.144%
	8.205%	6.884%	6.823%	9.194%	7.853%	6.088%	6.733%		9.467%	7.164%				6.314%
	2.129%	2.568%	1.112%	2.175%	0.725%	2.321%	2.676%		1.721%	1.630%				1.769%
	9.458%	8.345%	8.755%	5.988%	7.268%	7.725%	7.634%		7.744%	7.112%				7.758%
	2.365%		1.744%	1.132%	2.384%	0.570%	1.482%	0.900%	1.060%	1.022%				2.811%
	9.430%		6.137%	9.039%	7.193%	8.858%	6.970%	5.168%	7.945%	7.992%				9.816%
	-1.033%		-2.851%	-2.786%	-4.752%		-2.183%			-2.406%				-2.905%
										3.080%				
	2.982%		2.228%	3.120%	3.878%		2.276% 7.427%			6.494%				2.523%
	7.560% 11.391%		5.920% 9.712%	6.926%	6.323% 9.736%		8.323%			7.896%				7.428%
				7.338%			-0.990%			-0.569%				-1.086%
	-1.128%		0.539%		0.664%		5.531%		-2.001% 4.731%					4.808%
	5.868%		4.677%	6.061%	5.107% 2.985%					4.388% 3.076%				
	2.464%		0.924%	3.593%	2.985%		2.549%							4.117%
	-4.722%		-5.277%	-2.480%	-2.243%		-3.925%			-3.767%				-2.780%
	2.579%		-0.856%	5.366%	1.562%		0.271%		4.168%	1.612%				1.785%
	-1.111%		0.105%	-2.957%	-3.083%		-0.929%		-1.344%	-2.481%				-1.7029
	3.203%		5.172%	4.960%	3.975%		4.440%		4.831%	4.713%				4.0199
	0.657%		1.406%	2.348%	1.454%		2.152%		1.101%	3.013%				1.2829
	5.458%		4.574%	3.341%	2.435%		4.499%			3.527%				3.7839
	3.785%		3.607%	3.199%	5.020%		3.634%			2.874%				4.956%
	3.859%	5.706%	5.113%	4.174%	5.779%	3.648%	4.752%	6.867%	3.791%	3.013%	5.583%	4.740%	3.132%	3.439%
Mean	2.364	1.684	2.722	1.456	2.690	1.844	1.660	1.554	1.474	1.520	1.540	2.099	2.139	2.960
Median	2.414	1.709	2.228	1.166	3.013	1.971	2.036	1.789	1.250	1.341	1.726	1.606	1.919	3.439
Standard Deviation	4.4443	4.1014	3.7687	4.7276	3.8015	4.2220	4.2780	4.1608	4.6189	4.0947	4.3976	3.6848	3.0704	3.6405

 Standard Deviation
 4.4443
 4.1014
 3.7687
 4.7276
 3.8015
 4.2220
 4.2780
 4.1608
 4.6189
 4.0947
 4.3976
 3.6848
 3.0704
 3.6405

 Table A3.1 Statistical Results for Returns on unit trust over the period 2002 to 2006 (continued)

	Risk-free Rate	8.7716	0.087716	
UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio
KAGISO EGUITY ALPHA - KEAF[CL]	3.312	3.443	4.2990	0.7500
ABSA SELECT EQUITY- ASEF[CL]	2.973	2.658	3.4736	0.8306
ALLAN GRAY EQUITY- AGEF[CL]	2.514	2.563	4.3530	0.5574
OASIS GENERAL - OGEN[CL]	2.136	2.373	3.7109	0.5520
PRESCIENT EQUITY QUANT. A1- PEQF[CL]	2.816	2.258	4.7219	0.5778
OLD MUTUAL HIGH YIELD- OMHY[CL]	2.177	2.060	4.0131	0.5207
FOORD EQUITY- FEQF[CL]	2.364	2.307	3.9115	0.5818
PRUDENTIAL EQUITY- PRUO[CL]	2.007	2.181	4.2855	0.4480
INVESTEC EQUITY- METF[CL]	2.107	2.230	4.2163	0.4789
OASIS CRESCENT EQUITY- OCEF[CL]	1.946	2.266	3.5152	0.5287
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	2.047	1.606	3.7836	0.5179
CORONATION EQUITY- CORG[CL]	1.872	2.051	3.9383	0.4532
FNB GROWTH- FNBG[CL]	2.141	1.639	4.1157	0.4989
INVESTEC ACTIVE QUANTS A- INXA[CL]	3.458	3.325	4.4333	0.7602
ANALYTICS MANAGED EQUITY- FEWS[CL]	1.681	1.650	4.3514	0.3662
OLD MUTUAL GROWTH- OMGR[CL]	2.054	2.097	4.2565	0.4618
ELEMENT EARTH EQUITY- FEFA[CL]	2.268	2.045	3.4921	0.6244
ABSA GENERAL- ABSA[CL]	1.750	1.655	4.0124	0.4142
CANNON EQUITY- MCEF[CL]	3.275	3.407	3.9859	0.7997
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	1.798	1.700	4.1528	0.4119
SIM GENERAL EQUITY- SNTR[CL]	1.839	1.454	4.1648	0.4205
NEDGROUP INV. QUANTS. CORE EQUITY R- NQCE[CL]	2.687	3.200	3.5508	0.7320
OLD MUTUAL TOP COMPANIES- OMTC[CL]	1.853	1.870	4.3254	0.4081
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.645	1.398	3.9640	0.3929
SMMI EQUITY FoF- SAFF[CL]	1.718	1.200	3.5003	0.4658
INVESTMENT SOLUTIONS MM EQUITY- ISPE[CL]	1.685	2.080	4.0811	0.3914
MOMENTUM EQUITY A- REFA[CL]	3.285	4.032	3.6285	0.8813
MOMENTUM EQUITY R- RMEF[CL]	2.131	1.747	4.0810	0.5006
PSG EQUITY- PSGG[CL]	2.364	2.414	4.4443	0.5121
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	1.684	1.709	4.1014	0.3893
CAPSTONE ACTIVE EQUITY FOF- CAEF[CL]	2.722	2.228	3.7687	0.6989
STANLIB INDEX- STBI[CL]	1.456	1.166	4.7276	0.2894
INDEQUITY TECHNICAL- INDT[CL]	2.690	3.013	3.8015	0.6845
STANLIB SA EQUITY- GDBT[CL]	1.844	1.971	4.2220	0.0043
STANLIB SA EQUITY- GDSE[CL]	1.660	2.036	4.2220	0.4101
	1.554			0.3524
MARRIOT DIVIDEND GROWTH- HLMK[CL]		1.789	4.1608	
GRYPHON ALL SHARE TRACKER- PTST[CL]	1.474	1.250	4.6189	0.3002
STANLIB EQUITY R- GDBK[CL]	1.520	1.341	4.0947	0.3498
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	1.540	1.726	4.3976	0.3303
MAESTRO EQUITY- MOEF[CL]	2.099	1.606	3.6848	0.5458
SASFIN EQUITY- MSSR[CL]	2.139	1.919		0.6682
EFFICIENT GENERAL EQUITY- VAGE[CL]	2.960	3.439	3.6405	0.7891
Mean Return for the period	3 473			
•	2.173			
Median Rate of Returns for the period	2.048			
Standard deviation of Returns for the period	0.3622			
Mean Sharpe Ratio for the period Table A3.2 Mean Sharp Ratio of retu	0.5243			

 Table A3.2 Mean Sharp Ratio of returns over the period 2002 to 2006

Median 1.1	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26 9% -2.16 4% 0.54 1% 1.03 366 0.74	% 3.557% % -0.453% % 3.384% % -2.163% % 2.252% % 2.252% % 2.087% % 2.087% % 2.087% % 0.196% % -1.977% % -2.553% % -0.187% % -2.797% % 8.482% % -0.562% % -1.143% 04 1.0602 44 -0.1875	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% 2.905% 4.561% 2.154% -1.254%	4.119% -1.781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991% 8.179% 0.339% -0.687% 0.6191 0.6379	7.941% 2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020% 4.722% 1.882% -0.346% -0.5107 0.1816 4.2772	10.153% 3.222% 0.598% 5.809% 1.996% 2.851% 0.904% -0.642% -0.642% -0.515% -2.393% -2.836% -0.122% -4.405% 11.299% -1.361% -0.654% 0.4216 -0.0438 5.7041	-2.086% 7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.0963% 1.741% -0.097% -1.919% -3.802% -0.533% -3.393% 7.620% 0.021% 1.7620% 0.2610 0.4904 4.6893	-3.081% 9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497% 8.318% 0.758% 0.758% 0.6053 1.1650 4.4319	-3.080% 8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% 2.697% 8.620% 0.727% -1.287% -0.7039 0.7318 4.3001	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122% 6.925% 1.974% -2.195% -0.3366 0.6062 4.5717	5.517% 5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.608% 1.560% -0.280% 1.608% 1.560% -0.280% 1.608% 1.560% -0.280% 1.608% 1.545% -0.280% 1.545% 1.545% -0.280% 1.545% -0.280% -1.608% -1.301% 0.030% -1.301% 0.030% -1.301% 0.030% -1.301% 0.030% -1.301% 0.030% -1.305% -1.608% -1.301% 0.030% -1.305% -1.608% -1.301% 0.030% -1.305% -1.608% -1.301% 0.030% -1.305% -1.605% -1.305% -1.305% -1.305% -1.555% -1.305% -1.555% -1.555% -1.555% -1.555% -1.655% -1.555% -	-3.080% 6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.115% -0.538% -1.599% -0.413% -2.311% -1.072% 4.651% 0.458% 0.225% 	2.143/3 7.770% 4.132% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398% 7.027% 0.018% 0.960% -0.2785 0.9361 4.6452	8.304% 2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% 5.754% 1.468% -0.854% 0.7305 0.0552 4.7735	8.830 2.813 -0.313 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -1.4229 5.7819 -0.1829 1.4509 0.435 0.320 4.799
1.44 1.77 1.66 0.44 -2.44 -1.74 -0.27 -1.84 4.97 1.84 -0.33 -1.84 -0.33 -1.84 -0.33 -1.84 -0.33 -1.84 -0.33 -1.84 -0.33 -1.84 -0.34	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26 9% -2.16 4% 0.54 1% 1.03 366 0.74	% 3.557% % -0.453% % 3.384% % -2.163% % 2.252% % 2.252% % 2.252% % 2.087% % 2.087% % 0.196% % -1.977% % -2.553% % -0.187% % -2.797% % 8.482% % -0.562% % -1.143%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% -2.905% 4.561% 2.154% -1.254%	0.761% 0.241% 4.119% 4.1781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991% 8.179% 0.939% -0.687% 0.6191	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020% 4.722% 1.882% -0.346% 0.5107	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.642% -2.393% -2.836% -0.122% -4.405% 11.299% -1.361% -0.654% 0.4216	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533% 7.620% 0.021% 1.706% -0.2610	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497% 8.318% 0.758% 0.688% 	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% -2.697% 8.620% 0.727% -1.287%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122% 6.925% 1.974% -2.195% 0.3366	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186% -2.505% 4.930% 0.103% 1.198% 1.0659	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599% -0.413% -2.311% -1.072% 4.651% 0.458% 0.225%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398% 7.027% 0.018% 0.960% -0.2785	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% 5.754% 1.468% -0.854% 0.7305	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589 -1.1259 5.7819 -0.1829 1.4509
1.44 1.77 1.66 0.44 -2.44 -1.74 -0.27 -1.84 4.97 1.84 -0.33	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26 9% -2.16 4% 0.544 1% 1.03	% 3.557% % -0.453% % 3.384% % -2.163% % 2.252% % 2.252% % 2.252% % 2.087% % 2.087% % 0.196% % -1.977% % -2.553% % -0.187% % -2.797% % 8.482% % -0.562% % -1.143%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% -2.905% 4.561% 2.154%	0.761% 0.241% 4.119% 4.1781% 2.780% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991% 8.179% 0.939% -0.687%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020% 4.722% 1.882% -0.346%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393% -2.836% -0.122% -4.405% 11.299% -1.361% -0.654%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533% -3.393% 7.620% 0.021% 1.706%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497% 8.318% 0.758% 0.688%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% -2.697% 8.620% 0.727% -1.287%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122% 6.925% 1.974% -2.195%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186% -2.505% 4.930% 0.103% 1.198%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599% -0.413% -2.311% -1.072% 4.651% 0.458% 0.225%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398% 7.027% 0.018% 0.960%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% -2.843% 5.754% 1.468% -0.854%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589 -1.1259 5.7819 -0.1829 1.4509
1.44 1.77 1.66 0.44 -2.44 -1.74 -0.27 -1.84 4.97 1.84	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26 9% -2.16 4% 7.39 4% 0.54	% 3.557% % -0.453% % -0.453% % -0.453% % -0.453% % -0.163% % -2.163% % 2.252% % 2.252% % 2.087% % 0.196% % -1.977% % -2.553% % -0.187% % -2.797% % 8.482% % -0.562%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% 4.561% 2.154%	0.761% 0.241% 4.119% 4.1781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991% 8.179% 0.939%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020% 4.722% 1.882%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393% -2.836% -0.122% -4.405% 11.299% -1.361%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533% 7.620% 0.021%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497% 8.318% 0.758%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% -2.697% 8.620% 0.727%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122% 6.925% 1.974%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186% -2.505% 4.930% 0.103%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599% -0.413% -2.311% -1.072% 4.651% 0.458%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398% 7.027% 0.018%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% 5.754% 1.468%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589 -1.1259 5.7819 -0.1829
1.44 1.77 1.66 0.44 -2.44 -1.74 -0.27 -1.84 4.92	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% 1.90 7% -1.26 9% -2.16 4% 7.39	% 3.557% % -0.453% % -0.453% % -0.453% % -0.453% % -0.163% % -2.163% % 2.252% % 2.252% % 2.087% % 2.087% % 0.196% % -1.977% % -2.553% % -0.187% % -2.797% % 8.482%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% -2.905% 4.561%	0.761% 0.241% 4.119% 4.1781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991% 8.179%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020% 4.722%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393% -2.836% -0.122% -4.405% 11.299%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533% 7.620%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497% 8.318%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% -2.697% 8.620%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122% 6.925%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186% -2.505% 4.930%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -0.538% -0.413% -2.311% -1.072% 4.651%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398% 7.027%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% 5.754%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589 -1.1259 5.7819
1.44 1.77 1.66 0.44 -2.48 -1.74 -0.27 -1.84	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26 9% 2.16	% 3.557% % -0.453% % 3.384% % 2.163% % 2.252% % 1.896% % 2.087% % 0.196% % -1.977% % -0.187% % -0.187%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465% -2.905%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913% -0.991%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110% -3.020%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393% -2.836% -0.122% -4.405%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533% -3.393%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221% -3.497%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056% -2.697%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483% -3.122%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186% -2.505%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -0.538% -0.413% -2.311% -1.072%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353% -2.398%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534% -2.843%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589 -1.1259
1.44 1.73 1.64 -2.44 -1.74 -0.2	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90 7% -1.26	% 3.557% % -0.453% % 3.384% % 3.384% % 2.163% % 2.252% % 1.896% % 2.087% % 0.196% % -1.977% % -0.187%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869% -0.465%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604% 0.913%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687% -1.110%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393% -2.836% -0.122%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802% -0.533%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032% -0.221%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333% -1.056%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201% -0.483%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030% 1.186%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599% -0.413% -2.311%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316% -0.353%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720% -0.534%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069 -2.0589
1.44 1.73 1.64 0.44 -2.44 -1.74	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% -1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58 3% -1.90	% 3.557% % -0.453% % 3.384% % 3.384% % 2.163% % 2.252% % 1.896% % 2.087% % 0.196% % -1.977% % -2.553%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643% -0.869%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652% 0.534% -2.754% -1.604%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479% -0.687%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.642% -2.393% -2.393%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919% -3.802%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441% 0.032%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928% -2.333%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350% -1.201%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301% 0.030%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599% -0.413%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802% -0.316%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734% -1.720%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229 -3.3069
1.44 1.73 1.68 0.44 -2.48	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69 2% -0.58	% 3.557% % -0.453% % 3.384% % -2.163% % 2.252% % 1.896% % 2.087% % 0.196% % -1.977%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112% -1.643%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652% 0.534% -2.754%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383% -1.479%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515% -2.393%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097% -1.919%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171% -1.441%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553% -0.928%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404% -1.350%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506% -1.301%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538% -1.599%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539% -0.802%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224% -1.734%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039 -1.4229
1.44 1.73 1.66 0.48	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46 7% -0.69	% 3.557% % -0.453% % 3.384% % 2.163% % 2.252% % 1.896% % 2.087% % 0.196%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963% 0.112%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652% 0.534%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055% -0.383%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642% -0.515%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741% -0.097%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359% 0.171%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734% -0.553%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113% -0.404%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800% 0.506%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115% -0.538%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017% -0.539%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949% -0.224%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349 0.6039
1.44 1.73 1.68	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94 9% 0.34 1% 2.46	% 3.557% % -0.453% % 3.384% % -2.163% % 2.252% % 1.896% % 2.087%	2.469% 0.102% 7.287% -1.149% 2.063% 1.456% 0.963%	0.761% 0.241% 4.119% -1.781% 2.780% 1.689% 1.652%	2.075% -0.737% 5.393% -1.648% 2.061% 1.317% 0.055%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851% 0.904% -0.642%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615% 0.963% 1.741%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699% 0.763% 2.359%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743% 0.475% 2.734%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758% 0.599% 1.113%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560% -0.280% 1.800%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643% 0.115% -0.115%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886% 0.643% 2.017%	2.317% -1.067% 6.922% -3.468% 2.535% 1.331% 0.949%	2.8139 -0.3139 3.6249 -0.3779 0.1859 0.3119 1.0349
1.44	4% 3.34 1% 1.01 8% 3.90 3% -3.92 3% 1.94	3.557% -0.453% 3.384% -2.163% 2.252%	2.469% 0.102% 7.287% -1.149% 2.063%	0.761% 0.241% 4.119% -1.781% 2.780%	2.075% -0.737% 5.393% -1.648% 2.061%	10.153% 3.222% 0.598% 5.809% -1.996% 2.851%	7.235% 3.405% 1.375% 3.971% -3.912% 1.615%	9.328% 3.285% 1.614% 4.362% -3.079% 1.699%	8.340% 2.850% -0.370% 4.962% -1.707% 2.743%	8.343% 2.494% -1.446% 5.098% -2.008% 3.758%	5.548% 1.545% 0.199% 3.963% -1.608% 1.560%	6.246% 3.637% -0.093% 4.104% 0.475% 1.643%	7.770% 4.132% 2.298% 4.033% -1.683% 1.886%	2.317% -1.067% 6.922% -3.468% 2.535%	2.813 -0.313 3.6249 -0.3779 0.1859
	4% 3.34 1% 1.01 8% 3.90 3% -3.92	% 3.557% % -0.453% % 3.384% % -2.163%	2.469% 0.102% 7.287% -1.149%	0.761% 0.241% 4.119% -1.781%	2.075% -0.737% 5.393% -1.648%	10.153% 3.222% 0.598% 5.809% -1.996%	7.235% 3.405% 1.375% 3.971% -3.912%	9.328% 3.285% 1.614% 4.362% -3.079%	8.340% 2.850% -0.370% 4.962% -1.707%	8.343% 2.494% -1.446% 5.098% -2.008%	5.548% 1.545% 0.199% 3.963% -1.608%	6.246% 3.637% -0.093% 4.104% 0.475%	7.770% 4.132% 2.298% 4.033% -1.683%	2.317% -1.067% 6.922% -3.468%	2.813 -0.313 3.624 -0.377
-2.05	4% 3.34 1% 1.01 8% 3.90	% 3.557% % -0.453% % 3.384%	2.469% 0.102% 7.287%	0.761% 0.241% 4.119%	2.075% -0.737% 5.393%	10.153% 3.222% 0.598% 5.809%	7.235% 3.405% 1.375% 3.971%	9.328% 3.285% 1.614% 4.362%	8.340% 2.850% -0.370% 4.962%	8.343% 2.494% -1.446% 5.098%	5.548% 1.545% 0.199% 3.963%	6.246% 3.637% -0.093% 4.104%	7.770% 4.132% 2.298% 4.033%	2.317% -1.067% 6.922%	2.813 -0.313 3.624
5.7-	4% 3.34 1% 1.01	% 3.557% % -0.453%	2.469% 0.102%	0.761% 0.241%	2.075% -0.737%	10.153% 3.222% 0.598%	7.235% 3.405% 1.375%	9.328% 3.285% 1.614%	8.340% 2.850% -0.370%	8.343% 2.494% -1.446%	5.548% 1.545% 0.199%	6.246% 3.637% -0.093%	7.770% 4.132% 2.298%	2.317% -1.067%	2.813 -0.313
-0.58	4% 3.34	% 3.557%	2.469%	0.761%	2.075%	10.153% 3.222%	7.235% 3.405%	9.328% 3.285%	8.340% 2.850%	8.343% 2.494%	5.548% 1.545%	6.246% 3.637%	7.770% 4.132%	2.317%	2.813
1.25						10.153%	7.235%	9.328%	8.340%	8.343%	5.548%	6.246%	7.770%		
5.9															
-2.58	3% -3.19	-2.250%	-2.373%	-1.363%	-3.084%	-4.457%	0.0000/		-3.080%	-2.173%	0.017%	-3.080%	-2.440%	-2.370%	-3.020
7.92				4.240%	5.384%	6.944%	2.083%	6.613%	7.778%	4.946%	3.880%	3.271%	4.751%	8.644%	7.454
-1.80		-1.986%	-1.195%	0.312%	-1.461%	-3.375%	-0.696%	-2.242%	-2.507%	-2.979%	-1.131%	-0.768%	-1.946%	-2.853%	-2.692
-2.52					-4.843%	-5.340%	-3.057%	-3.927%	-5.469%	-4.995%	-2.365%	-4.948%	-5.783%	-4.299%	-4.226
1.13				1.468%	-1.304%	-2.649%	4.555%	1.497%	-0.961%	0.613%	-0.578%	-0.742%	4.350%	0.085%	1.674
1.8				-0.024% 4.108%	0.663%	-0.043% 7.576%	2.342% 4.593%	1.298% 5.522%	1.791% 6.715%	0.174% 6.790%	1.621% 4.574%	0.609%	1.228% 4.396%	1.223% 6.946%	-0.144
-0.02			-0.083%		-1.169%	-3.785%	-2.578%	-1.573%	-2.112%	-3.915%	-2.006%	-1.554%	-2.780%	-1.669%	-3.290
2.65			2.433%	1.981%	2.818%	2.314%	2.777%	5.563%	3.422%	3.169%	2.298%	2.613%	0.912%	4.294%	3.867
-0.18	9% -0.87	i%	-0.894%	-0.383%	-1.005%	2.937%	-0.237%	-0.427%	-1.440%	2.287%	0.373%	-0.932%	-0.361%	-1.046%	0.350
5.35			5.272%	5.746%	4.971%	6.139%	4.056%	2.652%	5.304%	4.254%	5.305%	4.442%	1.065%	5.231%	4.671
0.40			0.455%		1.288%	-0.215%	2.260%	1.032%	0.640%	0.596%	0.330%	4.724%	2.543%	-0.280%	0.329
4.65			4.979%	7.130% 4.584%	6.923% 5.235%	10.118% 3.019%	5.905% 5.283%	6.708% 5.340%	6.210% 2.064%	7.940% 1.076%	1.719%	6.585% 4.724%	4.955% 3.232%	10.068% 4.480%	8.387 5.042
2.05				-2.802%	0.487%	-3.572%	2.007%	2.026%	-0.018%	-2.244%		-1.364%	-2.223%	0.416%	-1.120
6.70				10.273%	6.256%	11.020%	6.594%	3.949%	6.297%	8.326%		6.869%	6.081%	7.907%	9.430
2.58				-1.650%	-5.142%	-7.844%	7.894%	4.528%	1.923%	-6.195%		-1.318%	3.400%	-1.098%	4.787
10.90				4.987%	6.661%	12.726%	6.662%	-0.194%	5.032%	4.360%		5.001%	2.765%	9.258%	7.671
-8.98	9% -6.73	1%		-8.597%	-8.521%	-10.504%	-11.527%	-8.040%	-7.025%	-6.263%		-8.644%	-6.338%	-9.424%	-11.344
-5.65				-9.704%	-3.825%	-4.993%	-7.312%	-4.812%	-3.353%	0.413%		-2.196%	-2.051%	-4.011%	-5.006
1.68				4.135%	3.487%	0.841%	2.675%	2.350%	3.368%	2.340%		4.386%	3.901%	2.489%	2.421
-8.91				-6.069% 0.420%	-9.995% -2.246%	-11.758% 1.798%	-10.658% 0.435%	-9.818% -1.031%	-6.029% 1.960%	-12.890% -1.464%		-11.008% -4.598%	-10.609% 0.036%	-10.634% -1.331%	-10.063
-8.7				-7.303%	-8.371%			-13.415%	-9.479%	-10.311%		-9.333%	-14.379%	-8.399% -10.634%	-12.866
3.20				1.104%	1.782%	-0.444%	5.767%	4.630%	3.080%	-0.614%		2.471%	0.342%	3.810%	3.747
-2.5				-3.449%	-2.808%		-1.374%	-0.635%	-4.237%	-7.366%		-7.881%	-9.879%	-1.565%	-6.080
-6.70	3% -4.26	i%		-7.499%	-4.991%	-3.261%	-6.933%	-5.053%	-6.157%	-7.119%		-4.196%	-5.153%	-6.695%	-5.571
0.96				3.131%	0.151%	4.149%	-2.845%	1.552%	2.811%	3.886%		0.965%	4.263%	2.300%	2.976
3.0				2.446%	3.271%	-0.045%	-0.552%	1.515%	4.031%	2.250%		2.873%	2.551%	3.323%	3.159
-3.2				-0.044%	-3.359%	-1.765%	-3.879%	-3.160%	-3.317%	-3.857%		-2.255%	-3.512%	-3.502%	-0.732
-8.68				-10.116% 9.390%	-9.127% 10.054%	-4.457% 12.425%	-14.203% 3.774%	-9.095% 9.971%	-11.037% 7.510%	-5.657% 10.233%		-6.441% 9.937%	-12.304% 7.418%	-8.893% 9.186%	-9.368 8.347
-2.10				-3.477%	-1.162%	-5.040%	-2.367%	-3.376%	-2.327%	-1.932%		0.126%	-2.047%	-2.696%	-2.272
-3.90				1.039%	-3.018%	-2.619%	-5.423%	-4.404%	-4.528%	-3.354%		-2.114%	-5.232%	-5.829%	-3.136
6.10				4.382%	5.844%	4.724%	6.742%	4.032%	5.709%	7.292%		2.964%	3.537%	7.089%	4.407
3.43	5% 4.69	1%		1.942%	2.615%	5.439%	0.522%	1.522%	2.453%	2.514%		3.937%	7.695%	2.350%	0.530
0.62				-1.035%	1.039%	0.708%	-0.073%	0.153%	0.337%	0.889%		0.934%	-0.646%	1.514%	-0.047
0.4				0.275%	0.049%	1.307%	-1.892%	-0.208%	0.736%	0.613%		-0.414%	-2.125%	0.026%	0.064
-0.72				-1.888%	-1.315%	-0.296%	-3.485%	-1.503%	-0.588%	-1.111%		-0.987%	-0.738%	-1.451%	-1.722
3.33				5.514% -1.781%	3.954% 2.212%	0.522%	5.364% -1.808%	4.171% 1.822%	3.518% 1.872%	2.561% 1.096%		3.040% 4.151%	2.362% 1.800%	3.836% -0.522%	5.590
6.43				6.390%	4.401%	6.916%	5.207%	3.372%	5.461%	5.203%		3.682%	7.427%	5.342%	2.508
2.00				0.742%	0.212%	0.981%	0.459%	1.861%	0.789%	1.915%		1.216%	1.680%	-0.165%	0.586
4.49				2.331%	4.833%	1.542%	4.032%	3.494%	4.568%	0.803%		5.382%	3.155%	5.612%	2.062

Table A4.1 Statistical Results for Returns on unit trust over the period 2007 to 2011

Mean	3.457% 1.873% 1.854% -0.362% -0.258% -0.228% -0.228% -0.228% -0.228% -0.228% -0.227% 5.758% 3.017% -0.297% -0.297% 0.6140 0.0755	2.3224% 2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532% 8.429% 0.855% 0.382% -0.5209 0.3873	-1.808% 1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230% 7.497% -0.461% 1.363% 0.5858 1.3919	-2.253% 1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -2.739% 5.497% -0.397% 1.557% 0.4125 0.4605	-2.990% 2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463% 9.031% -0.651% 0.289% -0.5391 0.3949	-3.469% 2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512% 6.762% -0.868% 1.296% 0.3556 1.2908	-2.099% 2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -3.3786% 8.995% -0.678% 1.634% 0.4836 0.4836	-2.813% 2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310% 8.355% -0.469% 1.529% 0.6520 0.9743	2.137% 2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -2.246% -2.2464% 5.940% -0.365% 1.208% 0.9580 1.2075	-3.037% 1.328% 1.04% -0.133% -0.133% -1.450% -1.732% -0.940% -3.031% 7.211% -0.246% 1.059% 0.3519 0.4861	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405% 7.497% -0.374% 1.249% 0.5419 1.1666	1.754% 0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505% 5.858% -0.959% 1.165% -0.4239 0.9887	1.690% 0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093% 8.174% -1.508% 0.417% 0.4579 0.5357	2.528% 1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309% 6.333% 0.692% -1.198% -0.3935 0.4659	2.427% 1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632% 9.301% -1.286% 1.016% 0.4111 0.4783	2.449% 1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607% 9.319% -1.262% 1.038% 0.4115 0.5026
Mean	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717% -3.577% 5.758% 3.017% -0.297%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532% 8.429% -0.855% 0.382%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230% 7.497% -0.461% 1.363%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -0.284% 5.497% -0.397% 1.557%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463% 9.031% -0.651% 0.289%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512% 6.762% -0.868% 1.296%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886% -3.786% 8.995% -0.678% 1.634%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310% 8.355% -0.469% 1.529%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119% -2.464% 5.940% -0.365% 1.208%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940% -3.031% 7.211% -0.246% 1.059%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405% 7.497% -0.374% 1.249%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505% 5.858% -0.959% 1.165%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093% 8.174% -1.508% 0.417%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309% 6.333% 0.692% -1.198%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632% 9.301% -1.286% 1.016%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607% 9.319% -1.262% 1.038%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717% -3.577% 5.758% 3.017%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532% 8.429% -0.855%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230% 7.497% -0.461%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -2.739% 5.497% -0.397%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463% 9.031% -0.651%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512% 6.762% -0.868%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886% -3.786% 8.995% -0.678%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310% 8.355% -0.469%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119% -2.464% 5.940% -0.365%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940% -3.031% 7.211% -0.246%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405% 7.497% -0.374%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505% 5.858% -0.959%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093% 8.174% -1.508%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309% 6.333% 0.692%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632% 9.301% -1.286%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607% 9.319% -1.262%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717% -3.577% 5.758% 3.017%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532% 8.429% -0.855%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230% 7.497% -0.461%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -2.739% 5.497% -0.397%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463% 9.031% -0.651%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512% 6.762% -0.868%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886% -3.786% 8.995% -0.678%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310% 8.355% -0.469%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119% -2.464% 5.940% -0.365%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940% -3.031% 7.211% -0.246%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405% 7.497% -0.374%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505% 5.858% -0.959%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093% 8.174% -1.508%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309% 6.333% 0.692%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632% 9.301% -1.286%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607% 9.319% -1.262%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717% -3.577% 5.758%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532% 8.429%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230% 7.497%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -2.739% 5.497%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463% 9.031%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512% 6.762%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886% -3.786% 8.995%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310% 8.355%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119% -2.464% 5.940%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940% -3.031% 7.211%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405% 7.497%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505% 5.858%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093% 8.174%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309% 6.333%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632% 9.301%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607% 9.319%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717% -3.577%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842% -3.532%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156% -4.230%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284% -2.739%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068% -2.463%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728% -3.512%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886% -3.786%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690% -3.310%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119% -2.464%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940% -3.031%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244% -4.405%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044% -4.505%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355% -1.093%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362% -1.309%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765% -3.632%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790% -3.607%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146% 0.717%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483% -0.842%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935% -1.156%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490% -0.284%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988% -0.068%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277% -3.728%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364% -0.886%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894% -0.690%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246% -1.119%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732% -0.940%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626% -0.244%	0.262% 1.881% -0.436% -2.724% -2.657% -1.044%	0.435% 1.333% -0.306% -2.371% -1.728% -1.355%	1.080% 0.948% -0.178% -1.770% -0.482% -0.362%	1.530% 2.301% -0.217% -2.521% -3.913% 0.765%	1.565% 2.321% -0.193% -2.496% -4.035% 0.790%
	1.873% 1.854% -0.362% -2.258% -0.028% -0.146%	2.423% 1.056% 0.393% -0.087% -1.786% -2.483%	1.804% 0.858% 1.413% -0.135% -2.360% -2.935%	1.870% 0.018% 2.210% -0.539% -2.054% -1.490%	2.133% -0.038% 2.677% -0.007% -1.655% -1.988%	2.563% -0.664% 1.286% -0.848% -0.550% -2.277%	2.538% 0.961% 1.718% 0.134% -2.122% -3.364%	2.758% 0.531% 2.231% 0.396% -2.126% -2.894%	2.321% 1.418% 1.271% -0.259% -1.736% -2.246%	1.328% 1.044% 2.105% -0.133% -1.450% -1.732%	1.629% 1.016% 1.589% -0.117% -2.390% -2.626%	0.262% 1.881% -0.436% -2.724% -2.657%	0.435% 1.333% -0.306% -2.371% -1.728%	1.080% 0.948% -0.178% -1.770% -0.482%	1.530% 2.301% -0.217% -2.521% -3.913%	1.565% 2.321% -0.193% -2.496% -4.035%
	1.873% 1.854% -0.362% -2.258% -0.028%	2.423% 1.056% 0.393% -0.087% -1.786%	1.804% 0.858% 1.413% -0.135% -2.360%	1.870% 0.018% 2.210% -0.539% -2.054%	2.133% -0.038% 2.677% -0.007% -1.655%	2.563% -0.664% 1.286% -0.848% -0.550%	2.538% 0.961% 1.718% 0.134% -2.122%	2.758% 0.531% 2.231% 0.396% -2.126%	2.321% 1.418% 1.271% -0.259% -1.736%	1.328% 1.044% 2.105% -0.133% -1.450%	1.629% 1.016% 1.589% -0.117% -2.390%	0.262% 1.881% -0.436% -2.724%	0.435% 1.333% -0.306% -2.371%	1.080% 0.948% -0.178% -1.770%	1.530% 2.301% -0.217% -2.521%	1.565% 2.321% -0.193% -2.496%
	1.873% 1.854% -0.362% -2.258%	2.423% 1.056% 0.393% -0.087%	1.804% 0.858% 1.413% -0.135%	1.870% 0.018% 2.210% -0.539%	2.133% -0.038% 2.677% -0.007%	2.563% -0.664% 1.286% -0.848%	2.538% 0.961% 1.718% 0.134%	2.758% 0.531% 2.231% 0.396%	2.321% 1.418% 1.271% -0.259%	1.328% 1.044% 2.105% -0.133%	1.629% 1.016% 1.589% -0.117%	0.262% 1.881% -0.436%	0.435% 1.333% -0.306%	1.080% 0.948% -0.178%	1.530% 2.301% -0.217%	1.565% 2.321% -0.193%
	1.873% 1.854% -0.362%	2.423% 1.056% 0.393%	1.804% 0.858% 1.413%	1.870% 0.018% 2.210%	2.133% -0.038% 2.677%	2.563% -0.664% 1.286%	2.538% 0.961% 1.718%	2.758% 0.531% 2.231%	2.321% 1.418% 1.271%	1.328% 1.044% 2.105%	1.629% 1.016% 1.589%	0.262% 1.881%	0.435% 1.333%	1.080% 0.948%	1.530% 2.301%	1.565% 2.321%
	1.873% 1.854%	2.423% 1.056%	1.804% 0.858%	1.870% 0.018%	2.133% -0.038%	2.563% -0.664%	2.538% 0.961%	2.758% 0.531%	2.321% 1.418%	1.328% 1.044%	1.629% 1.016%	0.262%	0.435%	1.080%	1.530%	1.565%
	1.873%	2.423%	1.804%	1.870%	2.133%	2.563%	2.538%	2.758%	2.321%	1.328%	1.629%					
												1.754%	1.690%	2.528%	2 427%	2 449%
			_1 XNX%-	-2.252%	_2 ddum	-3 469%	_///44%-	-/ XI 2%				2.033/0	1.022/0	2,212/0	0.02170	0.40070
	-3.459%	-2.824%							-2.737%	-3.687%	-1.676%	-2.639%	-1.022%	-2.212%	-3.327%	-3.435%
	-0.543% 5.618%	0.107% 5.818%	-0.702% 5.554%	-0.312% 4.260%	0.392% 3.954%	-0.813% 5.646%	-0.764% 4.766%	1.270% 5.234%	0.832% 4.696%	0.853% 4.652%	-0.606% 5.289%	-0.492% 4.899%	0.652% 4.527%	-0.567% 5.081%	-0.561% 5.020%	-0.535% 5.039%
	1.880%	3.104%	3.410%	0.963%	3.116%	2.420%	2.152%	2.376%	2.211%	2.634%	3.370%	1.116%	2.759%	2.843%	1.804%	1.826%
	8.000%	9.022%	6.980%	5.564%	8.310%	8.010%	8.873%	8.372%	6.470%	8.145%	7.069%	7.423%	7.737%	8.043%	9.067%	9.090%
	-3.738%	-3.103%	-2.502%	-0.982%	-2.740%	-3.022%	-2.788%	-3.249%	-1.707%	-2.823%	-2.399%	-2.786%	-3.210%	-2.596%	-4.197%	-4.172%
	8.301%	6.794%	5.491%	3.468%	4.865%	7.644%	8.567%	5.786%	5.282%	7.070%	5.384%	8.031%	6.264%	6.002%	6.830%	6.690%
	-2.882%	-2.975%	-3.122%	-1.484%	-1.692%	-4.368%	-4.379%	-2.460%	-2.459%	-2.597%	-3.111%	-4.055%	-3.005%	-1.908%	-2.813%	-2.785%
	-5.144%	-4.133%	-4.066%	-2.596%	-3.980%	-5.017%	-4.319%	-4.427%	-2.162%	-4.298%	-3.868%	-4.539%	-4.926%	-3.741%	-4.615%	-4.587%
	-0.343%	0.712%	0.101%	0.813%	0.383%	1.657%	-0.552%	0.633%	0.861%	0.428%	-0.019%	-0.159%	1.000%	-1.459%	0.468%	0.493%
	7.164%	6.344%	4.449%	4.376%	6.153%	5.199%	5.611%	7.453%	4.786%	6.683%	4.773%	6.592%	6.382%	5.434%	7.197%	7.223%
	1.756%	1.092%	1.884%	1.207%	0.423%	2.159%	1.412%	0.927%	1.068%	1.050%	1.775%	0.467%	0.636%	1.421%	-0.214%	-0.191%
	-3.845%	-2.878%	-2.558%	-3.059%	-1.877%	-3.363%	-3.002%	-3.096%	-1.581%	-5.966%	-2.176%	-4.233%	-2.280%	-2.296%	-3.342%	-3.451%
	4.617%	3.774%	3.171%	1.291%	3.163%	2.026%	3.147%	1.871%	2.452%	2.944%	3.006%	2.589%	2.886%	2.775%	3.890%	3.911%
	0.878%	0.100%	1.452%	-2.102%	0.074%	-1.820%	1.155%	1.022%	-0.945%	-0.125%	1.636%	1.688%	-0.545%	-1.687%	0.368%	0.393%
	5.228%	3.257%	3.381%	2.042%	4.304%	3.441%	4.044%	4.304%	1.470%	3.986%	3.739%	2.190%	3.898%	2.798%	4.563%	4.584%
	-0.007%	1.783%	1.525%	1.871%	1.792%	1.357%	0.817%	1.587%	2.194%	1.397%	0.794%	2.102%	1.200%	0.835%	0.489%	0.512%
	3.789%	4.649%	5.462%	4.720%	4.508%	7.460%	4.791%	4.418%	5.815%	5.065%	5.388%	3.220%	5.017%	3.379%	4.937%	4.962%
	9.534%	7.715%	5.955%	7.617%	6.234%	7.776%	8.245%	7.466%	5.767%	8.608%	5.781%	6.001%	4.213%	8.106%	8.433%	8.308%
	-0.897%	-0.161%	1.371%	0.781%	-0.945%	0.278%	-0.904%	-0.653%	1.388%	-0.524%	1.227%	-0.278%	-0.134%	-0.067%	-1.121%	-1.094%
	8.807%	7.526%	9.087%	6.310%	7.073%	8.930%	8.802%	8.565%	7.599%	7.081%	8.160%	8.447%	7.001%	6.416%	9.528%	9.542%
	-3.277%	0.074%	6.287%	-0.717%	1.536%	5.776%	4.065%	3.536%	4.847%	2.953%	5.955%	4.486%	3.033%	-1.267%	4.701%	4.717%
	11.222%	7.144%	11.338%	4.911%	5.832%	6.746%	8.316%	10.226%	7.142%	7.737%	12.224%	8.435%	7.557%	6.794%	7.612%	7.642%
	-9.250%	-7.962%	-11.132%	-7.318%	-7.450%	-10.382%	-9.756%	-9.247%	-9.328%	-8.907%	-10.587%	-9.196%	-9.973%	-8.835%	-11.457%	-11.428%
	-4.317%	-4.490%	-8.952%	0.651%	-9.239%	-5.185%	-12.512%	-9.997%	-5.496%	-7.393%	-9.260%	-3.979%	-3.990%	-2.429%	-5.092%	-5.221%
	1.884%	3.942%	1.858%	6.664%	3.421%	5.192%	3.490%	5.044%	4.001%	3.301%	2.205%	1.386%	2.431%	3.437%	2.465%	2.488%
	-1.275%	-1.480%	1.156%	-1.685%	0.530%	-3.726%	-2.048%	0.259%	-0.470%	0.060%	0.616%	0.720%	-0.808%	-1.693%	-3.297%	-3.273%
	-15.427%	-10.811%	-12.370%	-9.994%	-7.802%	-16.030%	-9.355%	-9.298%	-8.600%	-9.712%	-12.048%	-12.805%	-8.754%	-10.184%	-12.755%	-12.765%
	-13.943%	-10.811%	-12.376%	-8.590%	-10.201%	-11.151%	-10.290%	-8.410%		-9.425%	-12.048%	-12.863%	-8.734%	-10.184%	-12.799%	-12.769%
	-9.041% 1.713%	-4.497% 2.782%	-2.966% 3.096%	-3.628% 3.799%	-6.613% 2.265%	-5.742% 1.982%	-5.846% 2.789%	-6.260% 2.558%		-2.385% 3.521%	-3.100% 2.234%	-6.838% 1.268%	-4.933% 3.589%	-1.888% 2.721%	-6.070% 3.660%	-6.130% 3.682%
	-5.533%	-5.220%	-5.391%	-5.407%	-4.290%	-5.597%	-5.780%	-7.737%		-5.536%	-5.017%	-3.089%	-6.662%	-5.225%	-5.603%	-5.576%
	4.780%	2.153%	1.541%	1.951%	4.142%	1.805%	3.055%	1.301%		0.913%	2.308%	3.372%	1.230%	1.906%	2.928%	2.952%
	4.785%	0.927%	2.694%	-0.787%	1.837%	2.592%	2.688%	2.243%		1.411%	1.107%	3.257%	1.054%	0.850%	3.342%	3.365%
	-2.148%	-1.737%	-1.688%	-0.360%	-1.485%	-2.544%	-1.775%	-1.080%		-0.899%	-1.813%	-1.402%	-1.812%	-2.832%	-0.763%	-0.794%
	13.008%	8.198%	6.338%	6.156%	9.048%	8.088%	9.405%	8.227%		8.581%	7.059%	9.752%	7.666%	7.660%	8.419%	8.441%
	-5.770%	-8.607%	-7.907%	-5.755%	-8.735%	-8.115%	-9.383%	-11.125%		-11.346%	-8.530%	-7.545%	-10.092%	-8.401%	-8.392%	-8.507%
	-1.943%	-3.128%	-4.234%	-3.958%	-4.254%	-3.229%	-3.005%	-2.449%		-3.140%	-3.883%	-3.601%	-1.611%	-2.806%	-3.100%	-3.073%
	-3.078%	-4.340%	-2.240%	-1.508%	-2.383%	-5.842%	-3.520%	-2.907%		-3.410%	-2.674%	-4.418%	-3.229%	-4.133%	-3.181%	-3.155%
	7.270%	5.410%	7.294%	1.876%	4.243%	4.949%	5.775%	6.040%		4.901%	7.222%	1.940%	5.428%	4.387%	4.321%	4.344%
	2.893%	3.147%	1.278%	4.699%	4.156%	2.209%	2.662%	2.910%		3.600%	2.021%	4.578%	2.652%	2.152%	1.126%	1.148%
	-1.201%	0.165%	1.856%	0.002%	0.135%	-0.324%	-0.061%	0.069%		0.194%	1.326%	0.304%	-0.426%	0.240%	0.042%	0.066%
	0.102%	0.245%	1.449%	-0.057%	-0.552%	1.330%	0.258%	-1.251%		0.181%	1.245%	1.407%	-0.103%	-0.042%	-0.008%	-0.133%
	-1.214%	-1.482%	-1.693%	-2.150%	-1.853%	-0.129%	-1.825%	-1.040%		-1.822%	-1.908%	-1.328%	-1.631%	-2.208%	-1.866%	-1.841%
	0.049%	0.494%	-1.947%	2.136%	1.344%	2.212%	-0.827%	0.572%		0.544%	-1.644%	0.861%	-0.031%	1.027%	-1.106%	-1.080%
	2.740%	3.236%	4.822%	1.015%	3.571%	4.587%	4.749%	5.120%			3.828%	3.571%	4.532%	3.275%	5.570%	5.590%
	6.708%	5.307%	5.237%	4.235%	5.111%	4.193%	5.754%	5.662%			5.542%	6.319%	4.415%	4.156%	2.431%	2.461%
	1.631%	1.023%	2.117%	0.270%	0.398%	1.017%	1.102%	1.904%			1.061%	2.313%	1.005%	1.500%	0.596%	0.621%
	4.208%	3.503%	2.941%	2.154%	1.854%	5.061%	2.171%	3.350%			2.163%	4.043%	3.363%	3.072%	2.200%	2.097%
	INXA[CL]	FEWS[CL]	OMGR[CL]	FEFA[CL]	ABSA[CL]	MCEF[CL]	OMTL[CL]	SNTR[CL]	MVLT[CL]	NQCE[CL]	OMTC[CL]	CGMG[CL]	SAFF[CL]	ISPE[CL]	REFA[CL]	RMEF[CL]

Table A4.1 Statistical Results for Returns on unit trust over the period 2007 to 2011(continued)

Image: Control of the sector of the secto	4.204% 0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.003% 0.793% 2.258% 1.185% 0.793% 2.258% 1.185% 0.760% 0.5618 0.6300 5.0483	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -0.789% -4.260% 9.153% -0.547% 1.490% -0.4464 1.0241 4.7310	7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -3.135% 7.921% -0.558% 2.446% 0.5921 0.4955	7.606% 7.606% -5.085% -3.357% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% -0.384% -4.108% 10.701% -0.291% -1.050% 0.4999 0.5993 5.4508	7.285% -0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.688% 1.568% -0.393% -2.014% -2.014% -2.193% 0.412% -3.276% 7.249% -1.113% -0.4122 0.2613 4.6126	8.157% -0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122% 0.074% -0.2101 1.0950 5.6464	5.761% -0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.420% -2.934% 8.176% -0.068% 0.3926 0.7949 4.1397	4.354% 0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.6434% -0.730% 0.423% 1.77% 0.423% 1.77% 0.5225 0.4601 3.3525	7.957% 0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698% 0.289% 2.208% 0.6622 0.7816 4.9526	-0.189% -0.189% -0.189% -0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239% 1.461% -1.850% -1.850% -1.450% -1.	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.583% 0.608% -1.224% 6.796% 0.170% 1.426% 0.7541 0.7838 3.6132	-0.280% -0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -2.171% 0.387% -1.473% 8.530% -0.122% 0.2895 0.7004 5.1918	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983% -1.147% 0.888% 0.3563 0.7303	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617%	9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730% -0.870% 1.350% -0.870% -0.830	4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.954% -0.845% -1.209% -2.710% 6.430% -0.991% -0.082% -0.282%
Image: Control of the second secon	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258% 1.185% 6.711% 0.760% 0.441% 0.5618	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789% -4.260% 9.153% -0.547% 1.490%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -3.135% 7.921% -0.558% 2.446%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% -0.384% 10.701% -0.291% -1.050%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193% 0.412% -3.276% 7.249% -1.113% -0.148%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122% 0.074% -0.745%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.411% 1.280% -0.369% -1.917% -2.204% -1.005% 8.176% 0.068% 0.602% 0.3926	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314% -0.895% 4.777% 0.423% 1.177% 0.5225	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698% 0.289% 2.208%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239% 1.461% -1.850%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.356% -0.137% 6.796% 0.170% 1.457% 0.7541	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387% -1.473% 8.530% -0.122% -0.501%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983% -1.147% 0.888% 0.3563	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% -0.851% 0.151% -0.966% 6.897% -0.698% 1.279%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730% -0.870% 1.350% -0.7116	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.954% -0.845% -1.209% -2.710% 6.430% -0.991% -0.082% -0.082%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258% 1.185% 6.711% 0.760% 0.441%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789% -4.260% 9.153% -0.547% 1.490%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -3.135% 7.921% -0.558% 2.446%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% -0.384% -0.384% -0.105%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193% 0.412% -3.276% 7.249% -1.113% -0.148%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122% 0.074% -0.745%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.411% 1.280% 1.917% -2.204% -1.005% 8.176% -0.068% 0.602%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314% -0.895% 4.777% 0.423% 1.177%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698% 0.289% 2.208%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239% 1.461% -1.850%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356% -0.137% 6.796% 0.170% 1.457%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387% -1.473% 8.530% -0.122% -0.501%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983% -1.147% 0.888%	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% -0.851% 0.151% -0.966% 6.897% -0.698% 1.279%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730% -0.870% 1.350%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.954% -0.845% -1.209% -2.710% 6.430% -0.991% -0.082%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258% 1.185% 6.711% 0.760%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789% -4.260% 9.153% -0.547%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -3.135% 7.921% -0.558%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% -0.384% -0.384% -0.291%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193% 0.412% -3.276% 7.249% -1.113%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122% 0.074%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917% -2.204% -1.005% 8.176% -0.068%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314% -0.895% 4.777% 0.423%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698% 0.289%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239% 1.461%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356% -0.137% -1.224% 6.796% 0.170%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387% -1.473% 8.530% -0.122%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983% -1.147%	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% 0.151% -0.966% 6.897% -0.698%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730% -0.870%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.954% -0.845% -1.209% -2.710% 6.430% -0.991%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258% 1.185% 6.711% 0.760%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789% -4.260% 9.153% -0.547%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -3.135% 7.921% -0.558%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% -0.384% -0.384% -0.291%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193% 0.412% -3.276% 7.249% -1.113%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122% 0.074%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917% -2.204% -1.005% 8.176% -0.068%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314% -0.895% 4.777% 0.423%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698% 0.289%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239% 1.461%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356% -0.137% -1.224% 6.796% 0.170%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387% -1.473% 8.530% -0.122%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983% -1.147%	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% 0.151% -0.966% 6.897% -0.698%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730% -0.870%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.954% -0.845% -1.209% -2.710% 6.430% -0.991%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258% 1.185% 6.711%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789% -4.260% 9.153%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957% -1.095% -3.135% 7.921%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384% 4.108% 10.701%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% -0.393% -2.014% -2.193% 0.412% -3.276% 7.249%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396% -3.961% 9.122%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917% -2.204% -1.005% -2.934% 8.176%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314% -0.895% 4.777%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618% -3.277% 7.698%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548% -3.920% 9.239%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356% -0.137% -1.224% 6.796%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387% -1.473% 8.530%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655% -4.376% 8.983%	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% 0.151% -0.966% 6.897%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668% -2.174% -0.340% -3.847% 8.730%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.845% -1.209% -2.710% 6.430%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793% 2.258%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155% -0.789%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484% -0.384%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193% 0.412%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051% 1.396%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917% -2.204% -1.005%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643% -0.314%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061% -1.618%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162% -0.548%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356% -0.137%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171% 0.387%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044% -0.655%	-0.199% -5.346% -1.404% 5.982% -3.475% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% -0.851% 0.151%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668% -2.174% -0.340%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.845% -1.209%
))	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645% 0.793%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685% -3.155%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410% -1.957%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338% -3.484%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014% -2.193%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742% -3.051%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917% -2.204%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730% 0.643%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079% -4.061%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998% -3.162%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486% -1.356%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195% -1.095% -2.171%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666% -3.044%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617% -0.851%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668% -2.174%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954% -0.845%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003% 1.645%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064% -1.685%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159% -2.410%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414% -2.338%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688% 1.568% -0.393% -2.014%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522% -0.742%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369% -1.917%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741% -0.730%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476% -2.079%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908% -1.998%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608% -1.486%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723% -1.666%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401% -1.617%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301% -1.668%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100% -0.954%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307% 1.003%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080% -0.064%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563% -1.159%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333% -0.414%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.688% 1.688% -0.393%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051% -0.522%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860% -0.369%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653% 0.741%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544% 0.476%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158% -0.908%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583% 0.608%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390% 0.195%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205% -0.723%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180% -0.401%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615% -0.301%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514% -1.100%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061% 2.307%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498% 2.080%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837% 1.563%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496% 2.333%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820% 2.051%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280% 1.860%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292% 2.653%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456% 1.544%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473% 2.158%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780% -1.583%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440% 2.390%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242% 2.205%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997% 0.605% 2.180%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526% -0.615%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263% 1.514%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921% 1.061%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292% 1.498%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107% -0.837%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160% 0.496%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852% 1.688%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941% 2.820%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411% 1.280%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497% 1.292%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072% 0.456%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716% 0.473%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469% 0.780%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131% 2.440%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658% 1.242%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997% 0.605%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411% 1.526%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387% 0.263%
)) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832% 1.921%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453% 1.292%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631% 0.107%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320% 2.160%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187% 1.852%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440% 1.941%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156% 1.411%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414% 0.497%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350% 3.072%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397% 2.716%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363% 1.469%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399% 2.131%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048% 0.658%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660% 1.997%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283% 1.411%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312% -0.387%
)) -	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753% 1.832%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672% -3.453%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274% -3.631%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328% -3.320%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007% -3.187%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853% -4.440%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260% -2.156%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602% -5.414%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352% -1.350%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475% -3.397%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635% -0.363%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368% -2.399%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330% -4.048%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392% -1.660%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359% -3.283%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706% -5.312%
) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651% 6.753%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826% 4.672%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412% 4.274%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587% 5.328%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520% 5.007%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623% 5.853%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140% 4.260%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834% 3.602%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696% 4.352%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582% 6.475%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169% 3.635%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631% 4.368%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803% 5.330%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249% 5.392%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110% 5.359%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010% 4.706%
) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708% 0.651%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808% 0.826%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865% 0.412%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171% 0.587%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053% 0.520%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767% 0.623%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268% 0.140%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841% 0.834%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178% 0.696%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912% -0.582%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308% 1.169%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826% 0.631%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842% 0.803%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675% 0.249%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022% 1.110%	0.357% -4.464% -2.268% 5.951% -3.457% 8.268% 5.851% -0.010%
) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441% 4.708%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088% 1.808%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198% 4.865%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535% 3.171%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449% 1.053%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263% 1.767%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855% 3.268%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143% 1.841%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208% 2.178%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222% 3.912%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465% 1.308%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332% 1.826%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369% 1.842%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718% 3.675%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015% 2.022%	0.3579 -4.4649 -2.2689 5.9519 -3.4579 8.2689 5.8519
) 	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427% 9.441%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225% 9.088%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242% 7.198%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828% 9.535%	-0.249% -5.811% -3.233% 5.387% -3.590% 9.449%	-0.298% -4.432% -3.092% 6.692% -3.528% 9.263%	-0.010% -4.132% -2.261% 4.763% -2.884% 7.855%	0.011% -1.607% 0.327% 5.043% -2.005% 7.143%	0.867% -4.415% -2.903% 6.258% -3.664% 8.208%	-0.189% -5.133% -3.622% 7.262% -4.024% 9.222%	-1.742% -4.364% -1.340% 5.479% -2.717% 7.465%	-0.280% -4.497% -2.492% 5.648% -2.749% 8.332%	0.841% -4.621% -2.760% 5.953% -3.412% 9.369%	-0.199% -5.346% -1.404% 5.982% -3.475% 7.718%	-1.663% -4.554% -2.019% 6.789% -3.453% 9.015%	0.3579 -4.4649 -2.2689 5.9519 -3.4579 8.2689
) 1- 2- 2- 3-	0.470% 5.048% 0.881% 1.704% 2.916% 5.331% 3.427%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271% -3.225%	6.002% 0.969% -3.952% -2.202% 5.812% -4.242%	7.606% 0.063% -5.085% -3.357% 5.977% -3.828%	-0.249% -5.811% -3.233% 5.387% -3.590%	-0.298% -4.432% -3.092% 6.692% -3.528%	-0.010% -4.132% -2.261% 4.763% -2.884%	0.011% -1.607% 0.327% 5.043% -2.005%	0.867% -4.415% -2.903% 6.258% -3.664%	-0.189% -5.133% -3.622% 7.262% -4.024%	-1.742% -4.364% -1.340% 5.479% -2.717%	-0.280% -4.497% -2.492% 5.648% -2.749%	0.841% -4.621% -2.760% 5.953% -3.412%	-0.199% -5.346% -1.404% 5.982% -3.475%	-1.663% -4.554% -2.019% 6.789% -3.453%	0.357% -4.464% -2.268% 5.951% -3.457%
) [- 2- 2	0.470% 5.048% 0.881% 1.704% 2.916% 5.331%	0.968% 7.196% 0.563% -3.551% -3.570% 7.271%	6.002% 0.969% -3.952% -2.202% 5.812%	7.606% 0.063% -5.085% -3.357% 5.977%	-0.249% -5.811% -3.233% 5.387%	-0.298% -4.432% -3.092% 6.692%	-0.010% -4.132% -2.261% 4.763%	0.011% -1.607% 0.327% 5.043%	0.867% -4.415% -2.903% 6.258%	-0.189% -5.133% -3.622% 7.262%	-1.742% -4.364% -1.340% 5.479%	-0.280% -4.497% -2.492% 5.648%	0.841% -4.621% -2.760% 5.953%	-0.199% -5.346% -1.404% 5.982%	-1.663% -4.554% -2.019% 6.789%	0.3579 -4.4649 -2.2689 5.9519
(-1 -2	0.470% 5.048% 0.881% 1.704% 2.916%	0.968% 7.196% 0.563% -3.551% -3.570%	6.002% 0.969% -3.952% -2.202%	7.606% 0.063% -5.085% -3.357%	-0.249% -5.811% -3.233%	-0.298% -4.432% -3.092%	-0.010% -4.132% -2.261%	0.011% -1.607% 0.327%	0.867% -4.415% -2.903%	-0.189% -5.133% -3.622%	-1.742% -4.364% -1.340%	-0.280% -4.497% -2.492%	0.841% -4.621% -2.760%	-0.199% -5.346% -1.404%	-1.663% -4.554% -2.019%	0.357% -4.464% -2.268%
-1	0.470% 5.048% 0.881% 1.704%	0.968% 7.196% 0.563% -3.551%	6.002% 0.969% -3.952%	7.606% 0.063% -5.085%	-0.249% -5.811%	-0.298% -4.432%	-0.010% -4.132%	0.011% -1.607%	0.867% -4.415%	-0.189% -5.133%	-1.742% -4.364%	-0.280% -4.497%	0.841% -4.621%	-0.199% -5.346%	-1.663% -4.554%	0.357% -4.464%
(0.470% 5.048% 0.881%	0.968% 7.196% 0.563%	6.002% 0.969%	7.606% 0.063%	-0.249%	-0.298%	-0.010%	0.011%	0.867%	-0.189%	-1.742%	-0.280%	0.841%	-0.199%	-1.663%	0.357%
	0.470% 5.048%	0.968% 7.196%	6.002%	7.606%												
	0.470%	0.968%						4 05 40/	7.0570/	8.063%	6.026%	7.232%	7.520%	7.170%		5 0 0 0
-(4.204%			0.221%	-0.966%	1.302%	1.281%	0.881%	-0.249%	0.487%	1.124%	1.396%	0.284%	0.439%	0.750%	1.781%
-4	4 00 40/	-3.130%	-3.311%	-4.849%	-2.728%	-3.578%	-2.033%	-1.259%	-2.109%	-4.638%	-0.670%	-2.880%	-3.834%	-0.850%	-2.211%	-4.578%
4	4.998%	3.370%	2.357%	2.508%	2.580%	3.718%	2.986%	5.016%	2.065%	2.528%	4.274%	3.821%	3.321%	3.280%	3.724%	4.025%
	0.710%	1.363%	-0.252%	2.798%	1.337%	0.357%	-0.267%	-1.335%	-0.431%	2.538%	-0.256%	-0.386%	-0.167%	-0.010%	-0.615%	-2.674%
	4.598%	3.288%	3.701%	4.723%	3.751%	3.184%	3.863%	3.591%	3.120%	5.779%	3.513%	3.173%	2.836%	3.146%	4.203%	0.8559
	0.310%	1.080%	0.635%	1.157%	0.110%	1.822%	1.185%	4.248%	1.642%	0.129%	1.880%	1.590%	1.589%	1.188%	0.380%	2.025%
	4.783%	4.339%	3.757%	4.037%	3.744%	3.159%	5.037%	3.006%	4.983%	4.388%	5.653%	2.952%	5.222%	4.523%	2.553%	3.741%
	9.932%	6.135%	8.597%	6.396%	7.813%	3.487%	5.136%	4.813%	4.580%	7.340%	7.983%	4.971%	5.644%	7.495%	9.668%	8.059%
	1.661%	-0.595%	-1.020%	-2.522%	-2.004%	-0.764%	0.234%	0.972%	-2.108%	-3.227%	0.919%	-1.078%	-0.916%	1.152%	-0.083%	-0.500%
	0.741%	7.814%	7.867%	10.893%	7.447%	8.706%	7.150%	3.542%	10.283%	10.137%	5.098%	7.727%	7.487%	6.127%	6.568%	7.185%
	4.567%	1.661%	3.893%	0.781%	-2.819%	3.477%	2.787%	4.234%	3.845%	1.767%	0.615%	0.879%	4.852%	2.979%	-2.608%	1.478%
	6.659%	7.072%	7.870%	11.756%	4.763%	9.026%	5.623%	1.731%	10.645%	10.893%	5.771%	9.482%		6.090%	8.749%	7.291%
	3.238% 7.825%	-9.663% -7.982%	-4.095% -9.430%	-8.854% -9.577%	-1.555%	-11.208%	-5.104% -7.895%	-2.607% -7.542%	-13.595%	-10.039%	-3.899%	-10.749%	-9.230%	-11.872% -9.124%	-4.419% -8.819%	-3.378% -7.150%
	3.136%	2.696%		1.180%	2.217%	1.872% -7.299%	1.687%	5.178%	5.284% -13.595%		3.762% -3.899%	0.770%	3.505%	1.696%	1.503%	2.508%
	4.282%	-0.350%	-0.386% 3.345%	2.270%	-1.745%	-3.999%	-2.818%	0.309%	1.539%	1.975% 1.281%	2.108% 3.762%	-4.562%	1.492%	-0.582%		-3.311%
	1.896%	-9.664%		-11.414%	-6.821%	-19.022%	-9.359%	-3.589%		-12.504%	-6.816%		-12.016%	-4.297%		
	4.704%	-10.677%			-11.099%	-16.617%	-10.197%	-1.822%		-13.708%	-2.918%		-12.111%	-6.084%	10.0500	-10.188%
	5.370%	2.796%	1.190%	0.612%	0.741%	2.537%	2.683%	6.001%	-0.006%	0.329%	3.524%	0.971%	1.599%	3.528%		3.709%
-(0.504%	-7.556%		-11.495%		-9.707%	-3.036%	4.008%	-4.167%	-9.664%	0.095%	-9.725%	-4.392%	-3.175%		-4.924%
-7	7.204%	-5.247%	-7.466%	-3.027%	-5.291%	-5.835%	-5.244%	-4.932%	-9.010%	-3.988%	-5.981%	-5.244%	-5.486%	-4.071%		-6.616%
-(0.570%	2.614%	1.829%	4.317%	4.796%	2.371%	1.852%	-0.512%	1.286%	4.260%	0.165%	3.397%	1.951%			3.695%
	2.068%	2.451%	2.816%	3.310%	2.602%	0.841%	1.995%	-0.038%	1.672%	3.887%	-1.841%	2.261%	1.914%			3.910%
	4.881%	-1.542%	-2.173%	-0.998%	-1.470%	-0.978%	-2.863%	-3.472%	-1.525%	-1.553%	-2.279%	0.218%	-1.930%			-3.274%
	8.765%	8.277%		10.230%	10.509%	9.569%	7.584%	-0.068%	7.034%	10.689%	6.723%	8.947%	8.880%			9.417%
	2.341%	-9.321%	-8.887%	-5.111%	-8.552%	-7.395%	-8.917%	-8.560%	-10.769%	-6.140%	-7.427%	-9.860%	-9.539%			-7.669%
	2.781% 2.711%	-3.409% -3.333%	-3.070% -3.162%	-2.307%	-2.354%	-3.166% -2.586%	-4.144%	-5.775% -2.987%	-0.812% -0.885%	-1.942% -4.802%	-2.974% -3.339%	-4.150% -1.163%	-3.556% -4.180%			-4.213%
	3.950%	5.380%	5.775%	3.849% -2.367%	5.496% -2.354%	6.133%	5.378% -4.144%	3.959%	5.105%	4.344%	3.710%	7.288%	5.562%			6.931%
	0.609%	3.607%	2.645%	5.662%	6.679%	5.289%	2.102%	-1.395%	1.620%		2.564%	5.419%	3.483%			3.345%
	0.820%	-0.391%	0.523%	0.501%	-0.488%	-1.200%	0.193%	-2.134%	1.233%	0.591%	0.837%	0.020%	-0.551%			0.1319
	0.662%	0.364%	0.339%	0.230%	0.038%	0.947%	-0.243%	-1.627%	-1.319%	0.895%	0.787%	0.575%	0.392%			1.6439
	0.950%	-2.085%	-1.429%	-0.823%	-1.253%	-0.507%	-2.237%	-3.102%	-0.593%	-0.444%	-0.965%	-2.020%	-3.265%			0.303%
	0.985%	0.371%	0.468%	1.386%	0.628%	1.459%	0.988%	-1.452%	-0.745%	1.709%	-0.257%	1.313%	-1.011%			-0.060%
	3.842%	4.066%	4.579%	3.443%	4.416%	2.929%	3.737%	4.130%	7.183%	2.937%	2.291%	2.975%	4.152%			3.242%
	2.755%	5.706%	5.256%	6.067%	5.709%	5.329%	4.099%	2.803%	7.961%	5.264%	3.850%	5.336%	5.087%			4.898%
1	1.049%	1.128%	0.796%	1.328%	1.357%	1.243%	1.455%	0.078%	1.311%	1.365%	1.953%	1.601%	0.587%			1.1719
4	4.429%	2.546%	2.152%	0.827%	1.527%	2.757%	2.272%	2.667%	5.411%	1.857%	3.887%	2.752%	2.268%			4.697%
PSC	GG[CL] (OMAA[CL]	CAEF[CL]	STBI[CL]	INDT[CL]	GDBT[CL]	GDSE[CL]	HLMK[CL]	STCA1[CL]	PTST[CL]	AYEF[CL]	GDBK[CL]	MTLE[CL]	MIEF[CL]	27FB3[CL]	MOEF[CL

Table A4.1 Statistical Results for Returns on unit trust over the period 2007 to 2011(continued)

I	DIEF[CL]	MNEF[CL]				AFEA1[CL]					OMUA[CL]		MLAG[CL]	BCEA2[CL]	STSEA[CL]	STNA[CL
			1.896%	3.484%	1.605%		1.406%	1.772%	2.583%	1.686%		3.743%				
			0.884%	2.839%	1.160%		1.854%	1.033%	1.921%	0.367%		4.858%				6.5179
			5.485%	4.764%	4.612%		5.279%	3.883%	6.878%	1.470%		7.386%				6.1549
			4.179%	3.412%	2.647%		1.090%	3.167%	3.753%	0.926%		4.984%				7.079
			-0.007%	1.834%	0.422%		2.923%	2.195%	0.605%	1.278%		3.604%				3.4639
			-1.559%	-0.886%	-0.306%		-1.424%	-2.383%	-2.235%	-0.632%		-0.589%				0.590
			-0.882%	0.648%	0.997%		-1.063%	-0.515%	0.715%	-0.107%		1.477%				0.6565
			-0.168%	-0.437%	2.370%		0.430%	1.385%	0.549%	-0.229%		-0.824%			1.834%	
			2.613%	3.679%	2.572%		6.765%	2.606%	3.811%	1.383%		6.949%			6.631%	
			6.211%	6.000%	5.899%		1.237%	3.212%	6.532%	0.491%		3.953%			4.543%	
	0.0670/		-3.691%	-5.166%	-4.709%		-2.089%	-4.878%	-4.384%	-0.980%	-2.685%	-2.222%	E 0770/		-2.184%	
	-2.267%		-3.254%	-3.423%	-4.219%		-3.953%	-2.818%	-2.749%	-1.130%	-4.167%	-3.445%			-2.523%	
	-9.619%		-10.054%	-8.683%	-5.745%		-1.793%	-5.833%	-7.415%	-3.363%	-7.011%	-7.089%			-3.905%	
	7.020%		9.374%	7.309%	10.551% -3.986%		8.255%	7.683%	11.696%	4.183% 0.050%	10.503%		8.068%		9.775% 0.935%	
	-3.704% 1.587%		-2.145% 2.180%	1.138%	1.767%		0.143%	0.200%	-3.248% 0.893%	-1.155%	-1.041% 2.270%	3.256%	1.807%		2.340%	
	-1.465%		2.493%	4.532%	2.874%		2.673%	4.110%	2.475%	0.395%	1.606%	5.011%			4.666%	
	-7.708%		-5.790%	-5.644%	-4.828%	-6.069%	-3.416%	-4.191%	-6.723%	-1.393%	-5.176%		-4.115%		-4.319%	
	4.820%		-4.197%	-4.243%	-3.479%	-2.283%	-6.492%	-7.653%	-4.950%	-1.049%	-7.506%				-9.660%	
	4.820%		2.154%	1.248%	1.902%	2.812%	2.049%	1.697%	1.719%	2.807%	1.686%	0.390%	1.309%		0.406%	
	-4.370%	-12.435%	-9.861%		-9.931%	-9.951%			-10.734%	-2.458%	-11.367%				-12.762%	
	-6.244%	-10.355%	-13.952%	-13.310%	-9.226%		-10.932%	-3.082%	-12.890%	-3.838%					-18.324%	
	0.073%	-0.660%	-0.633%	-0.370%	-0.628%	0.031%		-1.430%	0.403%	0.253%	1.825%	-0.282%			-1.968%	
	2.077%	1.366%	3.068%	-0.619%	1.706%	3.389%	5.170%	-2.259%	3.248%	2.190%					2.949%	
	-9.435%	-9.614%	-4.638%	-9.826%	-6.791%	-2.316%	-0.915%		-4.866%	-0.865%	-8.109%	-5.093%			-4.995%	
	-13.676%	-8.649%	-8.705%	-6.220%	-11.213%		-7.442%	-8.098%	-9.159%	-3.117%					-5.668%	
	15.051%	9.732%	7.932%	8.806%	9.838%	9.515%	7.856%	8.255%	10.142%	2.412%		8.905%			6.373%	
	7.632%	0.656%	-1.547%	4.493%	-6.366%	-2.432%	0.377%	2.183%	-5.483%	-1.817%	4.420%	0.713%	1.666%		1.677%	7.223
	7.595%	6.349%	7.736%	6.590%	8.749%	8.064%	6.531%	7.510%	8.536%	3.282%	10.410%	7.527%	7.130%		7.346%	7.463
	2.707%	-0.263%	-0.785%	0.628%	-1.520%	-0.834%	0.529%	-1.590%	-0.983%	-0.069%	-1.945%	-1.305%	-1.841%		-2.272%	1.614
	8.697%	6.111%	8.259%	4.411%	7.006%	9.139%	5.923%	5.573%	8.780%	3.521%	9.966%	5.536%	5.900%		1.014%	3.4549
	3.612%	5.263%	4.629%	5.363%	4.429%	5.364%	4.756%	3.103%	4.399%	2.533%	3.561%	1.859%	4.291%		5.031%	7.5049
	0.039%	0.562%	0.784%	2.371%	1.133%	0.993%	1.257%	1.163%	0.471%	0.590%	-0.478%	1.744%	0.980%		1.300%	3.761
	4.896%	2.826%	2.879%	1.440%	3.691%	5.115%	0.170%	4.825%	4.553%	1.522%	6.510%	3.268%	2.936%		-0.605%	-0.576
	-0.687%	-0.098%	0.055%	-2.001%	1.163%	-0.085%	-1.218%	0.171%	0.207%	-0.560%	2.025%	0.639%	-0.038%		1.131%	-3.168
	2.748%	3.284%	2.938%	3.679%	2.019%	2.004%	0.215%	4.036%	3.366%	1.593%	2.206%	2.091%	2.414%		2.772%	2.107
	-1.107%	-3.991%	-2.419%	-3.141%	-2.614%	-3.980%	-2.991%	-2.499%	-2.543%	-0.588%	-3.415%	-4.888%	-2.283%		-2.133%	-3.813
	-0.550%	0.910%	0.881%	2.168%	-0.877%	0.923%	0.900%	0.719%	1.566%	1.097%	-0.155%	1.470%			1.687%	
	6.132%	6.391%	6.977%	6.366%	7.800%	6.652%	5.102%	5.371%	6.637%	1.792%	8.589%	6.202%	7.122%		1.759%	
	-0.027%	-0.082%	-0.895%	0.635%	-0.613%	-0.337%	1.106%	-0.389%	-1.170%	-1.372%	-0.074%				0.020%	
	-3.128%	-4.591%	-4.310%	-4.817%	-5.162%	-3.980%	-3.515%	-6.094%	-4.188%	-1.288%	-5.690%	-3.683%				
	-1.542%	-3.033%	-2.583%	-1.833%	-2.789%	-2.884%	-2.103%	-1.842%	-2.767%	-0.328%	-3.795%	-4.781%		-1.826%		
	5.022%	6.343%	6.937%	5.260%	5.911%	6.711%	2.971%	6.093%	7.622%	2.064%	8.322%	7.224%	5.212%	4.033%		
	0.229%	-3.066%	-3.377%	-4.006%	-3.368%	-3.452%	-1.231%	-4.611%	-3.535%	-0.675%	-3.796%	-4.429%	-3.295%	-2.456%		
	5.853%	8.576%	9.102%	9.500%	9.033%	8.373%		9.924%	9.620%	3.001%						
	2.104%	2.231%	0.938%	3.558%	3.124%	2.132%		4.235%	1.753%	0.622%						
	0.342%	-0.048%	0.375%	1.331%	1.563%	-0.142%	0.254%	1.131%	0.560%	0.631%						
	4.164%	4.947%	4.960%	4.553%	5.332% -2.246%	4.579% -3.374%	4.899%	4.694%	4.988%	0.374%						
	-1.590% 2.328%	-2.900%	-2.454% 1.747%	-3.560% 1.505%	2.251%	-3.374%		-3.351% 2.680%	-3.703% 0.973%	0.060%						
	2.328% 1.965%	2.086% -0.381%	1.747%	1.239%	0.374%	2.294%	0.873%	0.322%	2.399%	0.060%		1.923%				
	2.352%	2.368%	0.397%	2.456%	0.574%	-0.551%		2.416%	-0.185%	-0.267%						
	-0.853%	0.036%	-0.335%	-0.128%	-0.351%	-0.209%		-0.320%	-0.185%	0.649%						
	-2.984%	-1.985%	-1.585%	-1.040%	-2.033%	-0.810%		-1.498%	-1.122%	-0.257%						
	-1.202%	-1.681%	-1.680%	-1.878%	-2.718%	-1.762%			-1.698%	-0.504%						
	0.515%	-1.512%	-0.508%	0.953%	-0.396%	-1.448%	0.175%	-0.508%	0.050%	-0.250%						
	-0.621%	-2.005%	-2.145%	-3.444%		-4.162%			-4.252%	2.114%						
	5.475%	7.577%	5.978%	9.217%		8.330%	4.250%	9.437%	8.490%	2.171%						
	0.926%	-0.701%	-0.599%	-0.868%	-1.197%	-0.575%		-1.152%	-0.594%	0.275%						
	-1.167%	0.101%	0.998%	0.598%	-0.226%	0.606%		0.516%	1.158%	0.433%						
Mean	0.7442	0.2417	0.3613	0.4949	0.4088	0.4157	0.4800	0.3573	0.5340	0.3440	0.3135	0.6804	-0.0056	0.8332	0.0433	0.087
Median	0.3420	-0.0059	0.2151	1.0459	0.5443	-0.1417	0.4034	0.6175	0.5544	0.3212						
	5.0376	4.9466	4.6854	4.7807	4.8432	4.8053	3.7400	4.6299	5.0818	1.6363					4.8271	

Table A4.1 Statistical Results for Returns on unit trust over the period 2007 to 2011(continued)

	Risk-free Rate		8.029	0.08029
UNIT TRUSTS	Mean Returns	Median Rate of Returns		•
KAGISO EGUITY ALPHA - KEAF[CL]	0.887	1.196		0.18
ABSA SELECT EQUITY- ASEF[CL]	0.740	1.024		0.154
NEDGROUP INV. RAINMAKER- NICA[CL]	1.060	-0.187	3.432	0.286
KAGISO ISLAMIC EQUITY- KAIE[CL]	1.243	0.963		0.421
ALLAN GRAY EQUITY- AGEF[CL]	0.619	0.638	4.300	0.125
OASIS GENERAL - OGEN[CL]	0.511	0.182	4.277	0.10
PRESCIENT EQUITY QUANT. A1- PEQF[CL]	0.422	-0.044	5.704	0.060
OLD MUTUAL HIGH YIELD- OMHY[CL]	0.261	0.490	4.689	0.039
FOORD EQUITY- FEQF[CL]	0.605	1.165	4.432	0.11
PRUDENTIAL EQUITY- PRUO[CL]	0.704	0.732	4.300	0.14
INVESTEC EQUITY- METF[CL]	0.337	0.606	4.572	0.056
PERSONAL TRUST SA EQUITY- PTSAE[CL]	1.066	0.506	2.245	0.439
OASIS CRESCENT EQUITY- OCEF[CL]	0.457	0.341	4.096	0.092
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	0.278	0.936	4.645	0.04
CORONATION EQUITY- CORG[CL]	0.731	0.055	4.774	0.13
FNB GROWTH- FNBG[CL]	0.435	0.320	4.800	0.074
INVESTEC ACTIVE QUANTS A- INXA[CL]	0.614	0.075	5.437	0.098
ANALYTICS MANAGED EQUITY- FEWS[CL]	0.521	0.387	4.557	0.093
OLD MUTUAL GROWTH- OMGR[CL]	0.586	1.392	4.875	0.104
ELEMENT EARTH EQUITY- FEFA[CL]	0.412	0.461	3.642	0.093
ABSA GENERAL- ABSA[CL]	0.539	0.395	4.350	0.10
CANNON EQUITY- MCEF[CL]	0.356	1.291	5.113	0.054
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	0.484	0.889	5.046	0.08
SIM GENERAL EQUITY- SNTR[CL]	0.652	0.974	4.887	0.117
VERSO LT SA EQUITY- MVLT[CL]	0.958	1.208	3.902	0.22
NEDGROUP INV. QUANTS. CORE EQUITY R- NQCE[CL]	0.352	0.486	4.692	0.05
OLD MUTUAL TOP COMPANIES- OMTC[CL]	0.542	1.167	4.822	0.09
COMMUNITY GROTH EQUITYT- CGMG[CL]	0.424	0.989	4.743	0.07
SMMI EQUITY FoF- SAFF[CL]	0.458	0.536	4.305	0.08
INVESTMENT SOLUTIONS MM EQUITY- ISPE[CL]	0.393	0.466	4.127	0.076
MOMENTUM EQUITY A- REFA[CL]	0.411	0.478	4.970	0.06
MOMENTUM EQUITY R- RMEF[CL]	0.412	0.503	4.975	0.06
PSG EQUITY- PSGG[CL]	0.562	0.630	5.048	0.09
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	0.446	1.024	4.731	0.07
CAPSTONE ACTIVE EQUITY FoF- CAEF[CL]	0.592	0.495	4.297	0.119
STANLIB INDEX- STBI[CL]	0.500	0.599	5.451	0.07
INDEQUITY TECHNICAL- INDT[CL]	0.412	0.261	4.613	0.072
STANLIB SA EQUITY- GDBT[CL]	0.210	1.095	5.646	0.023
STANLIB MM EQUITY- GDSE[CL]	0.393	0.795	4.140	0.075
MARRIOT DIVIDEND GROWTH- HLMK[CL]	0.523	0.460	3.352	0.132
SIM TOP CHOICE EQUITY- STCA1[CL]	0.662	0.782	4.953	0.118
GRYPHON ALL SHARE TRACKER- PTST[CL]	0.498	0.743	5.409	0.07
AYLETT EQUITY- AYEF[CL]	0.754	0.784	3.613	0.186
STANLIB EQUITY R- GDBK[CL]	0.289			0.040
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	0.356			0.055
IMARA EQUITY- MIEF[CL]	0.657			0.13
27FOUR SHARI'AH ACTIVE EQUITY B3- 27FB3[CL]	0.712			0.13
MAESTRO EQUITY- MOEF[CL]	0.418			0.07
DISCOVERY EQUITY - DIEF[CL]	0.744			0.13
NEFG EQUITY- MNEF[CL]	0.242			0.033

 Table A4.2 Mean Sharp Ratio of returns over the period 2007 to 2011

0.361	0.215	4.685	0.060
0.495	1.046	4.781	0.087
0.409	0.544	4.843	0.068
0.416	-0. 1 42	4.805	0.070
0.480	0.403	3.740	0.107
0.357	0.618	4.630	0.060
0.534	0.554	5.082	0.089
0.344	0.321	1.636	0.161
0.314	-0.114	5.654	0.041
0.680	0.866	4.902	0.122
-0.006	-0.038	5.002	-0.017
0.833	0.667	2.389	0.315
0.043	0.498	4.827	-0.008
0.088	0.590	6.383	0.001
0.512			
0.540			
0.805			
0.106			
	0.409 0.416 0.480 0.357 0.534 0.344 0.314 0.680 -0.006 0.833 0.043 0.043 0.088 0.043 0.088	0.495 1.046 0.409 0.544 0.416 -0.142 0.480 0.403 0.357 0.618 0.534 0.554 0.357 0.618 0.354 0.357 0.354 0.354 0.354 0.354 0.354 0.354 0.344 0.321 0.314 -0.114 0.680 0.866 -0.006 -0.038 0.833 0.667 0.043 0.498 0.540 - 0.5512 - 0.805 -	0.495 1.046 4.781 0.409 0.544 4.843 0.416 -0.142 4.805 0.480 0.403 3.740 0.357 0.618 4.630 0.357 0.618 4.630 0.354 0.554 5.082 0.344 0.321 1.636 0.314 -0.114 5.654 0.680 0.866 4.902 -0.006 -0.038 5.002 0.833 0.667 2.389 0.043 0.498 4.827 0.0512

 Table A4.2 Mean Sharp Ratio of returns over the period 2007 to 2011 (continued)

AGEF[CL]	OMHY[CL]	PRUO[CL]	METF[CL]	OCEF[CL]	STPF[CL]	CORG[CL]	FNBG[CL]	FEWS[CL]	OMGR[CL]	ABSA[CL]	OMTL[CL]	SNTR[CL]	OMTC[CL]
			1.8572%							-0.2991%	1.0561%		1.6271%
			-1.2287%							-1.0847%	-0.4633%		1.7003%
			-5.0781%							-4.2775%	-4.5300%	-4.0281%	-1.8119%
			9.2095%							6.9873%	7.0690%	7.5670%	6.0677%
			-1.1616%							-0.5088%	-2.3716%		-0.9331%
			-6.9797%		4.3079%					-2.9845%	-6.8470%	-5.2037%	-8.5383%
			-5.3638%		-0.5693%					-3.3596%	-7.0507%	-6.3645%	-8.4585%
			4.3768%		3.1439%					-0.0407%	2.3215%	4.2865%	3.6793%
			-5.9611%		1.1102%					-4.4877%	-8.6210%	-6.6489%	-4.7380%
			2.5022%		1.6770%					4.1358%	6.0178%	4.1235%	5.6202%
			6.2406%		7.9815%					3.2263%	2.2216%	2.7375%	3.9979%
			5.4498%		4.0549%					4.6644%	3.6710%	3.5083%	2.0783%
			0.5587%		0.8650%					0.1440%	-1.8389%		1.8364%
			2.5947%		0.2685%					-0.8477%	3.8583%	0.5754%	1.6508%
			-2.9407%		-2.7646%					2.5418%	1.0816%		0.7499%
			8.1464%		1.0484%					5.2032%	4.9971%	4.8132%	3.9895%
			3.8902%		4.7217%					1.4717%	2.6609%	2.0056%	4.0532%
			-0.4668%		-3.8371%					-0.4044%	1.2653%	-0.5200%	-1.0534%
			-0.8183%		-2.7591%					-2.1774%	-1.9570%		-0.6396%
			-2.9430%		-3.3043%					-6.8423%	-4.4823%	-2.7219%	-4.4818%
			3.0270%		2.5815%					3.9797%	1.8846%	-1.1576%	2.0342%
			8.0093%		7.2418%					6.3396%	4.9324%	6.5242%	5.0498%
			10.7271%		7.2592%					14.9666%		13.7293%	
			-0.7530%		0.6689%					-2.9977%	-2.1541%		-4.6808%
			2.4117%		0.9537%					1.6511%	1.9420%	0.9749%	1.1043%
			4.2670%		5.1495%					1.3607%	2.6996%	0.6226%	2.7745%
			7.4346%		3.8884%					6.6820%	9.5787%	5.9148%	9.4758%
			5.3277%		15.2123%					1.0713%	1.5882%	-0.5586%	3.8768%
			0.4385%		-1.8458%					1.1833%	-1.4209%	0.1189%	1.9592%
			3.6007%		3.3223%					4.4341%	5.8218%	4.3326%	1.7270%
			5.7039%		5.9577%					3.4710%	2.0289%	3.5731%	4.2646%
			-2.0921%		-4.1340%					-3.6777%	-1.2019%	-1.2572%	-3.0148%
			2.1694%		-0.4778%					1.4271%	1.0015%		1.5041%
			2.1966%		2.8206%					1.0763%	3.3447%	1.0684%	2.9100%
			2.6423%		2.9300%					1.4025%	1.9703%	3.2767%	1.4674%
			-10.9568%		-7.8650%					-9.3484%		-12.2946%	-7.9200%
			0.8090%		-3.1081%					1.2092%	1.5276%	0.9608%	-0.3141%
_			2.1433%		1.0290%					0.7537%	1.8332%	3.5702%	4.1198%
			1.3458%		2.3452%					3.5188%	3.3725%	3.7473%	4.2170%
			1.4424%		6.0818%					0.8083%	-0.4326%		1.1860%
			-0.8158%		-2.0211%					-1.1470%	-1.0222%		0.0483%
_			1.0890%		-0.8807%					0.8810%	-0.8542%		
			3.4699%		2.0751%					2.7742%	2.3305%		2.8682%
			2.3652%		2.5529%					1.4818%	3.4826%		
			2.0251%		6.6306%					1.6848%	3.3848%		4.9814%
			3.4015%		6.4106%					2.9071%	1.6097%		4.9814% 5.0067%
			3.5774%		0.4106%					4.3228%	5.1410%		4.7214%
			6.9549%		8.2554%					4.3228%	8.4874%		6.2924%
			-1.0002%		-2.8360%					-2.8765%			-2.3249%
			0.0630%		-2.8300%					-2.8765%	-4.1285%		
			1.2641%		6.8313%					2.7185%	2.8225%		3.0156%
			-2.5069%		-3.5735%					-0.9870%	-1.1366%		
			2.0720%			10.5284%				2.0819%	2.1656%		3.9321%
 			-1.6968% -0.0397%		-0.6342% 0.7268%					-3.7677% 0.7453%	-4.9854% 0.5935%		-5.3154% 1.5148%
			4.8493%		0.7208%					2.6518%	4.8583%		4.8602%
			2.0662%		2.9216%					1.0767%	4.8583%		4.8002% -0.1476%
			0.6979%		-1.1141%					-2.3925%		-0.8053%	
1	I		0.03/9%		-1.1141%	1.0233%				-2.3923%	-1./921%	-2.9804%	-0.3004%

Table A5.1 Statistical Results for Returns on unit trusts over the period 1992 to 2001

ard Deviation	5.5347	5.2927	5.7771	5.7802	3.7637	5.4329	5.3207	5.9590	6.0719	5.3315	6.2364	6.3035	5.5805	5.946
Median	3.2396	1.5248	1.1430	1.8396	3.0633	1.2971	1.0859	3.2906	0.9624	3.3555	1.0767	1.2179	0.6037	1.514
Mean	3.1552	1.8106	1.5835	1.3225	3.0028	1.2999	1.1959	2.0039	0.6201	1.2833	0.7269	1.0148	0.7411	1.002
	3.7360%	3.2772%	9.3731%	9.9314%	9.1588%	3.1099%	7.4143%	6.0946%	9.4027%	4.5663%	8.3202%	8.3955%	6.3192%	6.62339
	4.4360%	5.9448%	7.4810%	9.7450%	9.3137%	8.4249%	6.0557%	9.3613%	8.4321%	5.3046%	9.0430%	6.5345%	7.3362%	6.76819
	0.1628%	1.0063%	2.9612%	5.0055%	3.7523%	3.2646%	3.3523%	5.8420%	3.8304%	2.0744%	2.4693%	4.8108%	2.5291%	3.09529
	-3.9804%	-5.8503%	-8.2290%		-3.3805%	-4.6297%	-6.9447%	-8.1346%	-8.8791%	-6.9779%	-8.1877%		-10.2044%	-6.9418
	-2.4807% 5.7332%	-2.0435% 5.1808%	4.4990%	4.2314%	6.3253%	-4.1236% 8.0175%	-3.2887%	4.6940%	3.1553%	3.3555%	5.1941%	4.9470%	3.6927%	1.5395
	4.3325% -2.4807%	3.7586% -2.0435%	0.4297% -5.9071%	0.3981%	0.8017% -1.0457%	3.9264% -4.1236%	-0.7079% -5.2887%	2.0694% -4.6445%	-2.7734% -8.1577%	1.6003% -3.9581%	-0.3367% -6.3915%	-0.0562% -7.3354%	-0.5634% -6.7124%	0.49409 -6.57659
	4.1499%	4.9165%	4.5802%	5.2772%	4.5151%	6.0459%	4.5794%	5.8556%	4.2637%	3.8133%	3.9002%	4.9768%	5.1701%	5.4486
	7.3940%	5.9159%	9.1371%	6.5222%	4.3894%	6.6238%	6.1265%	6.5357%	9.3115%	6.7377%	8.6999%	8.1096%	6.9409%	7.8624
	-4.3786%	-3.2663%	-6.9266%	-7.4384%		-0.5762%	-7.9050%	-7.0093%	-8.6445%	-7.7891%	-7.0545%		-10.0359%	-8.3388
	2.4399%	-1.1860%	-1.2572%	-0.8179%	3.3042%	4.6135%	-1.9791%	-3.2511%	-1.7350%	-6.1160%	-1.7042%	-2.4271%	-3.1289%	-5.1001
	7.3032%	3.6093%	5.3039%	6.4433%	7.0384%	9.0905%	5.4698%	5.0721%	4.7421%	5.9329%	7.7063%	4.7959%	6.2466%	4.9425
	2.1543%	8.2032%	8.4914%	7.9859%	1.9729%	4.7519%	5.0107%	9.8476%	4.9364%	8.1389%	5.9126%	7.5146%	8.4240%	6.8270
	2.7021%	-1.6366%	-1.2489%	-6.9859%	0.8735%	-0.5268%	-1.4943%	-2.6722%	-4.9740%		-2.3227%	-2.5942%	-4.1338%	-4.1194
	-1.5209%	-5.9266%	-4.5551%	-6.4685%	-0.6620%	-6.1099%	-4.8040%	-6.1039%	-1.2305%		-4.7059%	-5.0185%	-5.0096%	-4.6602
	0.2085%	-2.7367%	-1.7730%	-2.4123%	0.3051%	-0.8376%	-2.0418%	-3.7324%	-1.7584%		-3.2694%	-1.4528%	-3.4219%	-2.1069
	9.3018%	7.0456%	10.6208%	7.0078%	7.7749%	9.3493%	8.4629%	6.3497%			7.4118%	8.5486%	9.6135%	9.2734
	1.3795%	-2.4714%	-1.8880%	0.7976%		0.5824%	0.5622%	-3.3096%			-0.6944%	0.3346%	1.1387%	0.5138
	4.2857%	5.3284%	4.4562%	2.4777%	4.2704%	4.4317%	2.4224%	3.1250%			2.2456%	3.1827%	4.6045%	4.2598
	-2.4834%	-2.5848%	-1.3192%	-0.9594%	0.0000%	0.8496%	-2.2575%	-1.4321%			-3.5408%	-1.4763%	-2.0579%	-1.5971
	-3.3144%	-3.4395%	-4.9871%	-7.0357%	-3.4029%	-6.6501%	-7.8192%	-6.0652%			-7.1237%	-7.5347%	-7.1183%	-7.8795
	-4.6012%	-6.0707%	0.7975%	-1.3598%	-4.8003%	-4.9387%	-0.2071%	-1.3330%			-2.5661%	-1.5516%	-0.7580%	-2.3448
	-5.2785%	-5.1123%	-9.0168%	-4.9189%	-4.8065%	-6.4092%	-3.3681%	-4.8451%			-9.6287%	-2.8821%	-3.0193%	-2.0455
	10.0045% 4.8778%	8.0062% 1.7451%	12.9669% 0.6400%	13.0506% -0.3719%	9.0440% 3.1706%	7.8652% 1.4143%	10.6271% 0.4954%	10.2933% 0.7299%			14.0010% 1.5589%	14.8391% -1.2039%	12.3802% -0.6117%	12.5052 -2.0455
	5.4315%	5.3166%	4.2718%	6.1809%	3.7851%	2.8177%	6.8353%	4.7118%			3.1715%	7.0582%	6.3026%	9.3460
	6.0327%	2.2654%	3.9482%	4.3205%	4.7079%	-0.8567%	5.8281%	9.3339%			2.9592%	7.5885%	5.0400%	7.1659
	-3.1105%	-0.6028%	1.4886%	-0.6394%	-0.6487%	2.0381%	-4.7157%	-2.5177%			-7.5559%	-3.2071%	-3.9758%	-5.6641
	3.8856%	0.1243%		-2.6356%	2.0202%	-3.5732%	-4.3559%	-5.8887%			-8.0732%	-6.0662%	-3.5216%	-5.0762
	2.7432%	1.5248%		-0.9533%	3.0633%	4.1559%	1.1473%	-1.3536%			-3.3928%	-1.7906%	-1.6369%	-2.6641
	11.9769%	11.6154%		7.3885%	7.0724%	6.9886%	6.2329%	5.5493%			3.2881%	9.9410%	8.4958%	8.1766
	-4.6968%	-5.1517%		-6.2086%	-1.8609%	-8.7356%	-5.0068%	-3.9759%			-9.5661%	-7.1114%	-6.8726%	-5.4347
	17.8246%	13.8754%		1.8435%	7.0679%	7.9190%	4.4304%	3.4562%			1.8815%	6.0729%	2.9449%	4.2988
	17.6030%	14.3681%			11.2143%	7.3630%	8.8941%	14.8604%			3.0267%	6.8271%	7.2492%	7.2158
	4.4479%	0.9432%		1.9127%	6.1675%	5.0230%	1.5213%	5.4684%			2.7600%	1.9158%	1.6656%	1.6685
	7.3886%	1.8965%		7.1294%	4.3284%	4.8256%	6.4821%	3.8694%			8.0283%	6.0780%	6.8433%	5.3368
	1.3486%	-0.7962%		-0.8922%	1.8925%	0.5077%	-0.7139%	6.7331%			2.4234%	-0.5063%	0.1593%	-1.4493
	2.4578%			-2.4052%	2.4584%	-5.2358%		12.5658%			-7.6897%	-5.7538%	-5.2171%	-5.6379
				12.3311%	6.1765%	1.9917%	6.3961%				13.6141%	18.4007%	10.4885%	17.1715
				1.3306%	2.9913%	1.1799%	-3.4434%				-1.2429%	3.6043%	2.1179%	1.2774
				-34.8797%	1.1490%	-26.6747%					-38.0316%		-29.4494%	
				-8.9493% 4.7902%		-10.6461% 3.6445%	-4.8319% 6.4760%				-7.7324% 8.2150%	-8.6345% 5.1495%	-8.6559% 4.4806%	-9.8964 2.7120
				-2.4055%		-4.2899%	0.9601%				4.5456%	-1.8517%	-2.0169%	-4.44349
				7.7702%		14.7206%	4.0846%				6.9385%	6.4988%	6.1577%	5.79639
				4.3403%		4.1315%	8.8657%				8.4264%	6.9788%	6.6268%	8.98139
				10.0863%		12.0655%	13.3759%				17.4506%	9.6043%	10.1013%	8.41469
				7.5930%		2.3246%	4.7376%				7.9024%	7.4806%	6.2646%	4.2625
				-1.2382%		-5.4435%	-2.1406%				-3.1478%	-1.7039%	-0.1457%	-1.2987
				-0.0895%		-6.4194%	-2.6740%				-0.7468%	-1.7356%	-3.4745%	-1.2726
				-7.0832%		-6.6337%	-5.9331%				-6.4763%	-8.1167%	-8.1442%	-4.5771
				-1.1304%		-5.2244%	-1.4693%				-3.3860%	-1.0028%	-2.0704%	-2.4496
				-1.6480%		-0.1058%	-4.1331%				-1.6610%	-4.3313%	-1.6411%	-1.8965
				4.3636%		2.2204%	0.1813%				1.9577%	1.2179%	-0.3364%	-0.6738
				7.7450%		5.1826%	3.8354%				4.9937%	6.3946%	7.9542%	8.3491
				0.3559%		-0.4744%	0.0087%				-1.7835%	-0.7376%	-2.2404%	-0.3421
				1.8396%		-2.0507%	-0.9090%				0.3854%	0.6903%	0.5712%	2.5486
				1.2083%		-1.0212%	1.1465%				0.0249%	-0.3886%	0.6037%	0.15455
				3.6345% 2.2435%		2.9542% 3.3405%	3.6062% 5.0982%				0.9864%	1.1123% 5.6646%	1.0568% 6.7722%	0.61619
						2 05/20/	2 60620/				0.00640/	1 11000/		

Table A5.1 Statistical Results for Returns on unit trust over the period 1992 to 2001(continued)

CGMG[CL]	SAFF[CL]	RMEF[CL]	PSGG[CL]	OMAA[CL]	STBI[CL]	GDBT[CL]	GDSE[CL]	HLMK[CL]	PTST[CL]	GDBK[CL]	
		0.0929%						-0.2288%		1.5260%	0.0000%
		-2.2549%						1.0624%		-0.9170%	-0.9009%
		-3.1348%						-2.7173%		-1.7696%	-1.8182%
		6.5284%						5.8511%		9.2428%	6.4815%
		0.6839%						-1.4844%		-2.6821%	-1.3478%
1.0982%	ò	-6.4916%						-3.9709%		-6.5462%	-2.8294%
1.0178%	j.	-4.2511%						-3.7561%		-3.4281%	-3.2656%
0.9301%	5	3.0587%						4.5423%		4.4893%	-3.5353%
0.6623%	5	-5.0158%						-5.2902%		-3.6625%	-3.2857%
0.9059%	5	3.0601%						3.3324%		4.6767%	3.1360%
2.7783%	5	2.6897%						3.9519%		4.7386%	3.9372%
-5.2869%	5	5.4778%						4.3759%		0.0616%	3.0849%
2.1551%	5	1.7489%						-0.3288%		0.4509%	1.5463%
0.6462%	5	3.3546%						0.4216%		2.9828%	-1.2272%
0.1039%	5	2.4332%						-0.9334%		2.5407%	0.4081%
0.8112%	5	5.9448%						4.5186%		4.9386%	3.7030%
1.8993%		1.5988%						3.0424%		3.6164%	2.2209%
-3.6268%		-1.6350%						-0.6538%		-1.2205%	0.9116%
1.2671%		-1.4008%						-2.5237%		-0.9306%	
-2.2392%		-3.3993%						-3.1025%		-1.7248%	
4.8022%		1.7656%						2.1195%		0.8630%	2.7529%
5.9137%		5.7483%						7.0954%		5.1633%	6.0217%
9.1902%		11.6216%						11.4270%		10.1368%	6.3866%
-3.1364%	-	-2.3156%						-2.5848%		-1.6243%	-1.5886%
3.8774%		1.8398%						3.0694%		2.0891%	1.2728%
2.5410%		2.3928%						0.3824%		2.6591%	
7.6035%		7.0039%						5.7323%		7.3708%	4.6603%
4.4343%		3.0005%						6.1160%		-1.5102%	0.2465%
0.4520%		0.6349%						-0.2307%		1.1184%	0.2403%
0.4320%		0.0000%						2.6846%		1.3951%	1.4348%
		2.3424%									1.4348%
3.0012%						1.00570/		5.0788%		1.6161%	
-3.6802%		0.2979%				-1.9057%		-3.9784%		-1.7022%	
1.4199%		0.3823%				2.2665%		0.7653%		2.2324%	1.9196%
3.7538%						3.1085%		-1.0595% 2.2410%		1.2736%	1.8236%
2.8292%		1.3606%								2.8278%	2.0772%
-9.0402%		-9.9145%				-12.2684%		-11.3935%		-13.1080%	-8.4993%
-0.2718%		-0.5941%			0.07040/	2.7260%		-0.2147%		1.9629%	1.0138%
2.5788%		4.0524%			3.2724%	3.1804%		4.0949%		5.0326%	1.2136%
2.7729%		4.6555%			3.4086%	3.5634%		-0.0329%		3.0238%	2.2521%
2.3401%		0.5029%			0.0483%	0.7867%		0.7485%		0.3384%	
-2.2607%		-0.0114%			-0.2319%			-0.2329%		-1.2867%	
-4.6524%		-1.0009%			-0.6682%			0.0504%		0.2375%	
3.3085%		2.6632%			1.6379%			1.8378%		0.4626%	
3.8552%		2.7995%			2.3118%			0.9863%		3.7958%	
5.1503%	5	4.7979%			2.9721%	3.2621%		1.8898%		2.4159%	
4.5715%	5	3.7947%			3.3324%	2.5220%		2.9463%		3.2947%	6.9545%
2.9871%	5	4.6851%			3.6831%	4.3497%	i	4.1276%		5.2663%	6.6671%
5.6236%	6	3.5308%			7.4615%	5.3838%	1	6.6094%		4.4106%	8.6388%
-1.3920%	i	-1.5531%			-2.6967%	-3.4987%		-2.7596%		-2.0567%	-2.2095%
-2.7244%	5	1.4267%			1.2029%	1.4919%		0.1823%		2.7329%	-0.9507%
-0.5759%	5	2.1042%			3.9271%	1.8889%		0.1324%		2.4059%	1.9141%
-3.8335%	5	-1.1477%			-2.0709%	-2.1098%		-2.1056%		-0.7525%	-1.1413%
3.7619%	i	4.0105%			1.1521%	1.4818%		2.4180%		2.4546%	4.3096%
-2.9311%	5	-5.6343%			-5.1096%	-3.8573%		-5.2098%		-6.0189%	-0.7951%
-0.9264%	6	1.7649%			1.1838%	1.0477%		1.5224%		3.2684%	1.3377%
4.8529%		3.8653%			2.9331%			3.4063%		2.4309%	
1.4280%		1.5610%			3.2520%	0.3184%		1.1182%		0.3798%	
-3.3333%		-0.3345%			-3.4477%			-1.0596%		-2.7101%	
-2.6481%		-0.0483%			-1.0847%			0.1051%		0.0121%	

Table A5.1 Statistical Results for Returns on unit trust over the period 1992 to 2001(continued)

376% 4.1318 104% 8.7185 104% 8.7185 120% 10.9638 740% 1.7331 984% -1.7036 231% -2.6646 892% -5.2414 572% -3.7222 433% 0.4735 381% -0.8252 407% 7.5463 223% -3.1553 366% -3.2019 546% -5.5323 092% 7.9881 0546% 7.2566 324% 2.4219 929% 1.1407 381% -4.0721 322% 6.3864 008% 6.4564 0214 1.018 3604 0.807	% 7.6528% % 13.5000% % 1.2876% % -1.2113% % -4.4983% % -1.7111% % -4.4983% % -1.7111% % -2.1683% % -2.1683% % -2.1683% % -2.1683% % -3.2519% % -3.2519% % -3.2052% % -6.8943% % 5.0363% % 1.2993% % -6.4204% % 5.9627% % 5.9627% % 1.0082	3.7635% 13.7890% 0.9792% -3.8649% -3.1690% -7.2547% -5.2573% 3.6321% 0.9330% 6.0606% -5.3505% -7.5506% -5.8981% 8.7345% 6.0183% -7.0818% -12.0897% 7.2427% 3.6730% 3.2879% -5.1324% 2.4852% -12.0371% 1.1545% 3.5616% 0.0570% 0.4201	-0.5529% -4.5376% -1.2965% -6.0010% -1.2903% 3.9320% -1.4727% 8.1254%	4.3215% 5.7421% 12.6302% -2.4012% -4.3427% 0.4615% -5.2553% -0.9340% 4.8075% -0.6729% 9.3744% -1.7824% -1.7824% -1.7890% -3.5384% 7.0715% 6.5347% -0.6015% -8.4177% 9.8064% 4.1644% -1.9332% -8.0310% 4.3059% -8.3840% -8.036% 9.9855% 10.0615% -8.10293 1.0055	-5.4461% -1.8250% -6.0949% -1.9575% 4.7887% 0.2077% 8.9278% -1.8833% -4.0730% -1.9940% 7.8395% 5.8843% -3.9437% -6.7908% 7.3342% 3.9676% 2.4069% -6.1560% 3.7893%	5.5252% 13.7213% -2.2274% -6.1304% 0.5590% -1.2758% 5.2071% 0.8836% 10.0114% -1.7864% -2.9656% -2.1597% 7.5246% 4.0607% -0.7569% -8.2703% 9.7179% 3.9255% -0.6754% -6.4143% 4.8994% -8.1643% 4.3316%	6.2669% 9.4303% 11.4614% -1.5127% -7.3919% -3.5764% -4.7573% 0.2770% 2.7362% 0.7330% 6.0735% -4.5458% -1.5198% -8.0086% 8.1833% 5.3625% -6.4462% 7.9814% 4.4336% 0.2588% 7.9579% 2.8660% -10.4242% 3.6588% 6.6601% 4.5177% 0.7215 0.7330	-1.1522% -2.8005% -1.3861% -5.9302% -2.4931% 3.5813% 0.0499% 8.4732% -3.1628% -2.8628% -3.6473% 7.2328% 5.7442% -3.0849% -8.4730% 9.6438% 4.0224% -0.9207% -8.5563% 4.0728% -10.1156% 4.2583% 6.0515% 8.0091% -0.8142	6.3357% 5.4651% 11.1859% -3.0473% -5.1530% -0.2557% -4.8788% 0.3124% 4.7177% -0.6510% 10.3102% -1.6195% -2.9653% -2.8028% 5.4548% 5.7013% -1.6924% -7.1179% 9.6213% 4.4629% 0.0832% -6.6476% 4.3812% -8.80909% 6.6875% 10.2177%	4.731 8.411 12.044 0.215 -0.984 0.357 -9.530 -0.224 5.529 1.703 7.987 -1.672 -4.328 6.458 6.055 -4.299 -6.769 7.034 3.837 -1.233 -9.891 3.985 -9.908 5.455 5.455 -9.908 5.455 -9.913 8.332
104% 8.7185 10.9638 1.0.9638 740% 1.7331 984% -1.7036 231% -2.6646 892% -5.2414 572% -3.7222 433% 0.4735 381% -0.8252 407% 7.5463 223% -3.1352 042% -5.1553 366% -3.2019 150% 5.6209 5465% -5.5323 029% 1.1407 381% -0.4219 929% 1.1407 312% 2.7498 144% -6.6537 953% 2.4721 892% 6.3864 085% 6.4564	% 7.6528% % 13.5000% % 1.2876% % -4.4983% % -1.7111% % -4.4983% % -1.7111% % -4.1243% % 0.2437% % 5.1199% % -2.1683% % 6.9230% % -3.2519% % 9.1651% % 5.1707% % -3.2052% % 6.9124% % 5.0363% % 1.2993% % -6.4204% % 4.1957% % 5.8276 % 5.9627%	3.7635% 13.7890% 0.9792% -3.8649% -3.1690% -7.2547% -5.2573% 3.6321% 0.9330% 6.0606% -5.3505% -7.5506% -5.8981% 8.7345% 6.0183% -7.0818% -12.0897% 7.2427% 3.6730% 3.2879% -5.1324% 2.4852% -12.0371% 1.1545% 3.5616% 0.0570%	5.8635% 12.3378% -0.5529% -4.5376% -1.2965% -6.0010% -1.2903% 3.9320% -1.4727% 8.1254% -2.7896% -4.1222% -3.5476% 6.7029% 5.6997% -2.8287% -7.3505% 7.9623% 4.1038% 0.9852% -6.6788% 4.0808% -7.8495% 4.1217% 6.9718% 7.1311%	5.7421% 12.6302% -2.4012% -4.3427% 0.4615% -5.2553% -0.9340% 4.8075% -0.6729% 9.3744% -1.7824% -1.7824% -1.7890% -3.5384% 7.0715% 6.5347% -0.6015% -8.4177% 9.8064% 4.1644% -1.9332% -8.0310% 4.3059% -8.3840% 5.0036% 9.9855% 10.0615%	5.9523% 14.2035% 0.7692% -5.4461% -1.8250% -1.9575% 4.7887% 0.2077% 8.9278% -1.8833% -4.0730% -1.9940% 7.8395% 5.8843% -3.9437% -6.7908% 7.3342% 3.9676% 2.4069% -6.1560% 3.7893% -7.9145% 3.2043% 7.7292% 6.9732%	5.5252% 13.7213% -2.2274% -6.1304% 0.5590% -1.2758% 5.2071% 0.8836% 10.0114% -1.7864% -2.9656% -2.1597% 7.5246% 4.0607% -0.7569% -8.2703% 9.7179% 3.9255% -0.6754% -6.4143% 4.8994% -8.1643% 4.3316% 9.2311%	9.4303% 11.4614% -1.5127% -7.3919% -3.5764% -4.7573% 0.2770% 2.7362% 0.7330% 6.0735% -4.5458% -1.5198% -8.0086% 8.1833% 5.3625% -6.4462% -10.9783% 7.9814% 4.4336% 0.2588% -7.9579% 2.8660% -10.4242% 3.6588% 6.6601% 4.5177%	6.7994% 13.7629% -1.1522% -2.8005% -1.3861% -5.9302% -2.4931% 3.5813% 0.0499% 8.4732% -3.1628% -3.6473% 7.2328% 5.7442% -3.0849% -8.4730% 9.6438% 4.0224% -0.9207% -8.5563% 4.0728% -10.1156% 4.2583% 6.0515% 8.0091%	5.4651% 11.1859% -3.0473% -0.2557% -4.8788% 0.3124% 4.7177% -0.6510% 10.3102% -1.6195% -2.9653% -2.8028% 5.4548% 5.7013% -1.6924% -7.1179% 9.6213% 4.4629% 0.0832% -6.6476% 4.3812% -8.0909% 4.3969% 6.6875% 10.2177%	8.411 12.044 0.215 -0.984 0.357 -9.530 -0.224 5.529 1.703 7.987 -1.6720 -4.328 6.458 6.095 -4.299 -6.769 7.034 3.837 -1.233 -9.891 3.985 -9.908 5.455 9.913 8.332
104% 8.7185 10.9638 1.0.9638 740% 1.7331 984% -1.7036 231% -2.6646 892% -5.2414 572% -3.7222 433% 0.4735 381% -0.8252 407% 7.5463 223% -3.1352 042% -5.1553 366% -3.2019 150% 5.6209 5465 -5.5323 029% 7.9881 033% -5.6545 5666% 7.2566 324% 2.4219 929% 1.1407 322% 2.7498 144% -6.6537 953% 2.4721 392% 6.3864	% 7.6528% % 13.5000% % 1.2876% % -4.4983% % -1.7111% % -4.4983% % -1.7111% % -4.1243% % 0.2437% % 0.2437% % 0.2437% % -5.1199% % -2.1683% % -9.2519% % -3.2519% % -3.2052% % -6.8943% % 5.0363% % 1.2993% % -6.4204% % 4.1957% % 5.4829% % 9.8122%	3.7635% 13.7890% 0.9792% -3.8649% -3.1690% -7.2547% -5.2573% 3.6321% 0.9330% 6.0606% -5.3505% -7.5506% -5.8981% 8.7345% 6.0183% -7.0818% -12.0897% 7.2427% 3.6730% 3.2879% -5.1324% 2.4852% -12.0371% 1.1545% 3.5616%	5.8635% 12.3378% -0.5529% -4.5376% -1.2965% -6.0010% -1.2903% 3.9320% -1.4727% 8.1254% -2.7896% -4.1222% -3.5476% 6.7029% 5.6997% -2.8287% -7.3505% 7.9623% 4.1038% 0.9852% -6.6788% 4.0808% -7.8495% 4.1217% 6.9718%	5.7421% 12.6302% -2.4012% -4.3427% 0.4615% -5.2553% -0.9340% 4.8075% -0.6729% 9.3744% -1.7824% -1.7824% -1.7890% -3.5384% 7.0715% 6.5347% -0.6015% -8.4177% 9.8064% 4.1644% -1.9332% -8.0310% 4.3059% -8.3840% 5.0036% 9.9855%	5.9523% 14.2035% 0.7692% -5.4461% -1.8250% -1.9575% 4.7887% 0.2077% 8.9278% -1.8833% -4.0730% -1.9940% 7.8395% 5.8843% -3.9437% -6.7908% 7.3342% 3.9676% 2.4069% -6.1560% 3.7893% -7.9145% 3.2043% 7.7292%	5.5252% 13.7213% -2.2274% -6.1304% 0.5590% -1.2758% 5.2071% 0.8836% 10.0114% -1.7864% -2.9656% -2.1597% 7.5246% 4.0607% -0.7569% -8.2703% 9.7179% 3.9255% -0.6754% -6.4143% 4.8994% -8.1643% 4.3316% 9.2311%	9.4303% 11.4614% -1.5127% -7.3919% -3.5764% -4.7573% 0.2770% 2.7362% 0.7330% 6.0735% -4.5458% -1.5198% -8.0086% 8.1833% 5.3625% -6.4462% -10.9783% 7.9814% 4.4336% 0.2588% -7.9579% 2.8660% -10.4242% 3.6588% 6.6601%	6.7994% 13.7629% -1.1522% -2.8005% -1.3861% -5.9302% -2.4931% 3.5813% 0.0499% 8.4732% -3.1628% -3.6473% 7.2328% 5.7442% -3.0849% -8.4730% 9.6438% 4.0224% -0.9207% -8.5563% 4.0728% -10.1156% 4.2583% 6.0515%	5.4651% 11.1859% -3.0473% -5.1530% -0.2557% -4.8788% 0.3124% 4.7177% -0.6510% 10.3102% -1.6195% -2.9653% -2.8028% 5.4548% 5.7013% -1.6924% -7.1179% 9.6213% 4.4629% 0.0832% -6.6476% 4.3812% -8.0909% 4.3969% 6.6875%	8.411 12.044 0.215 -0.984 0.357 -9.530 -0.224 5.529 1.703 7.987 -1.672 -4.328 6.458 6.095 -4.299 -6.769 7.034 3.837 -1.233 -9.891 3.985 -9.908 5.455 9.913
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	700% 277% 541% 247% 329% 309% 483% 711% 365% 557% 557% 737% 701% 200% 188% 129% 766% 179% 561% 188% 129% 766% 129% 766% 129% 766% 129% 765% 555%	114% 4.6187% 700% 1.2228% 277% 2.4973% 247% 6.6637% 329% -0.7725% 009% -1.6269% 483% -0.9808% 711% -4.1715% 065% -0.9318% 499% -1.1589% 544% 3.3241% 557% 8.8168% 737% 4.4413% 075% 6.1987% 701% -4.8950% 200% -10.0432% 128% -3.3.5109% 129% -0.4709% 766% 15.5691% 179% -3.8549% 561% 0.5184% 187% 5.3569%	114% 4.6187% 700% 1.2228% 277% 2.4973% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.6637% 247% 6.0269% 483% -0.9808% 711% -4.1715% 265% -0.9318% 4444 3.3241% 9.3400% 557% 8.8168% 14.3406% 737% 4.4413% 9.4945% 075% 6.1987% 7.2029% 701% -4.8950% 2.1397% 200% -10.0432% -3.5826% 189% -3.35109% -2.3453% 766% 15.5691% 12.4807% 129% -0.4709% -2.3453% 766% 15.5691% 12.4807% 161% 0.5184%	114% 4.6187%	114% 4.6187% 6.3235% 700% 1.2228% -0.5455% 277% 2.4973% 0.3809% 541% -1.1034% -0.9107% 247% 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1.4141% -0.9892% 0.1769% 009% -1.6269% -1.4420% -1.4303% -1.2556% -2.5866% -2.1990% 813% -0.9808% -1.55596% -1.5545% -1.0559% -5.8502% 8.3856% 711% -4.1715% -1.4725% -0.1650% -2.1323% -1.6408% -0.0705% 5576 8.8168% 14.3406% 7.6584% 7.4639% 9.0117% 9.6408% 6.1742% 7376 4.4413% 9.4949%</td></td>	114% 4.6187% 6.3235% 6.5516% 700% 1.2228% -0.5455% -0.7638% 277% 2.4973% 0.3809% 2.2629% 641% -1.1034% -0.9107% -1.4075% 247% 6.6637% 0.0513% 0.1974% 249% -0.7725% 0.0513% 0.1974% 209% -0.7725% 0.0513% 0.1974% 209% -0.7725% 0.0513% 0.1974% 209% -0.9808% -1.5596% -1.4303% 483% -0.9808% -1.5596% -1.9545% 711% -4.1715% -9.2795% -7.7701% 265% -0.9318% -9.2795% -7.7701% 265% -0.9318% 1.43406% 7.6584% 7.4639% 737% 8.8168% 14.3406% 7.6584% 7.4639% 701% -4.4950% 2.1397% -10.5094% -6.5459% 200% -10.0432% -3.5826% -7.9713% -2.21280% 188% -3.3.5109% </td <td>114% 4.6187% 6.5235% 6.5516% 700% 1.2228% -0.5455% -0.7638% 277% 2.4973% 0.3809% 2.2629% 541% -1.1034% -0.9107% -1.4075% 247% 6.6637% 4.5799% 4.4049% 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Table A5.1 Statistical Results for Returns on unit trust over the period 1992 to 2001(continued)

	Risk-free Rate	12.9524	0.129524	
UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio
ALLAN GRAY EQUITY- AGEF[CL]	3.1552	3.2396	5.5347	0.5467
OLD MUTUAL HIGH YIELD- OMHY[CL]	1.8106	1.5248	5.2927	0.3176
PRUDENTIAL EQUITY- PRUO[CL]	1.5835	1.1430	5.7771	0.2517
INVESTEC EQUITY- METF[CL]	1.3225	1.8396	5.7802	0.2064
OASIS CRESCENT EQUITY- OCEF[CL]	3.0028	3.0633	3.7637	0.7634
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	1.2999	1.2971	5.4329	0.2154
CORONATION EQUITY- CORG[CL]	1.1959	1.0859	5.3207	0.2004
FNB GROWTH- FNBG[CL]	2.0039	3.2906	5.9590	0.3146
ANALYTICS MANAGED EQUITY- FEWS[CL]	0.6201	0.9624	6.0719	0.0808
OLD MUTUAL GROWTH- OMGR[CL]	1.2833	3.3555	5.3315	0.2164
ABSA GENERAL- ABSA[CL]	0.7269	1.0767	6.2364	0.0958
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	1.0148	1.2179	6.3035	0.1404
SIM GENERAL EQUITY- SNTR[CL]	0.7411	0.6037	5.5805	0.1096
OLD MUTUAL TOP COMPANIES- OMTC[CL]	1.0023	1.5148	5.9461	0.1468
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.0214	1.3604	5.6071	0.1591
SMMI EQUITY FoF- SAFF[CL]	1.0180	0.8071	5.0377	0.1764
MOMENTUM EQUITY R- RMEF[CL]	1.0082	1.4267	5.5546	0.1582
PSG EQUITY- PSGG[CL]	0.4201	1.4262	7.6866	0.0378
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	1.0721	0.9852	5.3320	0.1768
STANLIB INDEX- STBI[CL]	1.0293	1.0055	6.0867	0.1478
STANLIB SA EQUITY- GDBT[CL]	0.7847	1.3870	5.9327	0.1104
STANLIB MM EQUITY- GDSE[CL]	1.7235	1.1944	5.7610	0.2767
MARRIOT DIVIDEND GROWTH- HLMK[CL]	0.7215	0.7330	5.3222	0.1112
GRYPHON ALL SHARE TRACKER- PTST[CL]	0.8142	0.0499	7.2212	0.0948
STANLIB EQUITY R- GDBK[CL]	0.9595	1.1184	5.3111	0.1563
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	1.1235	1.0205	5.6099	0.1772
Mean Return for the period	1.2484			
Median Rate of Returns for the period	1.2061			
Standard deviation of Returns for the period	0.6961			
Mean Sharpe Ratio for the period	0.2073			

 Table A5.2 Mean Sharp Ratio of returns over the period 1992 to 2001 (continued)

KEAF[CL]	ASEF[CL]	NICA[CL]	KAIE[CL]	AGEF[CL]	OGEN[CL]	PEQF[CL]	OMHY[CL]	FEQF[CL]	PRUO[CL]	METF[CL]	PTSAE[CL	OCEF[CL]	STPF[CL]	CORG[CL]	FNBG[CL]
				-2.5075%	-3.1350%		-1.7800%		-4.9893%	-2.2174%		-1.0883%	-2.3305%	-3.1343%	-3.5205%
				1.2587%	2.8281%		0.2876%		2.5794%	5.1056%		2.6897%	4.0549%	1.8176%	2.2369%
				3.4500%	2.0648%		0.3480%		0.7566%	2.6006%		3.6089%	2.1542%	0.4783%	0.0308%
				5.1310%	4.1736%		5.8102%		5.4910%	0.9579%		0.3770%	4.7704%	3.5069%	6.7034%
				8.7394%	4.2172%		3.7893%		2.7406%	1.1731%		3.0769%	3.8902%	0.4943%	1.9348%
				-4.6180%	-2.0820%		-3.0370%		-5.2290%	-2.5200%		-1.0102%	-0.4921%	-3.2616%	-3.0792%
				-2.8442%	-1.0107%		-1.2117%		-9.7732%	-9.2643%		-1.9982%	-2.3630%	-8.5363%	-9.3432%
				2.3967%	3.2542%		3.7851%		1.0096%	4.0028%		2.9889%	1.6617%	3.5402%	2.8694%
				2.3246%	1.8017%		1.6316%		0.6250%	-0.2275%		2.2180%	-1.8085%	-0.7117%	0.9310%
				1.2874%	3.2316%		3.3309%	2.1717%	-0.0245%	-0.1815%		2.6187%	6.2075%	-0.5496%	1.2942%
				5.9363%	5.4373%		5.6509%	5.8202%	4.0471%	3.0604%		3.0411%	3.1625%	3.4569%	5.1549%
				1.8604%	-2.4923%		-1.3446%	-2.5489%	-2.9141%	-2.4401%		-0.9917%	0.2034%	-1.4620%	-3.2047%
				-2.5561%	-1.4186%		-3.0300%	-3.0992%	-4.1933%	-3.1977%		-1.6842%	-3.5485%	-2.5478%	-3.2179%
					-2.7713%		-4.7385%	-3.1522%	-5.1831%	-5.1134%		-3.3560%	-3.1643%	-2.2369%	-2.1116%
				-7.2100%			-5.6805%	-1.8071%		-4.6028%		-6.2686%	-5.8625%		
				-0.5698%			-0.3864%			1.0100%		-5.2550%	-2.5033%		
				13.9482%	11.6737%		8.9620%	9.8592%	10.5959%	8.3186%		10.7368%	11.8677%	11.3535%	11.5223%
				-0.4231%	-0.3671%		1.9028%	-0.1400%		3.5023%		-0.3964%	-1.2827%	0.5800%	1.5399%
				4.3123%	4.5893%		2.2166%	4.4602%		4.9295%		5.0783%	1.9892%		
				6.3074%	3.1185%	4.7326%	4.4078%	3.5611%		4.3562%		4.0111%	9.1793%		
				-0.5353%		-3.3783%	0.4628%	-1.3450%		-0.8778%		-1.0915%	-0.9349%		
				7.0523%	9.0051%		8.0539%	6.4014%		7.3441%		8.5474%	6.9343%		
				2.3017%	0.2169%	-1.0237%	1.4371%	1.1837%		4.8245%		0.1049%	-0.6373%		
				6.2524%	6.0206%	8.4058%	8.1230%	6.8205%		6.4713%		6.6312%	7.6459%		
				4.2563%	3.9029%	5.3082%	0.2806%	2.8215%		2.0264%		3.2465%	1.2080%		
				-2.3605%	0.3606%	0.5465%	3.5662%	0.4009%		1.1855%		-0.9918%	0.8052%		
	1.5654%			1.4907%	1.8756%	-1.9881%	1.6998%			2.4331%		0.4205%	0.9673%		
	0.5574%			-2.8488%	0.0133%	-5.7497%	0.5404%			-3.4315%		1.1605%	-0.5088%		
0.1819%				-0.0660%	-2.5135%	0.8980%	-1.6785%	-0.2280%		0.3551%		-3.5968%	-0.8171%		
0.6860%	0.9814%			-1.4548%	0.5912%	-3.2763%	3.1291%	-0.3097%		1.2730%		-0.0189%	0.2941%		
3.9379%				-1.0586%	0.5414%	2.2053%	-0.5441%	1.5852%		2.0049%		-0.0414%	-1.3396%		
5.2733%				7.8274%	6.9366%	9.2673%	5.4234%	8.7904%		5.8932%		6.3847%	7.6215%		
8.3791%				6.3325%	5.1193%	5.4127%	6.9684%	4.2214%		7.2891% 3.3810%		2.1793%	2.6216%		
6.5653% 11.9252%				2.7285% 6.0509%	4.1377% 7.1761%	-1.8464% 6.8653%	7.4613% 11.4186%	6.5154%		3.3810%		4.7881% 6.0951%	5.8226% 5.0250%		
6.2341%				3.0725%	3.9749%	1.0472%	4.9294%	2.7327%		4.5084%		2.8562%	1.1178%		
-0.5535%				0.9385%	0.3792%	1.1380%	-3.1569%	0.0848%		-0.4682%		0.8660%	1.0185%		
3.5070%				4.3881%	2.9765%	5.8084%	1.4157%	3.8594%		4.2467%		3.2583%	3.4566%		
	-1.3164%				-1.3996%	-0.4931%						-0.7915%	-0.5665%		
	-3.4779%				-5.0475%	-8.1736%		-1.6053%				-5.2703%	-3.5479%		
	10.8927%			9.7929%	6.3340%			7.2050%		6.7178%		6.3222%	7.6170%		
	2.2916%			2.9964%	2.1626%	2.8880%	3.4704%	3.1423%		3.4236%		1.8122%	1.3715%		
	7.3486%			6.6155%	6.9975%	6.7302%	5.8463%	9.0928%		7.9654%		6.5668%	3.8533%		
	1.5588%			1.2409%		1.9613%		2.6050%		1.9188%		1.5996%	1.5511%		
7.2797%				11.0882%		10.3191%				8.4145%		7.2648%	9.6682%		
	-2.5707%				-1.5830%	-2.4369%				-4.3543%		-1.2452%	-0.4993%		
2.5360%				6.4212%	3.4117%	1.7012%	3.4249%	3.3019%		2.8086%		3.5974%	3.5203%		
	7.1703%			8.2483%	6.4693%	8.0222%	8.4388%	7.2071%		9.4928%		5.1661%	4.5916%		
	7.9304%			8.8226%	7.3700%	8.8984%	8.2268%			9.4072%		7.1406%	8.6068%		
	-0.9590%				-0.2410%	-4.2745%	3.0002%	0.9639%		-2.4912%		-0.7918%	-1.9507%		
6.0797%				6.6219%	4.9052%	7.3116%	3.9042%	4.6543%		5.6825%		5.1043%	5.7436%		
	1.9874%				-0.3731%	2.1804%		1.9718%		1.9452%		-0.5016%	2.0685%		
	-3.2189%				-3.4498%	-2.2199%				-4.0991%		-1.5995%	-3.5599%		
	2.6994%				1.1274%	4.7203%				0.8611%		2.9493%	5.0999%		
	-1.5653%			-0.5070%	0.5724%	-1.9585%				-1.5460%		-0.1395%	-3.0307%		
	4.1136%			3.5386%	4.4696%	5.2888%	3.8429%	5.6621%		6.3374%		5.2790%	4.9806%		
	1.6846%			3.4007%	2.5841%	2.3113%		1.1791%		1.4231%		2.3136%	1.3277%		
3.3791%				4.4958%	6.5312%	4.1218%		6.0614%		3.3573%		5.8045%	3.1244%		
				5.2557%	3.2160%	2.0673%			4.7121%			2.4590%	3.4718%		

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011

Mean Median	1.8438% -0.3511% 1.7302 1.7913	0.5485% 1.0371% 1.5479 1.6623	-0.5622% -1.1426% 1.0602 -0.1875	2.1542% -1.2535% 1.2427 0.9631	0.9386% -0.6869% 1.5665 1.2730	-0.3457% 1.3234 1.2618	-0.6538% 1.4076 1.0140	1.7055% 1.2191 1.5259	0.6884% 1.4132 1.5221	-1.2870% 1.3557 1.6985	-2.1953% 1.2218 1.1793	1.1981% 1.0659 0.5056	0.2246%		-0.8537% 1.3015 1.2770	1.4504%
	-0.3511%	1.0371%	-1.1426%	-1.2535%	-0.6869%	-0.3457%	-0.6538%	1.7055%	0.6884%						-0.8537%	1.4504%
										-1.2870%	-2.1953%	1.1981%	0.2246%	0.9603%		
	1.8438%	0.5485%	-0.5622%	2.1542%	0.9386%	1.001070										
						1.8819%	-1.3609%	0.0213%	0.7583%	0.7271%	1.9740%	0.1026%	0.4580%	0.0183%	1.4677%	
	4.9242%	7.3899%		4.5607%	8.1788%	4.7218%	-4.4048%	7.6201%	8.3183%	8.6201%	6.9255%	4.9302%	4.6510%		5.7535%	
	-0.2766% -1.8486%	-1.2627% -2.1632%		-0.4650% -2.9047%	0.9127% -0.9914%	-1.1096% -3.0201%	-0.1220% -4.4048%	-0.5331% -3.3930%	-0.2207% -3.4968%	-1.0556% -2.6969%	-0.4829% -3.1219%	1.1857% -2.5047%	-2.3111% -1.0721%		-0.5339% -2.8430%	
	-1.7434%			-0.8685%	-1.6036%		-2.8357%	-3.8018%	0.0322%		-1.2005%	0.0295%	-0.4125%		-1.7201%	
	-2.4817%	-0.5823%		-1.6428%	-2.7544%	-1.4794%	-2.3933%	-1.9189%	-1.4412%	-0.9277%	-1.3500%	-1.3005%	-1.5994%		-1.7339%	
	0.4868%	-0.6943%	0.1957%	0.1118%	0.5336%		-0.5151%	-0.0974%	0.1707%	-0.5530%	-0.4043%	0.5056%	-0.5379%		-0.2239%	
	1.6811%	2.4665%	2.0865%	0.9631%	1.6519%	0.0552%	-0.6425%	1.7414%	2.3588%	2.7337%	1.1125%	1.7999%	-0.1151%		0.9489%	
	1.4434% 1.7388%	0.3477%	2.2523% 1.8958%	2.0633% 1.4555%	2.7796% 1.6888%	2.0615% 1.3166%	2.8506% 0.9037%	1.6147% 0.9633%	1.6994% 0.7625%	0.4746%	0.5993%	1.5602% -0.2799%	1.6429% 0.1149%		2.5349% 1.3312%	
	-2.0534%	-3.9259%		-1.1490%	-1.7814%		-1.9963%	-3.9122%	-3.0788%	-1.7070% 2.7426%	-2.0080% 3.7576%	-1.6078%	0.4747%		-3.4675%	
	5.7482%	3.9080%		7.2867%	4.1193%		5.8095%	3.9712%	4.3624%	4.9621%	5.0979%	3.9627%	4.1044%		6.9219%	
	-0.5807%		-0.4529%	0.1022%	0.2414%		0.5983%	1.3750%	1.6144%	-0.3697%	-1.4462%	0.1994%	-0.0929%		-1.0665%	
	1.2538%	3.3431%	3.5567%	2.4690%	0.7614%	2.0746%	3.2216%	3.4055%	3.2847%	2.8498%	2.4941%	1.5448%	3.6372%	4.1324%	2.3173%	
	5.9723%		8.1911%	6.8852%	6.6660%		10.1535%	7.2349%	9.3278%	8.3401%	8.3427%	5.5476%	6.2458%		8.3044%	
	-2.5835%			-2.3733%	4.2396%	-3.0845%	-4.4567%	-2.0834%	-3.0811%	-3.0804%	-2.1730%	0.0169%	-3.0805%		-2.3698%	-3.0195%
	-1.8653% 7.9251%	-2.5483% 6.6645%	-1.9860% 7.1710%	-1.1945% 5.3458%	0.3124% 4.2396%	-1.4606% 5.3838%	-3.3746% 6.9438%	-0.6963% 2.0834%	-2.2415% 6.6129%	-2.5074% 7.7777%	-2.9787% 4.9456%	-1.1312% 3.8798%	-0.7680% 3.2714%	-1.9457% 4.7507%	-2.8533% 8.6437%	-2.6916% 7.4541%
	-2.5252%	-4.0048%	-2.7726%	-2.5807%	-3.3270%	-4.8432%	-5.3396%	-3.0569%	-3.9266%	-5.4693%	-4.9954%	-2.3651%	-4.9484%	-5.7834%	-4.2987%	-4.2256%
	1.1375%	0.4923%	-0.9089%	1.2910%	1.4678%	-1.3038%	-2.6494%	0.5717%	1.4973%	-0.9606%	0.6132%	-0.5775%	-0.7419%	1.0678%	0.0846%	1.6738%
	4.4378%	6.3089%	4.6463%	2.5238%	4.1083%	6.7644%	7.5763%	4.5932%	5.5220%	6.7150%	6.7896%	4.5736%	5.1135%	4.3957%	6.9465%	7.2990%
	1.8729%	1.6278%	2.2756%	1.0971%	-0.0237%	0.6634%	-0.0426%	2.3417%	1.2981%	1.7910%	0.1736%	1.6206%	0.6086%	1.2285%	1.2228%	-0.1442%
	2.6496% -0.0230%	3.1769% -1.9531%		2.4328% -0.0830%	1.9805% -0.8602%	2.8181% -1.1686%	2.3139% -3.7851%	2.7773% -2.5777%	5.5630% -1.5735%	3.4220% -2.1124%	-3.9146%	2.2976% -2.0060%	2.6127% -1.5538%	0.9119%	4.2944% -1.6690%	3.8668% -3.2904%
	-0.1889%	-0.8761%		-0.8936%	-0.3832%	-1.0054%	2.9367%	-0.2370%	-0.4270%	-1.4400%	2.2869% 3.1687%	0.3732%	-0.9316%		-1.0460%	0.3499%
	5.3514%	4.1985%		5.2716%	5.7463%	4.9711%	6.1387%	4.0558%	2.6521%	5.3042%	4.2540%	5.3051%	4.4421%	1.0649%	5.2309%	4.6706%
	0.4623%	1.8371%		0.4547%	-0.2024%	1.2876%	-0.2146%	2.2599%	1.0319%	0.6401%	0.5965%	0.3304%	1.5006%	2.5434%	-0.2796%	0.3292%
	4.6588%	4.0468%		4.9789%	4.5841%	5.2354%	3.0193%	5.2829%	5.3400%	2.0636%	1.0763%	1.7194%	4.7236%	3.2322%	4.4795%	5.0420%
	10.2950%	6.6246%			7.1298%	6.9235%	10.1181%	5.9049%	6.7077%	6.2095%	7.9401%		6.5851%	4.9545%	10.0675%	
	2.0534%	0.9536%			-2.8022%	0.4869%	-3.5717%	2.0071%	2.0264%	-0.0176%	-2.2436%		-1.3643%	-2.2234%	0.4159%	
	2.5820% 6.7028%	3.8687% 5.3676%			-1.6504% 10.2728%	-5.1424% 6.2558%	-7.8441%	6.5942%	4.5280%	6.2974%	-6.1953% 8.3262%		-1.3183% 6.8687%	3.4004% 6.0809%	-1.0984%	4.7871% 9.4300%
	10.9046% 2.5820%	6.2420% 3.8687%			4.9866% -1.6504%	6.6605% -5.1424%	12.7264% -7.8441%	6.6619% 7.8943%	-0.1942% 4.5280%	5.0323% 1.9232%	4.3601% -6.1953%		5.0009% -1.3183%	2.7647% 3.4004%	9.2584% -1.0984%	7.6711% 4.7871%
	-8.9893%	-6.7366%			-8.5974%	-8.5212%		-11.5269%	-8.0396%	-7.0252%	-6.2627%		-8.6443%	-6.3383%		
	-5.6540%	-9.4543%			-9.7042%	-3.8254%	-4.9934%	-7.3119%	-4.8116%	-3.3532%	0.4134%		-2.1958%	-2.0515%	-4.0111%	
	1.6890%	4.0887%			4.1353%	3.4867%	0.8411%	2.6755%	2.3497%	3.3683%	2.3399%		4.3857%	3.9013%	2.4890%	2.4213%
	-2.9122%	2.3780%			0.4201%	-2.2460%	1.7978%	0.4349%	-1.0306%	1.9605%	-1.4644%		-4.5976%	0.0364%	-1.3308%	
	-8.9134%	-7.6085%			-6.0692%			-10.6576%	-15.4155%		-12.8899%			-14.5794%		
	3.2008% -8.7188%	3.5249% -8.7303%			1.1043% -7.3033%	1.7823% -8.3707%	-0.4435% -14.2711%	5.7674% -5.3589%	4.6296% -13.4153%	3.0801%	-0.6136% -10.3114%		2.4714%	0.3423%	3.8099% -8.3992%	3.7474% -12.8662%
	-2.5183%	-5.0023%			-3.4493%	-2.8077%	-10.1091%	-1.3740%	-0.6348%	-4.2370%	-7.3665%		-7.8805%	-9.8793%	-1.5650%	-6.0803%
	-6.7633%	-4.2655%			-7.4986%	-4.9905%	-3.2607%	-6.9331%	-5.0529%	-6.1568%	-7.1191%		-4.1960%		-6.6952%	
	0.9601%	2.6122%			3.1306%	0.1508%	4.1492%	-2.8446%	1.5524%	2.8112%	3.8864%		0.9650%	4.2628%	2.3001%	
	3.0164%	1.0943%			2.4456%	3.2714%	-0.0449%	-0.5516%	1.5146%	4.0306%	2.2499%		2.8727%	2.5510%	3.3230%	3.1590%
	8.9376% -3.2972%	8.4393% -1.0707%			9.3897% -0.0444%	-3.3589%	-1.7646%	-3.8793%	-3.1596%	-3.3168%	-3.8568%		9.9366% -2.2546%		-3.5021%	
	-8.6818%	-9.0592% 8.4393%			-10.1160%	-9.1271% 10.0538%	-4.4570% 12.4252%	-14.2027% 3.7739%	-9.0951% 9.9713%	-11.0373% 7.5101%	-5.6569% 10.2330%			-12.3043% 7.4177%	-8.8927% 9.1864%	-9.3682% 8.3469%
	-2.1625%	-3.6609%			-3.4771%	-1.1619%	-5.0397%	-2.3666%	-3.3764%	-2.3270%	-1.9322%		0.1258%		-2.6958%	-2.2720%
	-3.9648%	-2.1356%			1.0385%	-3.0175%	-2.6188%	-5.4235%	-4.4036%	-4.5278%	-3.3543%		-2.1142%		-5.8294%	
	6.1040%	5.3285%			4.3823%	5.8441%	4.7239%	6.7415%	4.0318%	5.7089%	7.2916%		2.9644%	3.5367%	7.0894%	4.4075%
	3.4152%	4.6970%			1.9415%	2.6149%	5.4390%	0.5220%	1.5221%	2.4528%	2.5144%		3.9369%	7.6946%	2.3497%	0.5297%
	0.6223%	-0.5154%			-1.0354%	1.0393%	0.7080%	-0.0725%	0.1529%	0.3374%	0.8888%		0.9340%	-0.6461%	1.5137%	
	-0.7212% 0.4156%	-2.5989% 0.3686%			-1.8881% 0.2753%	-1.3153% 0.0489%	-0.2962% 1.3067%	-3.4849% -1.8923%	-1.5035% -0.2080%	-0.5875% 0.7364%	-1.1108% 0.6135%		-0.9867% -0.4142%	-0.7376% -2.1248%	-1.4509% 0.0258%	-1.7221% 0.0645%
	2.2563%	0.8805%			-1.7806%	2.2118%	2.0791%	-1.8077%	1.8218%	1.8721%	1.0964%		4.1511%	1.7996%	-0.5219%	
	3.3358%	3.4145%			5.5138%	3.9544%	0.5217%	5.3637%	4.1711%	3.5176%	2.5608%		3.0397%	2.3615%	3.8364%	5.5903%
	6.4341%	5.6347%			6.3901%	4.4006%	6.9156%	5.2074%	3.3718%	5.4611%	5.2025%		3.6816%	7.4270%	5.3417%	2.5077%
	2.0054%	1.6399%			0.7421%	0.2125%	0.9808%	0.4589%	1.8613%	0.7890%	1.9152%		1.2160%	1.6800%	-0.1653%	0.5864%
	5.4431% 4.4990%	7.0293% 2.2373%			6.8868% 2.3311%	5.2451% 4.8331%	4.0326% 1.5421%	6.5620% 4.0321%	4.6638% 3.4939%	5.9760% 4.5676%	5.1145% 0.8027%		4.5274% 5.3816%	3.3027% 3.1553%	5.9473% 5.6120%	6.2857% 2.0622%

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

INXA[CL]	FEWS[CL]	OMGR[CL]	FEFA[CL]	ABSA[CL]	MCEF[CL]	OMTL[CL]	SNTR[CL]	MVLT[CL]	NQCE[CL]	OMTC[CL]	CGMG[CL]	SAFF[CL]	ISPE[CL]	REFA[CL]	RMEF[CL]
	-2.9645%	-4.4457%	-3.6793%	-2.4115%		-3.2108%	-3.2360%			-4.5587%	-5.4155%	-3.3144%	-2.5850%		-3.4181%
	2.5533%	-0.1899%	-0.7620%	1.5263%		5.0259%	3.0664%			2.3821%	1.0693%	-0.1644%	2.7708%		3.2874%
	1.6398%	1.2358%	0.2963%	0.7428%		2.2569%	1.2910%			0.4135%	1.3501%	0.4963%	1.5069%		-0.5156%
	2.3989%	7.2702%	8.1487%	2.7091%		3.8028%	3.5506%			4.5163%	5.6713%	2.3931%	2.7764%		6.8537%
	0.6517%	2.5442%	3.9698%	1.5384%		1.4584%	1.4545%			1.9292%	0.8073%	-0.0994%	1.4913%		2.5936%
	-4.5320%	-2.9732%	0.0157%	-5.0722%		-3.8950%	-3.6147%			-3.5961%	-3.9857%	-2.2066%	-3.8388%		-2.6151%
	-10.5503%	-7.4166%	-0.9540%	-8.7426%		-9.3428%	-8.8385%			-8.8531%			-10.1760%		-9.4244%
	4.6929%	2.8444%	1.2037%	2.7326%		2.7685%	2.9393%			4.0177%	1.5103%				1.7053%
	-1.6317%		-0.0165%	0.6562%		-0.1801%	-0.1573%			0.2562%	1.2824%				0.6192%
	-0.4473%		2.3923%	-1.1615%		1.2471%	-0.5916%			1.9115%	0.6209%				0.7730%
	3.0984%	4.1379%	5.1949%	3.4509%		3.5647%	4.5200%			3.9144%	3.2628%	2.6044%	3.9859%		5.3885%
	-2.8328%		-0.2781%			-2.7515%	-3.6238%			-2.1851%	-1.6872%				-4.1417%
	-3.6629%		-1.8858%	-3.6283%		-4.5796%	-3.3953%			-5.1624%					-3.3426%
	-3.9670%		-1.9816%			-4.4168%				-3.3533%					-2.3103%
	-7.5346%		-5.0482%	-7.1799%		-7.3308%	-7.4399%			-7.6842%	-6.8865%				-6.1706%
	-2.3594%	1.7983%	-2.9815%	-2.0102%		0.9558%	-0.2542%			-0.1198%	0.5414%				1.7208%
	12.1043%		10.8291%			10.8887%	10.9239%			10.7592%	9.4688%	7.9972%			10.9045%
	-0.6486%	2.9129%	0.5516%	-0.3845%		0.6110%	0.2678%			1.5110%	1.4465%				2.4974%
	5.1627%	4.8472%	3.6076%	4.7423%		2.5871%	4.6856%			3.0730%	5.0789%				4.3602%
	3.9351%		4.6630%	3.6803%		2.5715%	2.1155%			4.5135%	4.4893%				2.6896%
	-1.9574%		-0.6195%	-0.9880%		-1.4988%	-1.6802%			-0.4325%	-0.5127%				-0.0819%
	7.0110%	8.3989%	6.7287%	5.0662%		8.8866%	8.9612%			9.7127%	3.5737%	6.5979%	6.6284%		7.4004%
	1.5678%	0.9548%	2.0391%	1.4506%		0.6753%	1.1360%			2.6552%	1.0279%	2.1615%	2.7655%		5.2127%
	6.5022%	7.0893%	7.3274%	7.4666%		6.2025%	6.9098%			6.5452%	7.4993%	5.9934%	5.1997%		6.9687%
	3.4818%	2.2751%	2.6013%	3.5555%		2.1992%	2.3075%			1.6553%	2.6052%	2.7442%	3.1844%		0.6514%
	0.5164%	-0.2344%	0.6538%	1.2927%		-0.1758%	-0.5673%			0.9610%	0.0130%	-0.8164%	0.5192%		0.3356%
	-0.3892%	1.5518%	1.1673%	0.7131%		0.6930%	0.4002%			0.0889%	0.4888%	0.6436%	0.7421%		2.8146%
	-2.1022%	0.7008%	-1.0202%	-1.5301%		-0.6460%	0.2317%			-0.6672%	-0.8854%	-1.1127%	-2.0077%		-1.9808%
	0.0479%	-0.5885%	0.0214%	-0.0909%		-0.0507%	-0.3536%			-1.0792%	-0.0327%	-0.4518%	0.0295%		-0.3634%
	-0.3351%	0.4406%	0.2414%	-0.1707%		0.7632%	-0.1537%			1.2977%	0.0033%	-0.4434%	-0.2210%		1.4454%
	0.8966%	-1.0413%	0.7533%	-0.1758%		-0.6841%	-1.2606%			-1.7514%	0.1178%	-0.2988%	1.2183%		-1.3836%
	7.9346%	7.7240%	6.3444%	7.0049%		7.6691%	7.0147%			7.5622%	7.1823%	6.7241%	6.4196%	5.7110%	5.7759%
	5.8517%	7.7013%	5.3063%	5.4688%		6.6568%	6.3358%			8.2683%	5.1577%		5.9295%		
	1.8682%	6.3215%	3.8608%	4.5095%		4.6850%	4.5472%			4.9759%	1.9810%		3.2162%		
	8.4879%		7.2275%	7.9900%		8.4607%	7.7789%			9.1156%	8.9306%				
	2.5954%	3.4900%	3.6779%	3.5819%		3.5987%	3.8370%			4.0883%	3.8486%				
	1.1638%		-1.1767%	0.3022%		-0.6880%	-1.1214%			-0.4091%	1.5312%		-0.2111%		
	5.0678%	3.3911%	2.4654%	3.6107%		3.5211%	3.0711%		4.0031%	2.9204%	3.8903%	2.5743%	2.9567%		
	-1.2620%	-2.9571%	-0.6597%	-0.9007%		-2.1618%	-2.1302%		-2.3264%	-3.1874%			-2.2120%	-2.4083%	
						-2.1018%	-3.6191%								
7.14500/	-4.7041%		-4.6752%	-4.5003%					-2.9487%	-2.8301%			-4.0153%		
7.1453%			8.3519%	7.2372%		6.7220%	7.1706%		7.0201%						
1.3975%	2.3640%		2.8639%	2.4764%		1.9422%	2.3311%		2.1043%		3.0706%				
10.3856%	8.9204%		6.6653%	8.1512%		7.8810%	7.8377%		8.4545%	7.8873%	8.9814%				
4.5210%	1.6605%		1.0788%	1.3093%			1.4938%		1.3458%	0.6664%	0.8303%				
6.2925%	6.7293%		8.6949%		10.3333%		7.8723%		7.0280%						
-4.0950%			-1.9769%	-2.9705%	-2.6945%		-2.0696%		-2.6607%	-3.2974%					-2.1096%
3.2216%	3.2734%	2.5349%	3.1203%	3.1990%	3.4069%	2.5212%	4.3779%		3.2002%	2.2026%	2.8236%	2.7029%	2.3205%	1.7507%	1.7740%
8.3217%	6.7414%	8.9516%	6.1032%	6.3548%	7.2304%	7.6450%	7.0361%		6.9282%	6.9708%	7.1762%	6.9433%	7.4846%	8.5690%	8.5856%
14.0004%	8.9040%	7.0454%	8.3503%	8.1999%	9.7699%	6 7.1570%	7.2157%		6.4468%	8.3366%	7.8890%	7.9413%	9.0314%	7.9907%	7.8926%
-2.7474%	-0.4029%	-0.0599%	-0.3731%	0.1119%	-0.9445%	-0.1226%	1.4543%		-0.3974%	-1.1882%	-0.1168%	0.2376%	-0.9541%	-0.1729%	-0.1502%
6.5334%	4.6950%	3.9774%	4.4340%	4.4845%	4.8371%	4.5204%	5.7050%		5.0217%	4.5560%	4.7765%	4.5715%	5.5741%	4.8349%	4.8564%
1.8429%	1.2450%	2.2902%	2.0507%	2.8404%	2.9609%	2.3646%	1.0010%		2.1625%	2.3216%	2.0697%	0.9869%	1.9721%	1.0094%	1.0289%
-2.9687%			-2.1097%	-3.2852%	-4.1653%	-4.8110%	-5.5420%		-4.6196%						
0.7595%			3.3446%	1.7726%	0.2557%		0.3797%		0.6935%						
-0.3400%	-0.5248%		-0.5989%	-1.3790%	-1.6375%		-0.1297%		-0.1713%						
4.2332%			3.4599%	4.2265%	5.1034%		5.1685%		4.6578%	4.1495%	4.3865%				
0.5213%			0.9696%	2.5674%	2.2265%		1.3789%		2.0204%		1.1285%				
3.4282%			1.6769%	3.6342%	6.1087%		5.1897%		4.6174%						
2.0593%			4.2254%				4.0465%		3.8494%						

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

	4 65059/	6 62059/	7 00449/	4 50009/	E E1700/	E 45000/	6.02669/	C 000E0/		E 26550/	7.06270/	4.07520/	E 70000/	4 70000/	6 01700/	6 22270
	4.6505% 4.2083%	6.6395% 3.5032%	7.0244% 2.9410%	4.5900% 2.1540%	5.5178% 1.8540%	5.4523% 5.0614%	6.9366% 2.1708%	6.8805% 3.3496%		5.3655% 1.5652%	7.0637% 2.1626%	4.9753% 4.0433%	5.7883% 3.3631%	4.7829% 3.0724%	6.3172% 2.2004%	6.33379 2.09709
	1.6308%	1.0234%	2.1171%	0.2705%	0.3976%	1.0175%	1.1019%	1.9044%		1.0544%	1.0610%	2.3126%	1.0054%	1.4995%	0.5964%	0.62129
	6.7083%	5.3066%	5.2375%	4.2346%	5.1113%	4.1934%	5.7541%	5.6622%		5.4312%	5.5422%	6.3195%	4.4154%	4.1559%	2.4311%	2.46149
	2.7402%	3.2358%	4.8224%	1.0150%	3.5708%	4.5869%	4.7493%	5.1204%		4.1984%	3.8282%	3.5713%	4.5321%	3.2751%	5.5696%	5.5900
	0.0493%	0.4937%	-1.9469%	2.1365%	1.3441%	2.2117%	-0.8272%	0.5720%		0.5439%	-1.6435%	0.8611%	-0.0308%	1.0273%	-1.1063%	-1.0803
	-1.2145%	-1.4825%	-1.6935%	-2.1502%	-1.8532%	-0.1292%	-1.8254%	-1.0398%		-1.8220%	-1.9084%	-1.3283%	-1.6314%	-2.2078%	-1.8661%	-1.8410
	0.1017%	0.2449%	1.4486%	-0.0572%	-0.5519%	1.3305%	0.2576%	-1.2506%		0.1809%	1.2448%	1.4073%	-0.1034%	-0.0424%	-0.0085%	-0.1331
	-1.2014%	0.1648%	1.8565%	0.0025%	0.1348%	-0.3237%	-0.0614%	0.0693%		0.1943%	1.3258%	0.3036%	-0.4258%	0.2403%	0.0416%	0.0664
	2.8935%	3.1471%	1.2782%	4.6987%	4.1558%	2.2092%	2.6615%	2.9104%		3.5995%	2.0205%	4.5784%	2.6523%	2.1517%	1.1259%	1.1482
	7.2697%	5.4099%	7.2941%	1.8765%	4.2428%	4.9494%	5.7748%	6.0399%		4.9006%	7.2220%	1.9402%	5.4282%	4.3866%	4.3206%	4.3443
	-3.0784%	-4.3404%	-2.2397%	-1.5081%	-2.3825%	-5.8417%	-3.5203%	-2.9067%		-3.4101%	-2.6739%	-4.4179%	-3.2292%	-4.1335%	-3.1813%	-3.1548
	-1.9434%	-3.1276%	-4.2336%	-3.9583%	-4.2543%	-3.2289%	-3.0049%	-2.4489%		-3.1403%	-3.8831%	-3.6007%	-1.6115%	-2.8055%	-3.0999%	-3.0726
	-5.7701%	-8.6065%	-7.9072%	-5.7552%	-8.7350%	-8.1146%	-9.3829%	-11.1252%		-11.3460%	-8.5302%	-7.5455%	-10.0921%	-8.4012%	-8.3921%	-8.5073
	13.0082%	8.1980%	6.3375%	6.1564%	9.0481%	8.0876%	9.4051%	8.2270%		8.5805%	7.0593%	9.7522%	7.6656%	7.6597%	8.4188%	8.4409
	-2.1476%	-1.7372%	-1.6875%	-0.3601%	-1.4855%	-2.5444%	-1.7754%	-1.0799%		-0.8985%	-1.8134%	-1.4019%	-1.8115%	-2.8321%	-0.7630%	-0.7943
	4.7852%	0.9275%	2.6941%	-0.7873%	1.8374%	2.5915%	2.6878%	2.2426%		1.4107%	1.1066%	3.2573%	1.0542%	0.8501%	3.3423%	3.3649
	4.7800%	2.1531%	1.5414%	1.9513%	4.1415%	1.8050%	3.0550%	1.3011%		0.9135%	2.3084%	3.3715%	1.2302%	1.9061%	2.9281%	2.9517
	-5.5332%	-5.2198%	-5.3906%	-5.4067%	-4.2896%	-5.5967%	-5.7800%	-7.7365%		-5.5358%	-5.0166%	-3.0886%	-6.6616%	-5.2252%	-5.6027%	-5.5757
	-9.0408%	-4.4967%	-2.9663%	-3.6276%	-6.6135%	-5.7422%	-5.8456%	-6.2598%		-2.3855%	-3.0996%	-6.8380%	-4.9332%	-1.8885%	-6.0699%	-6.1305
	1.7133%	2.7820%	3.0959%	3.7991%	2.2645%	1.9821%	2.7893%	2.5580%		3.5209%	2.2338%	1.2680%	3.5892%	2.7214%	3.6602%	3.6823
	-13.9434%				-10.2012%			-8.4097%				-12.8631%				
			-11.8006%	-9.9943%		-16.0303%	-9.3551%	-9.2976%	-8.6000%			-12.5002%		-10.5086%		
	-1.2753%	-1.4797%	1.1564%	-1.6851%	0.5298%	-3.7265%	-2.0480%	0.2586%	-0.4705%	0.0599%	0.6161%	0.7202%	-0.8080%	-1.6931%	-3.2970%	-3.2729
	1.8837%	3.9422%	1.8582%	6.6641%	3.4213%	5.1918%	3.4903%	5.0443%	4.0013%	3.3006%	2.2050%	1.3859%	2.4306%	3.4368%	2.4651%	2.4875
	-4.3165%	-4.4900%	-8.9515%	0.6506%	-9.2394%			-9.9974%	-5.4962%	-7.3928%	-9.2596%	-3.9787%	-3.9898%	-2.4292%	-5.0920%	
	-9.2495%		-11.1323%	-7.3184%	-7.4503%	-10.3824% 6.7461%	-9.7564%	-9.2466%	-9.3278%		-10.5867%	-9.1961%	-9.9726%	-8.8350%	-11.4573%	
	11.2220% -3.2769%	7.1438% 0.0740%	11.3385% 6.2867%	4.9107% -0.7168%	5.8325% 1.5356%	5.7764%	8.3162% 4.0652%	10.2255% 3.5356%	7.1420% 4.8469%	7.7368% 2.9528%	12.2238% 5.9548%	8.4347% 4.4864%	7.5571% 3.0331%	6.7942% -1.2670%	7.6120% 4.7014%	7.6421
	8.8065%	7.5257%	9.0865%	6.3098%	7.0729%	8.9303%	4.0032% 8.8017%	8.5649%	7.5986%	7.0809%	8.1605%	4.4604%	7.0010%	6.4161%	9.5279%	9.5425
	-0.8971%	-0.1605%	1.3713%	0.7807%	-0.9446%	0.2778%	-0.9035%	-0.6526%	1.3879%	-0.5241%	1.2266%	-0.2783%	-0.1341%	-0.0666%	-1.1209%	-1.0944
	9.5336%	7.7147%	5.9547%	7.6172%	6.2341%	7.7761%	8.2452%	7.4664%	5.7675%	8.6079%	5.7808%	6.0011%	4.2129%	8.1060%	8.4331%	8.3077
	3.7887%	4.6492%	5.4624%	4.7205%	4.5079%	7.4601%	4.7910%	4.4184%	5.8146%	5.0654%	5.3876%	3.2205%	5.0165%	3.3793%	4.9365%	4.9620
	-0.0066%	1.7832%	1.5251%	1.8705%	1.7917%	1.3573%	0.8172%	1.5869%	2.1944%	1.3972%	0.7935%	2.1024%	1.1998%	0.8346%	0.4890%	0.5123
	5.2279%	3.2569%	3.3809%	2.0419%	4.3040%	3.4411%	4.0437%	4.3041%	1.4697%	3.9859%	3.7394%	2.1897%	3.8975%	2.7984%	4.5631%	4.5842
	0.8783%	0.1002%	1.4518%	-2.1018%	0.0741%	-1.8198%	1.1554%	1.0218%	-0.9454%	-0.1251%	1.6358%	1.6881%	-0.5453%	-1.6870%	0.3678%	0.3928
	4.6173%	3.7741%	3.1707%	1.2907%	3.1628%	2.0265%	3.1469%	1.8710%	2.4516%	2.9439%	3.0064%	2.5894%	2.8856%	2.7754%	3.8904%	3.9109
	-3.8455%	-2.8778%	-2.5585%	-3.0592%	-1.8767%	-3.3633%	-3.0016%	-3.0961%	-1.5811%	-5.9656%	-2.1757%	-4.2331%	-2.2801%	-2.2957%	-3.3425%	-3.4511
	1.7559%	1.0923%	1.8840%	1.2070%	0.4229%	2.1595%	1.4122%	0.9267%	1.0681%	1.0500%	1.7745%	0.4675%	0.6360%	1.4208%	-0.2141%	-0.1912
	7.1642%	6.3437%	4.4489%	4.3764%	6.1532%	5.1988%	5.6112%	7.4527%	4.7856%	6.6828%	4.7735%	6.5919%	6.3822%	5.4345%	7.1973%	7.2234
	-0.3429%	0.7121%	0.1005%	0.8134%	0.3831%	1.6575%	-0.5517%	0.6331%	0.8609%	0.4283%	-0.0189%	-0.1592%	1.0000%	-1.4588%	0.4676%	0.4928
	-5.1438%	-4.1331%	-4.0661%	-2.5958%	-3.9796%	-5.0168%	-4.3191%	-4.4267%	-2.1624%	-4.2977%	-3.8684%	-4.5392%	-4.9261%	-3.7410%	-4.6148%	-4.5871
	-2.8817%	-2.9750%	-3.1218%	-1.4841%	-1.6918%	-4.3680%	-4.3795%	-2.4604%	-2.4595%	-2.5974%	-3.1112%	-4.0546%	-3.0054%	-1.9081%	-2.8131%	-2.7851
	8.3012%	6.7941%	5.4911%	3.4684%	4.8655%	7.6439%	8.5667%	5.7860%	5.2815%	7.0702%	5.3841%	8.0307%	6.2639%	6.0016%	6.8303%	6.6900
	-3.7381%	-3.1035%	-2.5019%	-0.9819%	-2.7397%	-3.0221%	-2.7882%	-3.2493%		-2.8226%	-2.3986%	-2.7863%	-3.2097%	-2.5961%	-4.1974%	
	8.0002%	9.0216%	6.9796%	5.5641%	8.3096%	8.0102%	8.8725%	8.3718%	6.4702%	8.1452%	7.0694%	7.4235%	7.7368%	8.0432%	9.0667%	9.0895
	1.8803%	3.1042%	3.4103%	0.9625%	3.1157%	2.4198%	2.1523%	2.3764%	2.2112%	2.6340%	3.3697%	1.1163%	2.7589%	2.8431%	1.8045%	1.8260
	-0.5432%	0.1066%	-0.7024%	-0.3117%	0.3922%	-0.8130%	-0.7637%	1.2702%	0.8321%	0.8530%	-0.6065%	-0.4923%	0.6525%	-0.5671%	-0.5607%	
	5.6177%	5.8184%	5.5545%	4.2599%	3.9535%	5.6464%	4.7658%	5.2342%	4.6962%	4.6516%	5.2888%	4.8990%	4.5266%	5.0814%	5.0196%	
	-3.4591%	-2.8241%	-1.8076%	-2.2535%	-2.9899%	-3.4687%	-2.0988%	-2.8134%	-2.7372%	-3.6869%	-1.6756%	-2.6387%	-1.0218%	-2.2116%	-3.3272%	
	1.8731%	2.4227%	1.8044%	1.8701%	2.1331%	2.5626%	2.5379%	2.7582%	2.3206%	1.3281%	1.6294%	1.7535%	1.6905%	2.5280%	2.4267%	
	1.8544% -0.3624%	1.0556% 0.3927%	0.8578% 1.4126%	0.0177% 2.2096%	-0.0381% 2.6767%	-0.6638% 1.2855%	0.9614% 1.7175%	0.5311% 2.2308%	1.4184% 1.2708%	1.0437% 2.1046%	1.0164% 1.5894%	0.2618% 1.8814%	0.4354% 1.3327%	1.0799% 0.9479%	1.5296% 2.3008%	1.5647 2.3214
	-2.2579% -0.0281%	-0.0869% -1.7860%	-0.1352% -2.3604%	-0.5394% -2.0538%	-0.0072% -1.6546%	-0.8477% -0.5499%	0.1342% -2.1218%	0.3963%	-0.2594%	-0.1330% -1.4505%	-0.1165% -2.3901%	-0.4358% -2.7242%	-0.3062% -2.3715%	-0.1777% -1.7697%	-0.2171% -2.5213%	
	-0.0281%	-2.4828%		-2.0558%	-1.0340%	-0.3455%	-3.3641%	-2.1205%		-1.4303%	-2.6256%	-2.6574%	-1.7285%	-0.4815%	-3.9126%	
	0.7174%	-0.8415%	-1.1559%	-0.2844%	-0.0679%	-3.7278%	-0.8863%	-0.6904%		-0.9404%	-0.2436%	-1.0443%	-1.3545%	-0.3615%	0.7652%	0.7900
	-3.5773%	-3.5322%	-4.2302%	-2.7390%	-2.4625%	-3.5116%	-3.7858%	-3.3100%		-3.0314%	-4.4047%	-4.5046%	-1.0929%	-1.3095%	-3.6318%	
	5.7578%	8.4290%	7.4968%	5.4972%	9.0312%	6.7619%	8.9954%	8.3545%	5.9404%	7.2110%	7.4965%	5.8575%	8.1740%	6.3329%	9.3013%	9.3195
	3.0167%	-0.8552%	-0.4611%	-0.3971%	-0.6514%	-0.8678%	-0.6777%	-0.4693%	-0.3652%	-0.2456%	-0.3739%	-0.9587%	-1.5078%	0.6915%	-1.2860%	
	-0.2975%	0.3819%	1.3631%	1.5571%	0.2885%	1.2962%	1.6341%	1.5288%	1.2075%	1.0588%	1.2494%	1.1650%	0.4171%	-1.1979%	1.0157%	1.0378
Mean	1.3250	1.1011	1.3197	1.2935	1.1444	1.0002	1.1408	1.2455	0.9580	1.1296	1.1973	1.0346	1.0880	1.0394	1.3477	1.27
Median	1.5141	0.9754	1.4884	0.9923	1.3267	1.6575	1.2013	1.2960	1.2075	1.0588	1.4184	1.2165	0.9086	1.0982	1.1259	1.08
	5.3478	4.4932	4.6348	3.6946	4.2282	5.0343	4.6677	4.5791	3.9023	4.4459	4.6269	4.4131	3.9734	4.1546	4.7706	4.630

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

PSGG[CL] -3.7695%		CAEF[CL]	-2.1666%	INDI[CL]	GDBT[CL] -3.6817%	GDSE[CL]		STCA1[CL]	-4.0678%	ATEF[UL]	GDBK[CL]		WIEF[CL]	27FB3[CL]	WUEF[CL
-3.4761%			4.8669%		5.7023%	3.0711% 0.8407%			2.6094%		5.7073%	1.9109% 1.9110%			
1.0846%			1.0941%		0.2534%	3.4036%	4.9426%		1.2715% 2.9491%		1.1610% 0.9122%	1.6724%			
6.5235%			0.1510% 2.5885%		4.7586% 2.2362%	1.0132%			0.2624%		0.5122%	0.2775%			
-4.8148%			-5.5509%		-3.8441%	-5.0299%			-5.9618%		-3.5578%	-5.4486%			
-7.0721%			-12.6725%		-9.9669%		-10.6015%		-10.4685%			-10.7354%			
4.8716%			2.0255%		4.0574%	2.0609%			1.5540%		2.9233%	2.8213%			
2.9427%			-0.6870%		0.7153%	-0.9860%			-1.7452%		-1.3064%	-1.4816%			
-0.1877%			-0.3635%		2.4154%	0.8924%	3.1588%		0.6735%		-0.1521%	0.3068%			
4.8280%			1.2003%		3.7234%	4.0942%			3.7127%		2.2433%	2.6187%			
-4.0968%			-2.2500%		-2.6438%	-4.2796%			-5.0391%		-3.6461%	-3.0629%			
-0.2605%			-5.9775%		-5.1336%	-4.7547%			-5.8839%		-5.3946%	-4.3559%			
-0.3139%			-5.2948%		-3.3242%	-3.9490%			-4.1137%		-4.2609%	-4.0031%			
-10.0499%			-7.9621%		-7.1131%	-8.9856%			-6.8962%		-5.9709%	-6.5182%			
0.9476%			-1.7055%		0.7382%	0.3690%	4.1274%		-0.4446%		1.2640%	-1.0906%			
10.9209%			14.2351%		8.7268%		7.8364%		12.4543%		10.3632%				
2.1386%			-2.0392%		-0.5660%	-0.7139%			-2.3829%		0.6879%	-1.7838%			
7.3227%			3.1181%		3.4620%	4.8743%			3.3380%		2.1676%	3.2865%			
4.1984%			4.9094%		3.2482%	2.7684%			4.1160%		1.4174%	4.3542%			
-2.3771%			-2.2304%		-1.0225%	-1.0892%			-2.5095%		-1.6536%	-0.6854%			
8.8333%			8.2947%		7.3424%	8.0577%	5.1367%		10.1023%		7.5832%	8.0491%			
3.8418%			-1.1273%		1.0147%	2.3784%	3.0515%		-0.9207%		0.6319%	0.0779%			
8.2494%			7.0109%		7.3197%	6.7352%			7.3616%		8.0690%	6.5347%			
3.6078%			3.3629%		1.7057%	2.0106%			4.3203%		2.1352%	3.7522%			
0.6885%			0.4066%		1.5573%	-0.4022%			0.0072%		0.2976%	-0.6816%			
0.1393%			-1.5968%		-0.3308%	0.4624%			-1.1543%		-1.7523%	-0.0907%			
-0.2234%			-1.8189%		-2.9326%	-1.1565%	0.9168%		-2.0655%		-0.3930%	-0.8402%			
1.0141%			0.0738%		0.1083%	-0.2437%			-0.5515%		-1.6794%	-0.3464%			
-0.2269%			-1.6054%		0.4366%	0.0715%			-1.5513%		-0.1504%				
1.5269%			-1.0560%		-0.6443%	0.1791%			0.7155%		-1.2256%	-0.5236%			
7.5965%			9.3387%		7.2953%	7.2741%			9.6440%		7.9162%	7.4037%			
5.9059%			5.2499%		6.9954%	5.8541%			3.6120%		5.4989%	5.3904%			
3.1116%			-0.2673%		3.7463%	3.7318%	6.5520%		-0.0665%		2.6269%	2.6262%			
8.2788%			6.6830%		8.9355%	8.1640%	7.2277%		6.9103%		9.4075%	7.2163%			
1.8057%			1.9531%		3.2230%	4.1876%			1.9553%		3.3286%	3.3924%			
0.9199%			0.1946%	3.0411%		-1.2870%			1.2276%		0.2403%	0.0731%			
4.7718%			5.2943%	3.4825%		2.8854%	2.1402%		5.2311%		3.1609%	4.5199%			
-0.4257%			-0.4274%			-2.2504%			-1.6627%		-1.2994%				
-4.1565%		-2.4095%	-5.0373%	-2.9253%		-3.2927%			-4.6645%		-3.3026%	-3.4718%			
8.2054%	6.8843%		9.1936%	7.8533%		6.7327%	4.6654%		9.4673%		7.1638%	7.0040%			
2.1288%			2.1751%	0.7246%		2.6758%			1.7208%		1.6302%	2.2588%			
9.4582%			5.9884%	7.2677%		7.6339%			7.7443%		7.1117%	7.9179%			
2.3650%			1.1316%	2.3837%		1.4822%			1.0603%		1.0224%	1.3040%			1.1447
9.4301%			9.0390%	7.1926%		6.9700%			7.9445%		7.9917%	8.1264%			6.4383
-1.0327%			-2.7858%	-4.7521%		-2.1828%			-2.6916%		-2.4056%	-3.0109%			-1.8272
2.9817%			3.1198%	3.8776%		2.2756%			3.2751%		3.0803%	2.9755%			1.0110
7.5603%			6.9262%	6.3225%		7.4270%			7.0120%		6.4938%	8.2202%			6.8789
11.3906%			7.3382%	9.7362%		8.3229%			8.9858%		7.8957%	7.7031%			8.6094
-1.1277%			-2.5904%	0.6638%					-2.0014%		-0.5694%	-0.6930%			-0.9271
5.8678%			6.0611%	5.1071%		5.5313%			4.7315%		4.3883%	4.8446%			3.9859
2.4638%			3.5935%	2.9848%		2.5486%			3.5039%		3.0756%	2.0277%			0.2677
-4.7224%			-2.4797%	-2.2428%		-3.9253%			-3.4716%		-3.7673%	-5.6835%			-5.9438
2.5786%			5.3664%	1.5625%		0.2710%			4.1680%		1.6117%	0.9273%			-2.6191
-1.1114%			-2.9565%	-3.0829%		-0.9290%			-1.3437%		-2.4813%	-1.7997%			-0.1454
3.2027%			4.9603%	3.9749%		4.4400%			4.8313%	2.7874%		4.7739%			4.8920
0.6566%			2.3479%	1.4538%		2.1525%		0.2389%	4.8313%		3.0131%	4.7739%			4.8920
5.4584%			3.3408%	2.4346%		4.4993%		5.2646%	3.6125%		3.5274%	6.0288%			4.2765
J.4J0470	4.400070	3.6069%	3.1985%					5.1786%		4.4689%					3.29479

 Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011 (continued)

	3.8585%	5.7060%	5.1128%	4.1743%	5.7789%	3.6479%	4.7520%	6.8668%	7.8575%	3.7910%	5.5086%	3.0129%	5.5834%			4.7402%
	4.4291%	2.5458%	2.1522%	0.8274%	1.5268%	2.7571%	2.2722%	2.6675%	5.4108%	1.8569%	3.8867%	2.7524%	2.2683%			4.6973%
	1.0493%	1.1277%	0.7964%	1.3277%	1.3566%	1.2428%	1.4555%	0.0776%	1.3108%	1.3649%	1.9530%	1.6009%	0.5870%			1.1706%
	2.7550%	5.7062%	5.2564%	6.0670%	5.7093%	5.3293%	4.0989%	2.8028%	7.9608%	5.2645%	3.8497%	5.3356%	5.0869%			4.8981%
	3.8423%	4.0658%	4.5786%	3.4425%	4.4156%	2.9289%	3.7368%	4.1301%	7.1829%	2.9373%	2.2906%	2.9753%	4.1522%			3.2415%
	0.9855%	0.3712%	0.4684%	1.3860%	0.6276%	1.4586%	0.9880%	-1.4519%	-0.7454%	1.7087%	-0.2572%	1.3127%	-1.0106%			-0.0604%
	-0.9495%	-2.0849%	-1.4289%	-0.8235%	-1.2527%	-0.5067%	-2.2374%	-3.1019%	-0.5930%	-0.4440%	-0.9646%	-2.0205%	-3.2647%			0.30259
	-0.6622%	0.3644%	0.3393%	0.2302%	0.0382%	0.9473%	-0.2430%	-1.6274%	-1.3191%	0.8949%	0.7872%	0.5750%	0.3925%			1.64329
	-0.8199%	-0.3910%	0.5226%	0.5010%	-0.4881%	-1.1995%	0.1932%	-2.1339%	1.2327%	0.5913%	0.8372%	0.0200%	-0.5512%			0.13119
	0.6095%	3.6068%	2.6451%	5.6619%	6.6793%	5.2889%	2.1023%	-1.3950%	1.6200%	2.7739%	2.5637%	5.4192%	3.4832%			3.3450%
	3.9500%	5.3796%	5.7746%	3.8491%	5.4963%	6.1333%	5.3779%	3.9588%	5.1052%	4.3440%	3.7098%	7.2882%	5.5624%			6.93109
	-2.7806%	-3.4085%	-3.0700%	-2.3670%	-2.3541%	-3.1664%	-4.1442%	-5.7752%	-0.8118%	-1.9420%	-2.9742%	-4.1499%	-3.5558%			-4.21359
	-2.7110%	-3.3332%	-3.1624%	-4.5440%	-2.4158%	-2.5859%	-2.8307%	-2.9871%	-0.8851%	-4.8020%	-3.3391%	-1.1633%	-4.1804%			-2.0967%
	-12.3411%	-9.3211%	-8.8868%	-5.1107%	-8.5524%	-7.3953%	-8.9167%	-8.5596%	-10.7692%	-6.1403%	-7.4268%	-9.8602%	-9.5395%			-7.66919
	8.7650%	8.2768%	8.6009%	10.2305%	10.5088%	9.5688%	7.5845%	-0.0682%	7.0337%	10.6888%	6.7229%	8.9469%	8.8799%			9.41739
	-4.8806%	-1.5423%	-2.1733%	-0.9977%	-1.4700%	-0.9776%	-2.8627%	-3.4719%	-1.5250%	-1.5529%	-2.2793%	0.2180%	-1.9297%			-3.27379
	2.0683%	2.4510%	2.8157%	3.3096%	2.6017%	0.8409%	1.9946%	-0.0383%	1.6724%	3.8875%	-1.8406%	2.2611%	1.9138%			3.9095%
	-0.5699%	2.6137%	1.8291%	4.3172%	4.7963%	2.3709%	1.8524%	-0.5122%	1.2863%	4.2604%	0.1648%	3.3968%	1.9514%			3.69509
	-7.2041%	-5.2469%	-7.4661%	-3.0269%	-5.2910%	-5.8355%	-5.2439%	-4.9316%	-9.0103%	-3.9879%	-5.9812%	-5.2436%	-5.4863%	-4.0712%		-6.61579
	-0.5042%	-7.5563%	-3.6903%	-11.4945%	-11.1406%	-9.7067%	-3.0356%	4.0081%	-4.1670%	-9.6635%	0.0955%	-9.7245%	-4.3917%	-3.1751%		-4.92449
	5.3698%	2.7962%	1.1905%	0.6118%	0.7409%	2.5371%	2.6830%	6.0015%	-0.0061%	0.3288%	3.5240%	0.9707%	1.5990%	3.5281%		3.70939
	-14.7044%	-10.6768%	-8.1860%	-15.2071%	-11.0991%	-16.6174%	-10.1965%	-1.8216%	-6.4466%	-13.7077%	-2.9181%	-14.8443%	-12.1113%	-6.0840%		-10.18819
	-11.8963%	-9.6640%	-4.2970%	-11.4139%	-6.8212%	-19.0216%	-9.3585%	-3.5890%	-6.4795%	-12.5038%	-6.8163%	-13.5229%	-12.0162%	-4.2965%	-10.3532%	-15.22089
	-4.2820%	-0.3502%	-0.3861%	2.2703%	-1.7455%	-3.9992%	-2.8181%	0.3094%	1.5393%	1.9746%	2.1082%	-4.5620%	1.4919%	-0.5815%	-0.6233%	-3.31129
	3.1364%	2.6959%	3.3446%	1.1804%	2.2173%	1.8722%	1.6869%	5.1780%	5.2836%	1.2808%	3.7625%	0.7699%	3.5050%	1.6963%	1.5030%	2.50789
	-3.2378%	-9.6628%	-4.0953%	-8.8539%	-1.5547%	-7.2986%	-5.1044%	-2.6066%	-13.5952%	-10.0391%	-3.8986%	-10.7492%	-9.2303%	-11.8716%	-4.4188%	-3.37819
	-7.8253%	-7.9818%	-9.4298%	-9.5773%	-7.0847%	-11.2080%	-7.8950%	-7.5424%	-9.7088%	-9.2864%	-8.2719%	-8.6132%	-8.4494%	-9.1241%	-8.8192%	-7.14989
	6.6593%	7.0721%	7.8696%	11.7564%	4.7625%	9.0261%	5.6227%	1.7310%	10.6448%	10.8933%	5.7706%	9.4825%	10.7198%	6.0902%	8.7492%	7.29099
	4.5667%	1.6605%	3.8931%		-2.8189%	3.4767%	2.7868%	4.2341%	3.8445%	1.7674%	0.6151%	0.8793%	4.8525%	2.9786%	-2.6079%	1.47829
	10.7407%	7.8144%	7.8673%	10.8929%	7.4466%	8.7065%	7.1500%	3.5422%	10.2827%	10.1373%	5.0981%	7.7274%	7.4874%	6.1267%	6.5681%	7.18549
	1.6607%	-0.5950%	-1.0197%	-2.5225%	-2.0037%	-0.7639%	0.2337%	0.9720%	-2.1078%	-3.2270%	0.9192%	-1.0779%	-0.9159%	1.1521%	-0.0830%	-0.4997%
	9.9315%	6.1348%	8.5967%		7.8127%	3.4868%	5.1355%	4.8128%	4.5799%	7.3399%	7.9831%	4.9707%	5.6436%	7.4954%	9.6679%	8.05879
	4.7832%	4.3393%	3.7571%	4.0368%	3.7436%	3.1591%	5.0369%	3.0061%	4.9835%	4.3880%	5.6531%	2.9516%	5.2223%	4.5232%	2.5527%	3.74149
	0.3105%	1.0800%	0.6354%	1.1574%	0.1103%	1.8218%	1.1846%	4.2482%	1.6418%	0.1285%	1.8798%	1.5900%	1.5890%	1.1881%	0.3797%	2.02539
	4.5979%	3.2881%	3.7009%	4.7234%	3.7507%	3.1840%	3.8629%	3.5912%	3.1202%	5.7788%	3.5132%	3.1731%	2.8364%	3.1455%	4.2030%	0.85479
	-0.7096%	1.3629%	-0.2524%		1.3367%	0.3567%	-0.2666%	-1.3348%	-0.4312%	2.5384%	-0.2564%	-0.3858%	-0.1673%	-0.0104%	-0.6151%	
	4.9980%	3.3701%	2.3571%	2.5076%	2.5796%	3.7182%	2.9859%	5.0163%	2.0654%	2.5285%	4.2744%	3.8211%	3.3214%	3.2797%	3.7236%	4.02459
	-4.2044%	-3.1301%	-3.3112%	-4.8490%	-2.7277%	-3.5784%	-2.0328%	-1.2593%	-2.1088%	-4.6377%	-0.6696%	-2.8800%	-3.8340%	-0.8495%	-2.2107%	-4.57839
	-0.4695%	0.9681%	0.9978%		-0.9662%	1.3018%	1.2812%	0.8809%	-0.2493%	0.4873%	1.1238%	1.3958%	0.2837%	0.4386%	0.7502%	
	5.0479%	7.1961%	6.0021%		7.2849%	8.1573%	5.7614%	4.3541%	7.9567%	8.0629%	6.0261%	7.2322%	7.5205%	7.1697%	6.8606%	5.33199
	0.8813%	0.5633%	0.9695%	0.0625%	-0.2487%	-0.2978%	-0.0098%	0.0108%	0.8668%	-0.1890%	-1.7416%	-0.2802%	0.8414%	-0.1990%	-1.6631%	0.35759
	-1.7044%	-3.5513%	-3.9519%		-5.8110%	-4.4317%	-4.1321%	-1.6069%	-4.4146%	-5.1335%	-4.3641%	-4.4969%	-4.6209%	-5.3456%	-4.5540%	-4.46379
	-2.9158%	-3.5697%	-2.2022%		-3.2330%	-3.0922%	-2.2614%	0.3266%	-2.9027%	-3.6218%	-1.3398%	-2.4918%	-2.7600%	-1.4044%	-2.0194%	
	5.3308%	7.2707%	5.8121%		5.3870%	6.6922%	4.7627%	5.0434%	6.2582%	7.2620%	5.4788%	5.6482%	5.9529%	5.9823%	6.7893%	
	-3.4269%	-3.2250%	-4.2421%		-3.5904%	-3.5284%	-2.8839%	-2.0050%	-3.6637%		-2.7170%	-2.7491%	-3.4120%	-3.4751%	-3.4532%	
	9.4414%	9.0882%	7.1982%		9.4490%	9.2633%	7.8545%	7.1428%	8.2081%	9.2222%	7.4654%	8.3320%	9.3693%	7.7176%	9.0152%	
	4.7078%	1.8081%	4.8645%		1.0526%	1.7675%	3.2685%	1.8413%	2.1779%	3.9122%	1.3076%	1.8259%	1.8419%	3.6746%	2.0225%	
	0.6506%	0.8258%	0.4119%		0.5203%	0.6230%	0.1401%	0.8335%	0.6964%	-0.5817%	1.1687%	0.6309%	0.8026%	0.2494%	1.1101%	
	6.7527%	4.6720%	4.2744%		5.0065%	5.8527%	4.2602%	3.6018%	4.3517%	6.4749%	3.6349%	4.3681%	5.3297%	5.3922%	5.3590%	
	-1.8323%	-3.4530%	-3.6313%		-3.1871%	-4.4396%		-5.4143%	-1.3505%	-3.3968%	-0.3625%	-2.3994%	-4.0476%	-1.6605%	-3.2834%	
	1.9213%	1.2915%	0.1074%		1.8517%	1.9409%	1.4109%	0.4972%	3.0722%	2.7156%	1.4687%	2.1308%	0.6580%	1.9971%	1.4110%	
	1.0610%	1.4976%			1.6877%	2.8204%	1.2797%	1.2916%	0.4557%	0.4726%	0.7804%	2.1308%	1.2423%	0.6050%	1.5263%	
	2.3065%	2.0799%	1.5625%		1.5677%	2.0506%	1.8604%	2.6526%	1.5442%		-1.5831%	2.3896%	2.2046%	2.1801%	-0.6146%	
	-1.0031%	-0.0635%			-0.3934%	-0.5216%		0.7411%	0.4761%		0.6076%	0.1952%	-0.7229%	-0.4006%	-0.0140%	
	-1.6453%	-1.6850%			-2.0137%	-0.7423%		-0.7303%	-2.0792%	-1.9977%		-1.0950%	-1.6662%	-1.6169%	-1.6681%	
		-3.1552%			-2.0137%	-0.7423%		0.6428%	-2.0792%		-1.4850% -1.3555%	-1.0950%		-0.8509%	-1.0081%	
	-0.7929%	-0.7892%				1.3958%		-0.3140%	-4.0009%		-0.1374%			0.1515%	-0.3398%	
	-2.2582%				0.4123%							0.3867%	-0.6552%			
	-1.1848%	-4.2597%			-3.2763%	-3.9608%	-2.9339%	-0.8945%	-3.2770%	-3.9201%		-1.4726%	-4.3763%	-0.9661%	-3.8472%	
	6.7110%	9.1535%	7.9210%		7.2486%	9.1222%	8.1758%	4.7768%	7.6980%	9.2391%	6.7965%	8.5303%	8.9830%	6.8968%	8.7297%	
	0.7600%	-0.5469%	-0.5579%		-1.1126%	0.0744%		0.4230%	0.2892%	1.4607%	0.1703%	-0.1222%	-1.1471%	-0.6984%	-0.8698%	
	0.4414%	1.4898%	2.4457%	-1.0505%	-0.1478%	-0.7449%	0.6018%	1.1767%	2.2079%	-1.8496%	1.4575%	-0.5013%	0.8879%	1.2787%	1.3499%	-0.08169
	1 4000	1.007.1	1 1 1 1 1	0.0770	1.0000	1 0070	1 0001	1 0000	0.0405	0.0000	0.0000	0.0070	0.0402	0.000	0.7445	0 700
Mean	1.4628	1.0654	1.1442		1.0630	1.0272	1.0264	1.0382	0.9105	0.9860	0.9803	0.9048	0.9482	0.6571	0.7116	
Median Chandrad Deviation	1.0728	1.2462	0.9695		1.1946	1.4382	1.2321	0.8903	1.0498	1.1642	0.9192	0.9966	0.9076	0.4386	-0.0830	0.854
Standard Deviation	4.8405	4.4705	4.2695	5.1244	4.5150	5.0519	4.2569	3.8134	4.9391	5.0533	3.5736	4.7159	4.7491	4.2752	4.5746	4.6052

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

DIEF[CL]	MINEF[CL]	PBEB2[CL]	MHGE[CL]	HUEF[CL]	AFEA1[CL]	FIEU[CL]	WISSR[CL]	PEAB4[CL]	NFEAZ[CL]	UNUA[CL]	VAGE[CL]	WILAG[CL]	BCEAZ[CL]	STSEA[CL]	STNA
											-3.1441%				
											6.3137%				
											1.7688%				
											7.7580%				
											2.8113%				
											9.8160%				
											-2.9050%				
							1.9261%				2.5234%				
							5.1870%				7.1755%				
							7.8918%				7.4282%				
							0.4842%				-1.0863%				
		4.3620%					5.3263%				4.8082%				
		1.8605%					0.8749%				4.1174%				
		-4.6339%					-5.3633%				-2.7805%				
		2.5877%					0.9249%				1.7850%				
		-0.9608%					-0.5165%				-1.7015%				
		4.6190%		4.2695%			4.5809%				4.0191%				
		1.8602%		0.7841%			0.5685%				1.2816%				
		4.8788%		4.5930%		2.3824%	1.9110%				3.7834%				

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

2.: 0.: 4.: 2.: 1.: 2.: 2.: -0.: -0.: -0.: -0.: 5.: 0.: 5.: 0.: -1.: Mean	.0218% .2294% .8534% .1038% .3420% .3420% .5895% .3278% .9653% .3524% .8526% .9836% .2024%	-0.0817% -4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.6814% -1.5117% -2.0050% 7.5771% 0.1008% 0.2417 -0.0059	-0.8947% -4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076% -2.1451% 5.9779% -0.5988% 0.9983% -0.6540 0.8325	0.6347% -4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -0.1280% 0.9534% -3.4435% 9.2168% 0.65976% -0.6180 1.1889	-5.1619% -2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961% -3.7174% 10.6139% -1.1971% -0.2258% 0.6375 0.9974	-3.9796% -2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.2090% -0.5512% -0.2090% -0.8103% -1.7624% 4.1623% 8.3300% -0.5753% 0.6062% -0.4157 -0.1417	-3.5149% -2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.945% -1.8437% 0.1755% -2.1346% 4.2495% -0.5024% -0.0895% -0.7379 0.5065	-6.0944% -1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155% 0.3199% -1.4977% -3.1496% -0.5079% 9.4366% -1.1518% 0.5158% 0.6945 0.9791	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976% 0.0497% -4.2524% 8.4902% -0.5940% 1.1583%	-1.2882% -0.3278% 2.0643% 2.0643% 0.6751% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2504% -0.2504% 2.1143% 2.1708% 0.2749% 0.3782 0.3782 0.3675	-5.6904% -3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641% -4.0896% 9.0536% 1.2871% -1.6288% 0.3135 -0.1142	-3.6833% -4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745% -0.1653% -1.0986% -1.6050% -1.5897% -3.4374% 6.1717% -0.0535% 2.9348% 1.2715 1.7436	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267%	-3.2674% -1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826% 0.3064% 5.4959% 0.6156% 0.7206% 0.8332 0.6674	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461% -2.4278% 6.4829% -0.2700% 0.9245% -0.0433	8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200 -4.134 6.294 1.141
2.: 0.: 4.: -1.: 2.: 1.: 2.: -0.: -2.: -1.: 0.: -0.: 5.: 0.: -1.:	1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524% .8526% .9836% .2024% .5149% .6209% .4749% .9256% .1665%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.6814% -1.5117% -2.0050% 7.5771% -0.7007% 0.1008%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076% -2.1451% 5.9779% -0.5988% 0.9983%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -0.1280% -1.0397% -1.8782% 0.9534% -3.4435% 9.2168% -0.8680% 0.5976%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961% -3.7174% 10.6139% -1.1971% -0.2258%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.2590% -0.8103% -1.7624% -1.4483% -4.1623% 8.3300% -0.5753% 0.6062%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437% 0.1755% -2.1346% 4.2495% -0.5024%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496% -0.5079% -3.7459% 9.4366% -1.1518% 0.5158%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976% 0.0497% -4.2524% 8.4902% -0.5940% 1.1583%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574% -0.5036% -0.2501% 2.1143% 2.1708% 0.2749% 0.4329%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641% -4.0896% 9.0536% 1.2871% -1.6288%	-4,7814% 7,2240% -4,4287% 9,9137% 4,0276% 0,1681% 4,9843% -3,4029% 1,9227% 1,1702% 2,0745% -0,1655% -1,0986% -1,6050% -3,4374% 6,1717% -0,0535% 2,9348%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849% -0.3172% 8.7725% -0.8291% -0.4777%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826% -0.3064% 5.4959% 0.6156% 0.7206%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461% -2.4278% 6.4829% -0.2700% 0.9245%	-3.394 4.588 -3.663 8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200 -4.134 6.294 1.141 0.525
2.: 0.: 4.: -1.: 2.: 1.: 2.: -0.: -2.: -1.: 0.: -0.: 5.: 0.: 0.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .636% .5895% .3278% .9653% .3524% .8526% .9836% .2024% .5149% .6209% .4749% .9256%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.6814% -1.5117% -2.0050% 7.5771% -0.7007%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076% -2.1451% 5.9779% -0.5988%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397% -1.8782% 0.9534% -3.4435% 9.2168% -0.8680%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961% -3.7174% 10.6139% -1.1971%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.2590% -0.8103% -1.7624% -1.4483% -4.1623% 8.3300% -0.5753%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437% 0.1755% -2.1346% 4.2495% -0.5024%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496% -0.5079% -3.7459% 9.4366% -1.1518%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976% 0.0497% -4.2524% 8.4902% -0.5940%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574% -0.5036% -0.2501% 2.1143% 2.1708% 0.2749%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641% -4.0896% 9.0536% 1.2871%	-4,7814% 7,2240% -4,4287% 9,9137% 4,0276% 0,1681% 4,9843% -3,4029% 1,9227% 1,1702% 2,0745% -0,1655% -1,0986% -1,6050% -3,4374% 6,1717% -0,0535%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849% -0.3172% 8.7725% -0.8291%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826% -0.3064% 5.4959% 0.6156%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461% -2.4278% 6.4829% -0.2700%	-3.394 4.5899 -3.663 8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200 -4.134 6.294 1.141
2.: 0.: 4.: -1.: 2.: -0.: -2.: -1.: -0.: -2.: -1.: 5.:	1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524% .8526% .9836% .2024% .5149% .6209% .4749%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.6814% -1.5117% -2.0050% 7.5771%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076% -2.1451% 5.9779%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397% -1.8782% 0.9534% -3.4435% 9.2168%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961% -3.7174% 10.6139%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.25512% -0.2090% -0.8103% -1.7624% -1.4483% 8.3300%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437% 0.1755% -2.1346% 4.2495%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496% -0.5079% -3.7459% 9.4366%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976% 0.0497% -4.2524% 8.4902%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574% -0.5036% -0.2501% 2.1143% 2.1708%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641% -4.0896% 9.0536%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745% -0.1653% -1.0986% -1.6050% -3.4374% 6.1717%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849% -0.3172% 8.7725%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826% -0.3064% 5.4959%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461% -2.4278% 6.4829%	-3.394 4.589 -3.663 8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200 -4.134 6.294
2.: 0.: 4.: -1.: 2.: 2.: -0.: -2.: -1.: 0.: -0.: -0.: -0.:	1283% .5417% .0218% .2294% .8534% .1038% .3420% .3420% .5895% .3278% .9653% .3524% .8526% .9836% .2024% .5149% .6209%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.5117% -2.0050%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076% -2.1451%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397% -1.8782% 0.9534% -3.4435%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961% -3.7174%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.5512% -0.2090% -0.8103% -1.7624% -1.4483% -4.1623%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437% 0.1755% -2.1346%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496% -0.5079% -3.7459%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976% 0.0497% -4.2524%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574% -0.5036% -0.2501% 2.1143%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641% -4.0896%	-4,7814% 7,2240% -4,4287% 9,9137% 4,0276% 0,1681% 4,9843% -3,4029% 1,9227% 1,1702% 2,0745% -0,1653% -1,0986% -1,6050% -3,4374%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849% -0.3172% -2.9773%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826% -0.3064%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461% -2.4278%	-3.394 4.589 -3.663 8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200 -4.134
2.: 0.: 4.: -1.: 2.: 2.: -0.: -2.: -1.: 0.:	.1283% .5417% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524% .8526% .9836% .2024% .5149% .5149%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849% -1.6814% -1.5117%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796% -0.5076%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397% -1.8782% 0.9534%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180% -0.3961%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.5512% -0.2090% -0.8103% -1.7624% -1.4483%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437% 0.1755%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496% -0.5079%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% 0.0497%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574% -0.5036% -0.2501%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531% -3.3630% -0.3641%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745% -0.1653% -1.0986% -1.6050% -1.5897%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849% -0.3172%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166% 0.5826%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222% -2.1461%	-3.394 4.589 -3.663 8.559 3.076 -1.105 5.782 -5.928 -1.594 1.079 2.497 -0.490 0.325 -2.637 -0.200
2.: 0.: 4.: -1.: 2.: 1.: 2.: -0.: -0.: -1.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524% .8526% .9836% .2024%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% 2.0861% -2.9003% 2.0861% 2.3683% 0.364% -1.9849% -1.6814%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851% -1.6796%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397% -1.8782%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669% -0.3513% -2.0326% -2.7180%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.5512% -0.2090% -0.8103% -1.7624%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945% -1.8437%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 0.3222% 2.4155% -0.3199% -1.4977% -3.1496%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216% -1.6976%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.0601% -0.2667% 0.6493% -0.2574% -0.5036%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -3.3630%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745% -0.1653% -1.0986% -1.6050%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210% -3.0849%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518% -1.0166%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060% -2.6222%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92 -1.59 1.07 2.49 -0.49 0.32 -2.63
2.: 0.: 4.: -1.: 2.: 1.: 2.: -0.4 -0.4 -2.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524% .8526% .9836%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683% 0.0364% -1.9849%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965% -0.3349% -1.5851%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557% -0.1280% -1.0397%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 0.3738% 0.6669% -0.3513% -2.0326%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.5512% -0.2090% -0.8103%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173% -0.9107% -1.9945%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 0.3222% 2.4155% -0.3199% -1.4977%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853% -0.4366% -1.1216%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.0601% 0.1661% -0.2667% 0.6493% -0.2574%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104% -0.7126% -2.3531%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745% -0.1653% -1.0986%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370% -0.4267% -2.4210%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882% 0.6491% -1.9518%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533% 0.1977% -1.4060%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92 -1.59 1.07 2.49 -0.49 0.32
2.: 0.: 4.: -1.: 2.: 1.5 2.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278% .9653% .3524%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808% 2.3683%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966% 0.3965%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394% 2.4557%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738% 0.6669%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812% -0.5512%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730% 2.7173%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222% 2.4155%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995% -0.1853%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601% -0.2667% 0.6493%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515% 1.6104%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702% 2.0745%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317% 1.6370%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857% 2.3882%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882% 1.7533%	-3.394 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92 -1.59 1.07 2.49
2.: 0.3 4.: -1.; 2.: 1.5	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .3420% .1636% .5895% .3278% .9653%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861% -0.3808%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471% 1.3966%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052% 1.2394%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513% 0.3738%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936% 1.2812%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391% 0.8730%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802% 0.3222%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733% 2.3995%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557% 0.5515%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227% 1.1702%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503% 0.7317%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515% 0.6857%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207% 0.0882%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92 -1.59 1.07
2.: 0.: 4.: -1.: 2.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895% .3278%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003% 2.0861%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542% 1.7471%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603% 1.5052%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461% 2.2513%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740% 2.2936%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271% 1.4391%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515% 2.6802%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028% 0.9733%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493% 0.0601%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186% 3.0557%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029% 1.9227%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722% 1.3503%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044% 1.1515%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619% 1.2207%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92 -1.59
2.1 0.3 4.1 -1.5	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636% .5895%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473% -2.9003%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599% -2.4542%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530% -3.5603%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321% -2.2461%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786% -3.3740%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987% -2.4271%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940% -3.3515%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884% -3.7028%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743% 0.5493%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651% -2.3186%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843% -3.4029%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759% -3.4722%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995% -0.6044%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035% -0.7619%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78 -5.92
2.1 0.1 4.1	.1283% .5417% .0218% .2294% .8534% .1038% .3420% .1636%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483% 4.9473%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748% 4.9599%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313% 4.5530%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631% 5.3321%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417% 4.5786%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539% 4.8987%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309% 4.6940%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598% 4.9884%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312% 0.3743%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306% 6.5651%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681% 4.9843%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574% 4.4759%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897% 2.1995%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977% 4.3035%	-3.39 4.58 -3.66 8.55 3.07 -1.10 5.78
2.: 0.:	.1283% .5417% .0218% .2294% .8534% .1038% .3420%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314% -0.0483%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384% 0.3748%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576% 1.3313%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244% 1.5631%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322% -0.1417%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781% 0.2539%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352% 1.1309%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530% 0.5598%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223% 0.6312%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072% -1.0306%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276% 0.1681%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501% 0.2574%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016% 0.9897%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988% 0.4977%	-3.39 4.58 -3.66 8.55 3.07 -1.10
2.:	.1283% .5417% .0218% .2294% .8534% .1038%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763% 2.2314%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021% 0.9384%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003% 3.5576%	-2.7891% 5.9111% -3.3682% 9.0328% 3.1244%	-2.8842% 6.7105% -3.4520% 8.3732% 2.1322%	-2.1031% 2.9712% -1.2306% 5.3917% 1.6781%	-1.8421% 6.0934% -4.6111% 9.9240% 4.2352%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198% 1.7530%	-0.3278% 2.0643% -0.6751% 3.0008% 0.6223%	-3.7946% 8.3225% -3.7965% 8.7359% 2.2072%	-4.7814% 7.2240% -4.4287% 9.9137% 4.0276%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783% 3.7501%	-1.8257% 4.0333% -2.4560% 5.7780% 2.8016%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173% 2.7988%	-3.39 4.58 -3.60 8.59 3.07
	.1283% .5417% .0218% .2294% .8534%	-4.5905% -3.0326% 6.3432% -3.0656% 8.5763%	-4.3102% -2.5825% 6.9370% -3.3768% 9.1021%	-4.8165% -1.8330% 5.2599% -4.0060% 9.5003%	-2.7891% 5.9111% -3.3682% 9.0328%	-2.8842% 6.7105% -3.4520% 8.3732%	-2.1031% 2.9712% -1.2306% 5.3917%	-1.8421% 6.0934% -4.6111% 9.9240%	-4.1876% -2.7672% 7.6222% -3.5353% 9.6198%	-0.3278% 2.0643% -0.6751% 3.0008%	-3.7946% 8.3225% -3.7965% 8.7359%	-4.7814% 7.2240% -4.4287% 9.9137%	-4.7087% -3.0636% 5.2122% -3.2946% 7.8783%	-1.8257% 4.0333% -2.4560% 5.7780%	-5.4386% -2.1606% 4.2543% -1.8826% 6.0173%	-3.39 4.58 -3.60 8.55
	.1283% .5417% .0218% .2294%	-4.5905% -3.0326% 6.3432% -3.0656%	-4.3102% -2.5825% 6.9370% -3.3768%	-4.8165% -1.8330% 5.2599% -4.0060%	-2.7891% 5.9111% -3.3682%	-2.8842% 6.7105% -3.4520%	-2.1031% 2.9712% -1.2306%	-1.8421% 6.0934% -4.6111%	-4.1876% -2.7672% 7.6222% -3.5353%	-0.3278% 2.0643% -0.6751%	-3.7946% 8.3225% -3.7965%	-4.7814% 7.2240% -4.4287%	-4.7087% -3.0636% 5.2122% -3.2946%	-1.8257% 4.0333% -2.4560%	-5.4386% -2.1606% 4.2543% -1.8826%	-3.3 4.5 -3.6
0.2	.1283% .5417% .0218%	-4.5905% -3.0326% 6.3432%	-4.3102% -2.5825% 6.9370%	-4.8165% -1.8330% 5.2599%	-2.7891% 5.9111%	-2.8842% 6.7105%	-2.1031% 2.9712%	-1.8421% 6.0934%	-4.1876% -2.7672% 7.6222%	-0.3278% 2.0643%	-3.7946% 8.3225%	-4.7814% 7.2240%	-4.7087% -3.0636% 5.2122%	-1.8257% 4.0333%	-5.4386% -2.1606% 4.2543%	-3.3 4.5
	.1283%	-4.5905%	-4.3102%	-4.8165%					-4.1876%				-4.7087%		-5.4386%	
-1.3					-5.1619%	-3.9796%	-3.5149%	-6.0944%		-1.2882%	-5.6904%	-3.6833%		-3.2674%		-4.0
-3.1	0265%	-0.0817%	-0.8947%	0.0347%											0.020370	
					-0.6129%	-0.3375%	1.1058%	-0.3893%	-1.1702%	-1.3718%	-0.0738%	-0.8362%	-0.0353%		0.0205%	1.0
	.1322%	6.3906%	6.9773%	6.3656%	7.8005%	6.6522%	5.1020%	5.3711%	6.6374%	1.7917%	8.5888%	6.2015%	7.1221%		1.7588%	8.5
	.1066% .5502%	-3.9907% 0.9103%	-2.4189% 0.8813%	-3.1410% 2.1679%	-2.6144% -0.8772%	-3.9800% 0.9233%	-2.9906% 0.8998%	-2.4993% 0.7193%	-2.5431% 1.5661%	-0.5884% 1.0975%	-3.4151% -0.1547%	-4.8879% 1.4704%	-2.2830% -0.3517%		-2.1331% 1.6866%	-3.8 -0.7
	.7478%	3.2844%	2.9380%	3.6794%	2.0190%	2.0036%	0.2151%	4.0360%	3.3662%	1.5929%	2.2058%	2.0912%	2.4136%		2.7719%	2.1
	.6869%	-0.0978%	0.0553%	-2.0012%	1.1634%	-0.0850%	-1.2182%	0.1710%	0.2068%	-0.5605%	2.0249%	0.6386%	-0.0377%		1.1310%	-3.10
4.8	.8959%	2.8265%	2.8795%	1.4398%	3.6909%	5.1152%	0.1703%	4.8248%	4.5530%	1.5219%	6.5103%	3.2675%	2.9362%		-0.6050%	-0.5
0.0	.0395%	0.5617%	0.7837%	2.3711%	1.1330%	0.9931%	1.2572%	1.1625%	0.4712%	0.5897%	-0.4783%	1.7436%	0.9796%		1.2995%	3.70
	.6116%	5.2625%	4.6291%	5.3632%	4.4289%	5.3643%	4.7562%	3.1027%	4.3987%	2.5328%	3.5613%	1.8589%	4.2910%		5.0311%	7.50
	.6966%	6.1112%	8.2592%	4.4113%	7.0057%	9.1394%	5.9227%	5.5730%	8.7804%	3.5211%	9.9656%	5.5355%	5.9002%		1.0138%	3.4
	.7070%	-0.2628%	-0.7851%	0.6284%	-1.5202%	-0.8336%	0.5289%	-1.5897%	-0.9825%	-0.0687%	-1.9455%	-1.3051%	-1.8408%		-2.2721%	1.6
	.6323% .5949%	0.6565% 6.3490%	-1.5474% 7.7363%	4.4926% 6.5896%	-6.3660% 8.7494%	-2.4325% 8.0637%	0.3770% 6.5306%	2.1830% 7.5104%	-5.4830% 8.5360%	-1.8174% 3.2822%	4.4198% 10.4099%	0.7125% 7.5273%	1.6656% 7.1299%		1.6770% 7.3459%	7.2
	.0510%	9.7324%	7.9324%	8.8062%	9.8382%	9.5145%	7.8558%	8.2554%	10.1424%		10.5233%	8.9047%	10.2346%		6.3734%	8.2
	.6758%	-8.6489%	-8.7053%		-11.2132%	-10.5259%	-7.4423%	-8.0985%	-9.1589%	-3.1165%		-9.0846%	-8.8486%		-5.6681%	
	.4349%	-9.6140%	-4.6384%	-9.8255%	-6.7907%	-2.3164%	-0.9154%	-11.6493%	-4.8660%	-0.8653%	-8.1094%		-14.1203%			
	.0768%	1.3658%	3.0684%	-0.6193%	1.7060%	3.3890%	5.1703%	-2.2589%	3.2476%	2.1900%	2.1711%	1.0201%	2.4543%		2.9486%	-1.04
0.0	.0729%	-0.6601%	-0.6329%	-0.3702%	-0.6284%	0.0313%	-1.8634%	-1.4296%	0.4033%	0.2533%	1.8251%	-0.2820%	-0.3126%		-1.9675%	-8.2
-6.2	.2443% -	10.3550%	-13.9525%	-13.3102%	-9.2256%	-8.2673%	-10.9319%	-3.0817%	-12.8902%	-3.8382%	-10.6407%	-9.9113%	-7.2491%		-18.3243%	-17.9
		12.4352%		-11.3911%	-9.9307%	-9.9515%		-12.6886%			-11.3675%		-11.6212%		-12.7616%	
	.8199% .4503%		-4.1968%	-4.2429% 1.2477%	-3.4786%	2.8123%	-6.4924%	-7.6526%	-4.9499% 1.7194%	-1.0489% 2.8070%	-7.5056%	0.3901%	-4.4749% 1.3094%		-9.6603%	0.09
	.7076%		-5.7899% -4.1968%	-5.6439% -4.2429%	-4.8283% -3.4786%	-6.0692% -2.2831%	-3.4161% -6.4924%	-4.1914% -7.6526%	-6.7233% -4.9499%	-1.3927% -1.0489%	-5.1761% -7.5056%	-3.4620% -10.2867%	-4.1150%		-4.3185% -9.6603%	
	.4647%		2.4934%	4.5324%	2.8737%	C 00000	2.6730%	4.1097%	2.4751%	0.3954%	1.6064%	5.0108%	2.8061%		4.6659%	2.78
	.5871%		2.1805%	1.1384%	1.7667%		0.4840%	2.3668%		-1.1548%	2.2697%	3.2558%	1.8072%		2.3398%	0.06
-3.7	.7041%		-2.1454%	-1.3788%	-3.9856%		0.1434%	0.2004%	-3.2479%	0.0499%	-1.0405%	-0.5485%	-1.7229%		0.9353%	-0.75
	.0195%		9.3740%	7.3092%	10.5515%		8.2551%	7.6829%	11.6962%	4.1832%	10.5030%	10.1001%	8.0680%		9.7749%	
	.6191%		-10.0535%	-8.6828%	-5.7447%		-1.7927%	-5.8325%	-7.4151%	-3.3632%	-4.1075%	-7.0893%	-5.9961%			
	.2675%		-3.6907% -3.2544%	-5.1664% -3.4227%	-4.7093% -4.2190%		-2.0886% -3.9526%	-4.8782% -2.8176%	-4.3842% -2.7493%	-0.9803% -1.1299%	-2.0840%	-2.2218% -3.4448%	-5.3772%		-2.1840% -2.5230%	-4.6
			6.2113%	5.9996%	5.8986%		1.2369%	3.2123%	6.5320%	0.4907%	-2.6846%	3.9535%			4.5432%	8.1
			2.6132%	3.6787%	2.5718%		6.7650%	2.6063%	3.8115%	1.3830%		6.9488%			6.6305%	10.46
			-0.1683%	-0.4366%	2.3697%		0.4297%	1.3851%	0.5490%	-0.2287%		-0.8239%			1.8342%	0.88
			-0.8824%	0.6479%	0.9974%		-1.0629%	-0.5151%	0.7148%	-0.1073%		1.4774%				0.65
			-1.5589%	-0.8857%	-0.3063%		-1.4235%	-2.3833%	-2.2345%	-0.6315%		-0.5892%				0.58
			-0.0071%	1.8340%	0.4217%		2.9228%	2.1954%	0.6051%	1.2782%		3.6036%				3.46
			4.1786%	3.4124%	2.6467%		1.0901%	3.1667%	3.7530%	0.9255%		4.9837%				7.07
			0.8841% 5.4849%	2.8390% 4.7638%	1.1597% 4.6121%		1.8542% 5.2794%	1.0332% 3.8833%	1.9209% 6.8784%	0.3675% 1.4702%		4.8578% 7.3857%				6.51 6.15
			1.8958%	3.4838%	1.6054%		1.4061%	1.7722%	2.5827%	1.6863%		3.7434%				

Table A6.1 Statistical Results for Returns on unit trust over the period 2002 to 2011(continued)

	Risk-free Rate	8.4003	0.084003	
UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio
KAGISO EGUITY ALPHA - KEAF[CL]	1.7302	1.7913	4.5480	0.3620
ABSA SELECT EQUITY- ASEF[CL]	1.5479	1.6623	4.1461	0.3531
NEDGROUP INV. RAINMAKER- NICA[CL]	1.0602	-0.1875	3.4316	0.2845
KAGISO ISLAMIC EQUITY- KAIE[CL]	1.2427	0.9631	2.7582	0.4201
ALLAN GRAY EQUITY- AGEF[CL]	1.5665	1.2730	4.4289	0.3347
OASIS GENERAL - OGEN[CL]	1.3234	1.2618	4.0857	0.3033
PRESCIENT EQUITY QUANT. A1- PEQF[CL]	1.4076	1.0140	5.4506	0.2428
OLD MUTUAL HIGH YIELD- OMHY[CL]	1.2191	1.5259	4.4682	0.2540
FOORD EQUITY- FEQF[CL]	1.4132	1.5221	4.2912	0.3097
PRUDENTIAL EQUITY- PRUO[CL]	1.3557	1.6985	4.3420	0.2929
INVESTEC EQUITY- METF[CL]	1.2218	1.1793	4.4858	0.2536
PERSONAL TRUST SA EQUITY- PTSAE[CL]	1.0659	0.5056	2.2448	0.4374
OASIS CRESCENT EQUITY- OCEF[CL]	1.2016	1.0628	3.8885	0.2874
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	1.1628	1.2182	4.3277	0.2493
CORONATION EQUITY- CORG[CL]	1.3015	1.2770	4.4130	0.2759
FNB GROWTH- FNBG[CL]	1.2879	1.0178	4.5514	0.2645
INVESTEC ACTIVE QUANTS A- INXA[CL]	1.3250	1.5141	5.3478	0.2321
ANALYTICS MANAGED EQUITY- FEWS[CL]	1.1011	0.9754	4.4932	0.2264
OLD MUTUAL GROWTH- OMGR[CL]	1.3197	1.4884	4.6348	0.2666
ELEMENT EARTH EQUITY- FEFA[CL]	1.2935	0.9923	3.6946	0.3274
ABSA GENERAL- ABSA[CL]	1.1444	1.3267	4.2282	0.2508
CANNON EQUITY- MCEF[CL]	1.0002	1.6575	5.0343	0.1820
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	1.1408	1.2013	4.6677	0.2264
SIM GENERAL EQUITY- SNTR[CL]	1.2455	1.2960	4.5791	0.2536
VERSO LT SA EQUITY- MVLT[CL]	0.9580	1.2075	3.9023	0.2240
NEDGROUP INV. QUANTS. CORE EQUITY R- NQCE[CL]	1.1296	1.0588	4.4459	0.2352
OLD MUTUAL TOP COMPANIES- OMTC[CL]	1.1973	1.4184	4.6269	0.2406
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.0346	1.2165	4.4131	0.2154
SMMI EQUITY FoF- SAFF[CL]	1.0880	0.9086	3.9734	0.2527
INVESTMENT SOLUTIONS MM EQUITY- ISPE[CL]	1.0394	1.0982	4.1546	0.2300
MOMENTUM EQUITY A- REFA[CL]	1.3477	1.1259	4.7706	0.2649
MOMENTUM EQUITY R- RMEF[CL]	1.2711	1.0849	4.6305	0.2564
PSG EQUITY- PSGG[CL]	1.4628	1.0728	4.8405	0.2848
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	1.0654	1.2462	4.4705	0.2195
CAPSTONE ACTIVE EQUITY FoF- CAEF[CL]	1.1442	0.9695	4.2695	0.2483
STANLIB INDEX- STBI[CL]	0.9779	0.8043	5.1244	0.1744
INDEQUITY TECHNICAL- INDT[CL]	1.0630	1.1946	4.5150	0.2168

 Table A6.2 Mean Sharp Ratio of returns over the period 2002 to 2011

STANLIB SA EQUITY- GDBT[CL]	1.0272	1.4382	5.0519	0.1867
STANLIB MM EQUITY- GDSE[CL]	1.0264	1.2321	4.2569	0.2214
MARRIOT DIVIDEND GROWTH- HLMK[CL]	1.0382	0.8903	3.8134	0.2502
SIM TOP CHOICE EQUITY- STCA1[CL]	0.9105	1.0498	4.9391	0.1673
GRYPHON ALL SHARE TRACKER- PTST[CL]	0.9860	1.1642	5.0533	0.1785
AYLETT EQUITY- AYEF[CL]	0.9803	0.9192	3.5736	0.2508
STANLIB EQUITY R- GDBK[CL]	0.9048	0.9966	4.7159	0.1740
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	0.9482	0.9076	4.7491	0.1820
IMARA EQUITY- MIEF[CL]	0.6571	0.4386	4.2752	0.1341
27FOUR SHARI'AH ACTIVE EQUITY B3- 27FB3[CL]	0.7116	-0.0830	4.5746	0.1372
MAESTRO EQUITY- MOEF[CL]	0.7890	0.8547	4.6052	0.1531
DISCOVERY EQUITY- DIEF[CL]	0.7442	0.3420	5.0376	0.1311
NEFG EQUITY- MNEF[CL]	0.2417	-0.0059	4.9466	0.0319
MI-PLAN IP BETA EQUITY- PBEB2[CL]	0.6540	0.8325	4.5404	0.1256
HARVARD HOUSE GENERAL EQUITY- MHGE[CL]	0.6180	1.1889	4.7511	0.1124
HUYSAMAR EQUITY- HUEF[CL]	0.6375	0.9974	4.7397	0.1168
AFENA EQUITY- AFEA1[CL]	0.4157	-0.1417	4.8053	0.0690
ELEMENT ISLAMIC EQUITY- FIEU[CL]	0.7379	0.5065	3.6535	0.1790
SASFIN EQUITY- MSSR[CL]	0.6945	0.9791	4.4330	0.1377
PRESCIENT EQUITY ACTIVE QUANT- PEAB4[CL]	0.5917	0.5598	5.0597	0.1003
NFB EQUITY- NFEA2[CL]	0.3782	0.3675	1.6443	0.1789
OLD MUTUAL RAFI 40 TRACKER- OMUA[CL]	0.3135	-0.1142	5.6536	0.0406
EFFICIENT GENERAL EQUITY- VAGE[CL]	1.2715	1.7436	4.7153	0.2518
LION OF AFRICA GENERAL EQUITY- MLAG[CL]	-0.0056	-0.0377	5.0018	-0.0179
BJM CORE EQUITY- BCEA2[CL]	0.8332	0.6674	2.3890	0.3136
STANLIB SHARI'AH EQUITY- STSEA[CL]	0.0433	0.4977	4.8271	-0.0084
STANLIB NATION BUILDER- STNA[CL]	0.0876	0.5897	6.3827	0.0006
Mean Return for the period	9.9500			
Median Rate of Returns for the period	10.5400			
Standard deviation of Returns for the period	0.7474			
Mean Sharpe Ratio for the period	0.2149			

 Table A6.2 Mean Sharp Ratio of returns over the period 2002 to 2011 (continued)

KEAF[CL]	ASEF[CL]	NICA[CL]	KAIE[CL]	AGEF[CL]	OGEN[CL]	PEQF[CL]	OMHY[CL]	FEQF[CL]	PRUO[CL]		PISAE[CL]	UCEF[CL]	STPF[CL]	CORG[CL]	FNBC
										1.8572%					
										-1.2287%					
										-5.0781%					
										9.2095%					
										-1.1616%					
										-6.9797%			4.3079%		
										-5.3638%			-0.5693%		
										4.3768%			3.1439%		
										-5.9611%			1.1102%		
										2.5022%			1.6770%		
										6.2406%			7.9815%		
										5.4498%			4.0549%		
										0.5587%			0.8650%		
										2.5947%			0.2685%		
										-2.9407%			-2.7646%		
										8.1464%			1.0484%		
										3.8902%			4.7217%		
										-0.4668%			-3.8371%		
										-0.8183%			-2.7591%		
										-2.9430%			-3.3043%		
										3.0270%			2.5815%		
										8.0093%			7.2418%		
										10.7271%			7.2592%		
										-0.7530%			0.6689%		
										2.4117%			0.9537%		
										4.2670%			5.1495%		
										7.4346%			3.8884%		
										5.3277%			15.2123%		
										0.4385%			-1.8458%		
										3.6007%			3.3223%		
										5.7039%			5.9577%		
										-2.0921%			-4.1340%		
										2.1694%			-0.4778%		
										2.1966%			2.8206%		
										2.6423%			2.9300%		
										-10.9568%			-7.8650%		
										0.8090%			-3.1081%		
										2.1433%			1.0290%		
										1.3458%			2.3452%		
										1.4424%			6.0818%		
										-0.8158%			-2.0211%		
										1.0890%			-0.8807%		
										3.4699%			2.0751%		
										2.3652%			2.5529%		
										2.0251%			6.6306%		
										3.4015%			6.4106%		
										3.5774%			0.4016%		
										6.9549%			8.2554%		
										-1.0002%			-2.8360%		
										0.0630%			-1.2550%		
										1.2641%			6.8313%		
															,
										-2.5069%			-3.5735%		
										2.0720%				10.5284%	
										-1.6968%			-0.6342%	0.7975%	á
										-0.0397%			0.7268%	1.9850%	6
										4.8493%			0.8418%		
										2.0662%			2.9216%		
										0.6979%			-1.1141%		
										1.1600%			0.3740%		
										3.6345%			2.9542%	3.6062%	ś
										2.2435%			3.3405%	5.0982%	6
										1.2083%			-1.0212%		
										1.8396%			-2.0507%		
										0.3559%			-0.4744%		
										7.7450%			5.1826%		
										4.3636%			2.2204%	0.1813%	5
										-1.6480%			-0.1058%	-4.1331%	6
										-1.1304%				-1.4693%	
										-7.0832%				-5.9331%	
										-0.0895%				-2.6740%	
										-1.2382%				-2.1406%	
										7.5930%			2.3246%	4.7376%	ó
										10.0863%			12.0655%	13.3759%	6
										4.3403%				8.8657%	
										7.7702%			14.7206%		
										-2.4055%			-4.2899%		
										-8.9493%			-10.6461%	-4.8319%	ó
										4.7902%			3.6445%	6.4760%	6
										-34.8797%		1,1490%	-26.6747%		
										1.3306%			1.1799%		
										12.3311%		b 1/65%	1.9917%	6.3961%	a

Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011

		1.3486%			-0.7962%			-0.8922%	1.8925%	0.5077%	-0.7139%	6.733
		7.3886%			1.8965%			7.1294%	4.3284%	4.8256%	6.4821%	
		4.4479%			0.9432%			1.9127%	6.1675%	5.0230%	1.5213%	
		17.6030%			14.3681%			9.4682%	11.2143%	7.3630%	8.8941%	
		17.8246%			13.8754%			1.8435%	7.0679%	7.9190%	4.4304%	
									-1.8609%	-8.7356%		
		-4.6968%			-5.1517%			-6.2086%				
		11.9769%			11.6154%			7.3885%	7.0724%	6.9886%	6.2329%	
		2.7432%			1.5248%			-0.9533%	3.0633%	4.1559%		
		3.8856%			0.1243%			-2.6356%	2.0202%	-3.5732%	-4.3559%	
		-3.1105%			-0.6028%		1.4886%	-0.6394%	-0.6487%	2.0381%	-4.7157%	-2.517
		6.0327%			2.2654%		3.9482%	4.3205%	4.7079%	-0.8567%	5.8281%	9.3339
		5.4315%			5.3166%		4.2718%	6.1809%	3.7851%	2.8177%	6.8353%	4.711
		10.0045%			8.0062%		12.9669%	13.0506%	9.0440%	7.8652%	10.6271%	10.293
		4.8778%			1.7451%		0.6400%	-0.3719%	3.1706%	1.4143%	0.4954%	0.729
		-5.2785%			-5.1123%		-9.0168%	-4.9189%	-4.8065%	-6.4092%	-3.3681%	-4.845
		-4.6012%			-6.0707%		0.7975%	-1.3598%	-0.5020%	-4.9387%	-0.2071%	-1.333
		-3.3144%			-3.4395%		-4.9871%	-7.0357%	-3.4029%	-6.6501%		
		-2.4834%			-2.5848%		-1.3192%	-0.9594%	0.0000%	0.8496%		
		4.2857%			5.3284%		4.4562%	2.4777%	4.2704%	4.4317%		
		1.3795%			-2.4714%		-1.8880%	0.7976%	1.5616%	0.5824%	0.5622%	
		9.3018%			7.0456%		10.6208%	7.0078%	7.7749%	9.3493%		
		0.2085%			-2.7367%		-1.7730%	-2.4123%	0.3051%	-0.8376%	-2.0418%	
		-1.5209%			-5.9266%		-4.5551%	-6.4685%	-0.6620%	-6.1099%	-4.8040%	
		2.7021%			-1.6366%		-1.2489%	-6.9859%	0.8735%	-0.5268%		
		2.1543%			8.2032%		8.4914%	7.9859%	1.9729%	4.7519%	5.0107%	
		7.3032%			3.6093%		5.3039%	6.4433%	7.0384%	9.0905%		
		2.4399%			-1.1860%		-1.2572%	-0.8179%	3.3042%	4.6135%	-1.9791%	-3.25
		-4.3786%			-3.2663%		-6.9266%	-7.4384%	-2.2405%	-0.5762%	-7.9050%	-7.00
		7.3940%			5.9159%		9.1371%	6.5222%	4.3894%	6.6238%	6.1265%	6.53
		4.1499%			4.9165%		4.5802%	5.2772%	4.5151%	6.0459%	4.5794%	5.85
		4.3325%			3.7586%		0.4297%	0.3981%	0.8017%	3.9264%		
		-2.4807%			-2.0435%		-5.9071%	-2.7898%	-1.0457%	-4.1236%		
		5.7332%			5.1808%		4.4990%	4.2314%	6.3253%	8.0175%	3.8100%	
		-3.9804%			-5.8503%		-8.2290%	-7.4305%	-3.3805%	-4.6297%		
		0.1628%	6.4100%		1.0063%		2.9612%	5.0055%	3.7523%	3.2646%	3.3523%	
		4.4360%	7.7248%		5.9448%		7.4810%	9.7450%	9.3137%	8.4249%	6.0557%	
			6.2985%						9.1588%	3.1099%		
		3.7360%			3.2772%		9.3731%	9.9314%				
		-2.5075%	-3.1350%		-1.7800%		-4.9893%	-2.2174%	-1.0883%	-2.3305%		
		1.2587%	2.8281%		0.2876%		2.5794%	5.1056%	2.6897%	4.0549%	1.8176%	
		3.4500%	2.0648%		0.3480%		0.7566%	2.6006%	3.6089%	2.1542%	0.4783%	
		5.1310%	4.1736%		5.8102%		5.4910%	0.9579%	0.3770%	4.7704%	3.5069%	6.70
		8.7394%	4.2172%		3.7893%		2.7406%	1.1731%	3.0769%	3.8902%	0.4943%	1.93
		-4.6180%	-2.0820%		-3.0370%		-5.2290%	-2.5200%	-1.0102%	-0.4921%	-3.2616%	-3.07
		-2.8442%	-1.0107%		-1.2117%		-9.7732%	-9.2643%	-1.9982%	-2.3630%	-8.5363%	-9.34
		2.3967%	3.2542%		3.7851%		1.0096%	4.0028%	2.9889%	1.6617%	3.5402%	2.86
		2.3246%	1.8017%		1.6316%		0.6250%	-0.2275%	2.2180%	-1.8085%	-0.7117%	0.93
		1.2874%	3.2316%		3.3309%	2.1717%	-0.0245%	-0.1815%	2.6187%	6.2075%	-0.5496%	1.29
		5.9363%	5.4373%		5.6509%	5.8202%	4.0471%	3.0604%	3.0411%	3.1625%	3.4569%	5.15
		1.8604%	-2.4923%		-1.3446%	-2.5489%	-2.9141%	-2.4401%	-0.9917%	0.2034%	-1.4620%	
		-2.5561%	-1.4186%		-3.0300%	-3.0992%	-4.1933%	-3.1977%	-1.6842%	-3.5485%		
		-4.4019%	-2.7713%		-4.7385%	-3.1522%	-5.1831%	-5.1134%	-3.3560%	-3.1643%		
		-7.2100%	-7.2065%		-5.6805%	-1.8071%	-7.5397%	-4.6028%	-6.2686%	-5.8625%		
		-0.5698%	-3.8093%		-0.3864%	-5.9913%	0.1051%	1.0100%	-5.2550%	-2.5033%	-0.7474%	
		13.9482%			8.9620%	9.8592%		8.3186%	10.7368%	11.8677%		
		-0.4231%	-0.3671%		1.9028%	-0.1400%	1.6060%	3.5023%	-0.3964%	-1.2827%		
		4.3123%	4.5893%	10.5100%	2.2166%	4.4602%	3.7141%	4.9295%	5.0783%	1.9892%	5.6070%	
		6.3074%	3.1185%	4.7326%	4.4078%	3.5611%	2.8979%	4.3562%	4.0111%	9.1793%		
		-0.5353%	-1.6839%	-3.3783%	0.4628%	-1.3450%	-0.9047%	-0.8778%	-1.0915%	-0.9349%	-1.1563%	-0.54
		7.0523%	9.0051%	10.0599%	8.0539%	6.4014%	9.0414%	7.3441%	8.5474%	6.9343%	6.0052%	7.48
		2.3017%	0.2169%	-1.0237%	1.4371%	1.1837%	3.5584%	4.8245%	0.1049%	-0.6373%	3.1210%	5.13
		6.2524%	6.0206%	8.4058%	8.1230%	6.8205%	7.1461%	6.4713%	6.6312%	7.6459%	5.6780%	6.62
		4.2563%	3.9029%	5.3082%	0.2806%	2.8215%	0.7302%	2.0264%	3.2465%	1.2080%	3.7055%	
		-2.3605%	0.3606%	0.5465%	3.5662%	0.4009%	1.1660%	1.1855%	-0.9918%	0.8052%		
	1.5654%	1.4907%	1.8756%	-1.9881%	1.6998%	-1.3240%	2.0602%	2.4331%	0.4205%	0.9673%		
	0.5574%	-2.8488%	0.0133%	-5.7497%	0.5404%	-1.2720%	-0.9830%	-3.4315%	1.1605%	-0.5088%		
0.1819%	0.0986%	-0.0660%	-2.5135%	0.8980%	-1.6785%	-0.2280%	0.5673%	0.3551%	-3.5968%	-0.8171%		
0.6860%		-0.0660%	0.5912%	-3.2763%	3.1291%	-0.2280%	2.5560%	1.2730%	-3.5908%	0.2941%		
	0.9814%	-1.4548%										
3.9379%	0.6665%		0.5414%	2.2053%	-0.5441%	1.5852%	-0.1891%	2.0049%	-0.0414%	-1.3396%		
5.2733%	7.2117%	7.8274%	6.9366%	9.2673%	5.4234%	8.7904%	6.4462%	5.8932%	6.3847%	7.6215%	6.5359%	
8.3791%	5.8261%	6.3325%	5.1193%	5.4127%	6.9684%	4.2214%	6.6005%	7.2891%	2.1793%	2.6216%		
6.5653%	3.2961%	2.7285%	4.1377%	-1.8464%	7.4613%	2.3067%	4.9170%	3.3810%	4.7881%	5.8226%	3.4872%	
11.9252%	7.7283%	6.0509%	7.1761%	6.8653%	11.4186%	6.5154%	10.6316%	10.4441%	6.0951%	5.0250%		
6.2341%	2.6173%	3.0725%	3.9749%	1.0472%	4.9294%	2.7327%	4.2101%	4.5084%	2.8562%	1.1178%		
-0.5535%	1.5831%	0.9385%	0.3792%	1.1380%	-3.1569%	0.0848%	0.5562%	-0.4682%	0.8660%	1.0185%	2.0862%	1.48
3.5070%	3.3901%	4.3881%	2.9765%	5.8084%	1.4157%	3.8594%	3.7265%	4.2467%	3.2583%	3.4566%	4.2147%	0.23
-4.5672%	-1.3164%	-2.0560%	-1.3996%	-0.4931%	-2.5882%	-2.0913%	-3.0152%	-3.3657%	-0.7915%	-0.5665%	-2.3062%	-2.43
-3.9033%	-3.4779%	-3.6253%	-5.0475%	-8.1736%	-2.2547%	-1.6053%	-2.0878%	-4.6495%	-5.2703%	-3.5479%		
6.4001%	10.8927%	9.7929%	6.3340%	10.3381%	3.2836%	7.2050%	5.7130%	6.7178%	6.3222%	7.6170%		
2.4100%	2.2916%	2.9964%	2.1626%	2.8880%	3.4704%	3.1423%	1.0425%	3.4236%	1.8122%	1.3715%		
10.1135%	7.3486%	6.6155%	6.9975%	6.7302%	5.8463%	9.0928%	8.2065%	7.9654%	6.5668%	3.8533%		
2.6317%	1.5588%	1.2409%	1.2360%	1.9613%	1.0574%	2.6050%	2.3929%	1.9188%	1.5996%	1.5511%		
				10.3191%	4.4052%	7.7775%	7.0537%	8.4145%	7.2648%	9.6682%	4.9757%	6.05
7.2797%	6.7048%	11.0882%	6.4978%									
7.2797% -4.4810%	-2.5707%	-3.4294%	-1.5830%	-2.4369%	-2.3381%	-2.3441%	-2.4796%	-4.3543%	-1.2452%	-0.4993%	-3.3881%	-2.13
7.2797%												-2.131

 Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011 (continued)

	Statistical	Degralta	for D				4		• 4 b a		J 10	014	. 301	1		
Median Deviation	1.7913 4.5480	1.6623 4.1461	-0.1875 3.4316	0.9631 2.7582	1.7746 4.7672	1.3166 4.1247	1.0140 5.4506	1.5248 4.6824	1.5221 4.2912	1.5473 4.6485	1.3458 5.1712	0.5056 2.2448	1.8122 3.9361	1.2182 4.8979	1.1469 4.7616	1.1 4.9
Mean	1.7302	1.5479	1.0602	1.2427	1.9486	1.4572	1.4076	1.3585	1.4132	1.3988	1.2719	1.0659	1.6603	1.2296	1.2633	1.4
	-0.3511%	1.0371%	-1.1426%	-1.2535%	-0.6869%	-0.3457%	-0.6538%	1.7055%	0.6884%	-1.2870%	-2.1953%	1.1981%	0.2246%	0.9603%	-0.8537%	
	4.9242% 1.8438%	7.3899% 0.5485%	8.4821% -0.5622%	4.5607% 2.1542%	8.1788% 0.9386%	4.7218% 1.8819%	11.2990% -1.3609%	7.6201% 0.0213%	8.3183% 0.7583%	8.6201% 0.7271%	6.9255% 1.9740%	4.9302% 0.1026%	4.6510% 0.4580%	7.0271% 0.0183%	5.7535% 1.4677%	
	-1.8486%	-2.1632%	-2.7975%	-2.9047%	-0.9914%	-3.0201%	-4.4048%	-3.3930%	-3.4968%	-2.6969%	-3.1219%	-2.5047%	-1.0721%	-2.3978%	-2.8430%	-1.12
	-0.2766%	-1.2627%	-0.1875%	-0.4650%	0.9127%	-1.1096%	-0.1220%	-0.5331%	-0.2207%	-1.0556%	-0.4829%	1.1857%	-2.3111%	-0.3534%	-0.5339%	-2.05
	-2.4817% -1.7434%	-0.5823% -1.9041%	-1.9766% -2.5532%	-1.6428% -0.8685%	-2.7544% -1.6036%	-1.4794% -0.6870%	-2.3933% -2.8357%	-1.9189% -3.8018%	-1.4412% 0.0322%	-0.9277% -2.3333%	-1.3500% -1.2005%	-1.3005% 0.0295%	-1.5994% -0.4125%	-0.8024% -0.3161%	-1.7339% -1.7201%	
	0.4868%	-0.6943%	0.1957%	0.1118%	0.5336%	-0.3834%	-0.5151%	-0.0974%	0.1707%	-0.5530%	-0.4043%	0.5056%	-0.5379%	-0.5388%	-0.2239%	
	1.6811%	2.4665%	2.0865%	0.9631%	1.6519%	0.0552%	-0.6425%	1.7414%	2.3588%	2.7337%	1.1125%	1.7999%	-0.1151%	2.0167%	0.9489%	1.0
	1.4434% 1.7388%	1.9416% 0.3477%	2.2523% 1.8958%	2.0633% 1.4555%	2.7796%	2.0615% 1.3166%	2.8506% 0.9037%	1.6147% 0.9633%	1.6994% 0.7625%	2.7426% 0.4746%	3.7576% 0.5993%	1.5602% -0.2799%	1.6429% 0.1149%	1.8857% 0.6431%	2.5349% 1.3312%	0.1
	-2.0534% 1.4434%	-3.9259%	-2.1628%	-1.1490% 2.0633%	-1.7814% 2.7796%	-1.6480% 2.0615%	-1.9963% 2.8506%	-3.9122%	-3.0788% 1.6994%	-1.7070% 2.7426%	-2.0080% 3.7576%	-1.6078% 1.5602%	0.4747%	-1.6826% 1.8857%	-3.4675% 2.5349%	-0.3 0.1
	5.7482%	3.9080%	3.3844%	7.2867%	4.1193%	5.3933%	5.8095%	3.9712%	4.3624%	4.9621%	5.0979%	3.9627%	4.1044%	4.0329%	6.9219%	3.6
	1.2538% -0.5807%	3.3431% 1.0117%	-0.4529%	2.4690% 0.1022%	0.7614%	2.0746% -0.7371%	3.2216% 0.5983%	3.4055% 1.3750%	3.2847% 1.6144%	2.8498% -0.3697%	2.4941% -1.4462%	1.5448% 0.1994%	3.6372% -0.0929%	4.1324% 2.2977%	2.3173% -1.0665%	-0.3
	5.9723% 1.2538%	8.6352% 3.3431%	8.1911% 3.5567%	6.8852% 2.4690%	6.6660% 0.7614%	7.9405% 2.0746%	10.1535% 3.2216%	7.2349% 3.4055%	9.3278% 3.2847%	8.3401% 2.8498%	8.3427% 2.4941%	5.5476% 1.5448%	6.2458% 3.6372%	7.7700% 4.1324%	8.3044% 2.3173%	
	-2.5835%	-3.1982%	-2.2496%	-2.3733%	-1.3626%	-3.0845%	-4.4567%	-2.0861%	-3.0811%	-3.0804%	-2.1730%	0.0169%	-3.0805%	-2.4402%	-2.3698%	
	7.9251%	6.6645%	7.1710%	5.3458%	4.2396%	5.3838%	6.9438%	2.0834%	6.6129%	7.7777%	4.9456%	3.8798%	3.2714%	4.7507%	8.6437%	7.4
	-2.5252% -1.8653%	-4.0048% -2.5483%	-2.7726% -1.9860%	-2.5807% -1.1945%	-3.3270% 0.3124%	-4.8432% -1.4606%	-5.3396% -3.3746%	-3.0569% -0.6963%	-3.9266% -2.2415%	-5.4693% -2.5074%	-4.9954% -2.9787%	-2.3651% -1.1312%	-4.9484% -0.7680%	-5.7834% -1.9457%	-4.2987% -2.8533%	-4.2 -2.6
	1.1375%	0.4923%	-0.9089%	1.2910%	1.4678%	-1.3038%	-2.6494%	0.5717%	1.4973%	-0.9606%	0.6132%	-0.5775%	-0.7419%	1.0678%	0.0846%	
	4.4378%	6.3089%	4.6463%	2.5238%	4.1083%	6.7644%	7.5763%	4.5932%	5.5220%	6.7150%	6.7896%	4.5736%	5.1135%	4.3957%	6.9465%	7.2
	-0.0230% 1.8729%	-1.9531% 1.6278%	2.2756%	-0.0830% 1.0971%	-0.8602% -0.0237%	-1.1686% 0.6634%	-3.7851% -0.0426%	-2.5777% 2.3417%	-1.5735% 1.2981%	-2.1124% 1.7910%	-3.9146% 0.1736%	-2.0060% 1.6206%	-1.5538% 0.6086%	-2.7796% 1.2285%	-1.6690% 1.2228%	
	2.6496% -0.0230%	3.1769% -1.9531%		2.4328% -0.0830%	1.9805% -0.8602%	2.8181% -1.1686%	2.3139% -3.7851%	2.7773% -2.5777%	5.5630% -1.5735%	3.4220% -2.1124%	3.1687% -3.9146%	2.2976% -2.0060%	2.6127% -1.5538%	0.9119% -2.7796%	4.2944% -1.6690%	3.8 -3.2
	-0.1889%	-0.8761%		-0.8936%	-0.3832%	-1.0054%	2.9367%	-0.2370%	-0.4270%	-1.4400%	2.2869%	0.3732%	-0.9316%	-0.3612%	-1.0460%	0.3
	0.4623% 5.3514%	1.8371% 4.1985%		0.4547% 5.2716%	-0.2024% 5.7463%	1.2876% 4.9711%	-0.2146% 6.1387%	2.2599% 4.0558%	2.6521%	0.6401% 5.3042%	0.5965% 4.2540%	0.3304% 5.3051%	4.4421%	2.5434% 1.0649%	-0.2796% 5.2309%	
	4.6588%	4.0468%		4.9789%	4.5841% -0.2024%	5.2354% 1.2876%	3.0193% -0.2146%	5.2829% 2.2599%	5.3400% 1.0319%	2.0636%	1.0763% 0.5965%	1.7194% 0.3304%	4.7236% 1.5006%	3.2322% 2.5434%	4.4795% -0.2796%	5.0 0.3
	10.2950%	6.6246%			7.1298%	6.9235%	10.1181%	5.9049%	6.7077%	6.2095%	7.9401%		6.5851%	4.9545%	10.0675%	8.3
	2.0534%	0.9536%			-2.8022%	0.4869%	-3.5717%	2.0071%	2.0264%	-0.0176%	-2.2436%		-1.3643%	-2.2234%	0.4159%	-1.1
	2.5820% 6.7028%	3.8687% 5.3676%			-1.6504% 10.2728%	-5.1424% 6.2558%	-7.8441% 11.0200%	7.8943% 6.5942%	4.5280% 3.9486%	1.9232% 6.2974%	-6.1953% 8.3262%		-1.3183% 6.8687%	3.4004% 6.0809%	-1.0984% 7.9066%	4.7 9.4
	10.9046%	6.2420%			4.9866%	6.6605%	12.7264%	6.6619%	-0.1942%	5.0323%	4.3601%		5.0009%	2.7647%	9.2584%	
	-8.9893%	-6.7366%			-8.5974%			-11.5269%	-8.0396%	-7.0252%	-6.2627%		-8.6443%	-6.3383%	-9.4242%	
	-5.6540%	-9.4543%			-9.7042%	-3.8254%	-4.9934%	-7.3119%	-4.8116%	-3.3532%	0.4134%		-2.1958%	-2.0515%	-4.0111%	
	-2.9122% 1.6890%	2.3780% 4.0887%			0.4201% 4.1353%	-2.2460% 3.4867%	1.7978% 0.8411%	0.4349% 2.6755%	-1.0306% 2.3497%	1.9605% 3.3683%	-1.4644% 2.3399%		-4.5976% 4.3857%	0.0364% 3.9013%	-1.3308% 2.4890%	
	-8.9134%	-7.6085%			-6.0692%			-10.6576%	-9.8183%		-12.8899%			-10.6094%		
	-8.7188%	-8.7303%			-7.3033%	-8.3707%	-14.2711%	-5.3589%	-13.4153%	-9.4789%	-10.3114%		-9.3334%	-14.3794%	-8.3992%	-12.8
	-2.5183% 3.2008%	-5.0023% 3.5249%			-3.4493% 1.1043%	-2.8077% 1.7823%	-10.1091% -0.4435%	-1.3740% 5.7674%	-0.6348% 4.6296%	-4.2370% 3.0801%	-7.3665% -0.6136%		-7.8805% 2.4714%	-9.8793% 0.3423%	-1.5650% 3.8099%	-6.0 3.7
	-6.7633%	-4.2655%			-7.4986%	-4.9905% -2.8077%	-3.2607%	-6.9331%	-5.0529%	-6.1568%	-7.1191%		-4.1960%	-5.1527%	-6.6952%	
	0.9601%	2.6122%			3.1306%	0.1508%	4.1492%	-2.8446%	1.5524%	2.8112%	3.8864%		0.9650%	4.2628%	2.3001%	
	3.0164%	1.0943%			2.4456%	3.2714%	-0.0449%	-0.5516%	1.5146%	4.0306%	2.2499%		2.8727%	2.5510%	3.3230%	
	8.9376% -3.2972%	8.4393% -1.0707%			9.3897% -0.0444%	10.0538% -3.3589%	12.4252% -1.7646%	3.7739% -3.8793%	9.9713% -3.1596%	7.5101% -3.3168%	10.2330% -3.8568%		9.9366% -2.2546%	7.4177% -3.5124%	9.1864% -3.5021%	
	-8.6818%	-9.0592%			-10.1160%	-9.1271%		-14.2027%		-11.0373%	-5.6569%			-12.3043%	-8.8927%	
	-2.1625%	-3.6609%			-3.4771%	-1.1619%	-5.0397%	-2.3666%	-3.3764%	-2.3270%	-1.9322%		0.1258%	-2.0466%	-2.6958%	-2.2
	6.1040% -3.9648%	5.3285% -2.1356%			4.3823% 1.0385%	5.8441% -3.0175%	4.7239%	6.7415% -5.4235%	4.0318% -4.4036%	5.7089% -4.5278%	7.2916% -3.3543%		2.9644% -2.1142%	3.5367% -5.2317%	7.0894% -5.8294%	4.4 -3.1
	3.4152%	4.6970%			1.9415%	2.6149% 5.8441%	5.4390% 4.7239%	0.5220% 6.7415%	1.5221% 4.0318%	2.4528%	2.5144%		3.9369%	7.6946%	2.3497% 7.0894%	0.5
	0.6223%	-0.5154%			-1.0354%	1.0393%	0.7080%	-0.0725%	0.1529%	0.3374%	0.8888%		0.9340%	-0.6461%	1.5137%	-0.0
	0.4156%	0.3686%			0.2753%	0.0489%	1.3067%	-1.8923%	-0.2080%	0.7364%	0.6135%		-0.4142%	-2.1248%	0.0258%	0.0
	2.2563% -0.7212%	0.8805% -2.5989%			-1.7806% -1.8881%	2.2118% -1.3153%	2.0791% -0.2962%	-1.8077% -3.4849%	1.8218% -1.5035%	1.8721% -0.5875%	1.0964% -1.1108%		4.1511% -0.9867%	1.7996% -0.7376%	-0.5219% -1.4509%	
	3.3358%	3.4145%			5.5138%	3.9544%	0.5217%	5.3637%	4.1711%	3.5176%	2.5608%		3.0397%	2.3615%	3.8364%	
	2.0054% 6.4341%	1.6399% 5.6347%			0.7421% 6.3901%	4.4006%	6.9156%	0.4389% 5.2074%	3.3718%	5.4611%	1.9152% 5.2025%		1.2160% 3.6816%	7.4270%	-0.1653% 5.3417%	
	4.4990%	2.2373%			2.3311%	4.8331% 0.2125%	1.5421% 0.9808%	4.0321% 0.4589%	3.4939% 1.8613%	4.5676% 0.7890%	0.8027%		5.3816%	3.1553% 1.6800%	5.6120%	2.0 0.5
	5.4431%	7.0293%			6.8868%	5.2451%	4.0326%	6.5620%	4.6638%	5.9760%	5.1145%		4.5274%	3.3027%	5.9473%	6.2
	3.8181%	4.0220%			5.2557%	3.2160%	2.0673%	5.0248%	3.7123%	4.7121%	3.9029%		2.4590%	3.4718%	4.2801%	
	1.2510% 3.3791%	1.6846% 4.0226%			3.4007% 4.4958%	2.5841% 6.5312%	2.3113% 4.1218%	-0.2968% 8.0484%	1.1791% 6.0614%	0.8150% 6.1281%	1.4231% 3.3573%		2.3136% 5.8045%	1.3277% 3.1244%	1.7434% 5.5732%	4.69 1.96
	5.3514%	4.1136%			3.5386%	4.4696%	5.2888%	3.8429%	5.6621%	4.9082%	6.3374%		5.2790%	4.9806%	3.4376%	
	-0.8855%	-1.5653%			-0.5070%	0.5724%	-1.9585%	-1.6794%	-0.6766%	-1.0441%	-1.5460%		-0.1395%	-3.0307%	-0.0958%	
	-4.4479% 0.4668%	-3.2189% 2.6994%			-2.6840% 2.9915%	-3.4498% 1.1274%	-2.2199% 4.7203%	-7.5634% -3.3731%	-4.4789% -0.8450%	-3.2177% -0.9722%	-4.0991% 0.8611%		-1.5995% 2.9493%	-3.5599% 5.0999%	-5.1102% -0.3818%	
	2.2503%	1.9874%			0.7959%	-0.3731%	2.1804%	1.7406%	1.9718%	2.3026%	1.9452%		-0.5016%	2.0685%	0.7899%	
	6.0797%	3.9862%			6.6219%	4.9052%	7.3116%	3.9042%	4.6543%	5.7918%	5.6825%		5.1043%	5.7436%	4.5892%	
	0.2700%	-0.9590%			-2.2631%	-0.2410%	-4.2745%	3.0002%	0.9639%	1.9823%	-2.4912%		-0.7918%	-1.9507%	-1.1421%	-0.

INXALCI		FEFA[CL] ABSA[CL]			NQCE[CL] OMTC[CL]			A[CL] RMEF[CL]
INVA[CL] FI	LVV3[CL] UNUK[CL]	-0.2991%	1.0561%	-0.7080%	1.6271%	CONICICLI SAFF[CLJ ISPELULJ KEH	0.0929%
		-0.2991%	-0.4633%	-0.6542%	1.7003%			-2.25499
		-4.2775%	-4.5300%	-4.0281%	-1.8119%			-3.13489
		6.9873%	7.0690%	7.5670%	6.0677%			6.52849
		-0.5088%	-2.3716%	-2.0148%	-0.9331%			0.68399
		-2.9845%	-6.8470%	-5.2037%	-8.5383%	1.0982%		-6.4916%
		-2.9845%	-0.8470%	-5.2037%	-8.5383%	1.0982%		-0.4910%
		-0.0407%	2.3215%	4.2865%	3.6793%	0.9301%		3.05879
		-4.4877%	-8.6210%	-6.6489%	-4.7380%	0.6623%		-5.0158%
		4.1358%	6.0178%	4.1235%	5.6202%	0.9059%		3.06019
				2.7375%	3.9979%			
		3.2263%	2.2216% 3.6710%	3.5083%	2.0783%	2.7783% -5.2869%		2.6897%
		0.1440%	-1.8389%	-0.0276%	1.8364%	2.1551%		1.7489%
				0.5754%				3.3546%
		-0.8477% 2.5418%	3.8583%	-1.2206%	1.6508%	0.6462%		2.43329
			1.0816%	4.8132%	0.7499%			
		5.2032%	4.9971%	4.8132% 2.0056%	3.9895%	0.8112%		5.94489
		1.4717%	2.6609%		4.0532%	1.8993%		1.59889
		-0.4044%	1.2653%	-0.5200% -1.6914%	-1.0534%	-3.6268%		-1.6350%
		-2.1774%	-1.9570%		-0.6396%	1.2671%		
		-6.8423%	-4.4823%	-2.7219%	-4.4818%	-2.2392%		-3.3993%
		3.9797%	1.8846%	-1.1576%	2.0342%	4.8022%		1.76569
		6.3396%	4.9324%	6.5242%	5.0498%	5.9137%		5.7483%
		14.9666%	17.4523%		15.3780%	9.1902%		11.6216%
		-2.9977%	-2.1541%	-3.4550%	-4.6808%	-3.1364%		-2.31569
		1.6511%	1.9420%	0.9749%	1.1043%	3.8774%		1.83989
		1.3607%	2.6996%	0.6226%	2.7745%	2.5410%		2.39289
		6.6820%	9.5787%	5.9148%	9.4758%	7.6035%		7.00399
		1.0713%	1.5882%	-0.5586%	3.8768%	4.4343%		3.00059
		1.1833%	-1.4209%	0.1189%	1.9592%	0.4520%		0.6349%
		4.4341%	5.8218%	4.3326%	1.7270%	0.1773%		0.0000%
		3.4710%	2.0289%	3.5731%	4.2646%	3.0012%		2.3424%
		-3.6777%	-1.2019%	-1.2572%	-3.0148%	-3.6802%		0.2979%
		1.4271%	1.0015%	-1.1497%	1.5041%	1.4199%		0.3823%
		1.0763%	3.3447%	1.0684%	2.9100%	3.7538%		3.1345%
		1.4025%	1.9703%	3.2767%	1.4674%	2.8292%		1.3606%
		-9.3484%	-11.8533%		-7.9200%	-9.0402%		-9.9145%
		1.2092%	1.5276%	0.9608%	-0.3141%	-0.2718%		-0.5941%
		0.7537%	1.8332%	3.5702%	4.1198%	2.5788%		4.0524%
		3.5188%	3.3725%	3.7473%	4.2170%	2.7729%		4.6555%
		0.8083%	-0.4326%	-0.3802%	1.1860%	2.3401%		0.5029%
		-1.1470%	-1.0222%	-0.2130%	0.0483%	-2.2607%		-0.0114%
		0.8810%	-0.8542%	1.0504%	-0.6487%	-4.6524%		-1.0009%
		2.7742%	2.3305%	1.7419%	2.8682%	3.3085%		2.6632%
		1.4818%	3.4826%	1.9506%	2.1535%	3.8552%		2.7995%
		1.6848%	3.3848%	1.3886%	4.9814%	5.1503%		4.79799
		2.9071%	1.6097%	3.2904%	5.0067%	4.5715%		3.79479
		4.3228%	5.1410%	4.8214%	4.7214%	2.9871%		4.68519
		8.6100%	8.4874%	7.8930%	6.2924%	5.6236%		3.53089
		-2.8765%	-4.1285%	-1.0071%	-2.3249%	-1.3920%		-1.55319
		-1.1660%	1.1589%	0.2537%	-0.8934%	-2.7244%		1.42679
		2.7185%	2.8225%	1.9615%	3.0156%	-0.5759%		2.10429
		-0.9870%	-1.1366%	-1.6603%	-0.8981%	-3.8335%		-1.14779
		2.0819%	2.1656%	4.7717%	3.9321%	3.7619%		4.01059
		-3.7677%	-4.9854%	-3.6750%	-5.3154%	-2.9311%		-5.63439
		0.7453%	0.5935%	0.7571%		-0.9264%		1.7649%
		2.6518%		3.6898%	4.8602%			3.8653%
		1.0767%	-0.2490%	-0.8053%	-0.1476%			1.5610%
		-2.3925%		-2.9864%		-3.3333%		-0.33459
		0.3785%		-1.1294%	0.2580%			-0.04839
		0.9864%		1.0568%	0.6161%			-0.49829
		4.7232%	5.6646%		4.3163%			4.61879
		0.0249%	-0.3886%		0.1545%	4.1700%		1.22289
		0.3854%	0.6903%		2.5486%	2.5277%		2.49739
		-1.7835%		-2.2404%	-0.3421%			-1.10349
		4.9937%		7.9542%	8.3491%			6.66379
		1.9577%		-0.3364%	-0.6738%			-0.7725%
		-1.6610%		-1.6411%	-1.8965%			-1.62699
		-3.3860%		-2.0704%		-2.0483%		-0.98089
		-6.4763%		-8.1442%	-4.5771%			-4.17159
		-0.7468%		-3.4745%	-4.3771%			-4.17137
		-0.7468%		-3.4745%	-1.2726%	0.4499%		-0.93187
		-3.1478%			4.2625%	4.4544%		
			7.4806%					3.32419
		17.4506%		10.1013%		12.0557%		8.81689
		8.4264%		6.6268%	8.9813%			4.44139
		6.9385%	6.4988%		5.7963%			6.19879
		4.5456%		-2.0169%	-4.4434%			-4.89509
		-7.7324%		-8.6559%		-11.1200%		-10.04329
				4 400000/	2.7120%	4.2189%		2.37109
		8.2150%	5.1495%	4.4806%	2.712076	4.2189%		2.57107
		8.2150% -38.0316%	-36.9227%			-34.2488%		
			-36.9227%			-34.2488%		-33.5109%
		-38.0316%	-36.9227% 3.6043%	-29.4494%	-34.7085% 1.2774%	-34.2488%		-33.5109% -0.4709% 15.5691%

Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011(continued)

99

(continued)

				2.4234%		-0.5063%	0.1593%			-1.4493%	-0.6661%				0.5184%
				8.0283% 2.7600%		6.0780%	6.8433%			5.3368%	3.1487%				5.3569%
				3.0267%		1.9158% 6.8271%	1.6656% 7.2492%			1.6685% 7.2158%	1.6355% 4.3528%	6.1143%			3.4962% 6.0831%
				1.8815%		6.0729%	2.9449%			4.2988%	0.4645%	6.5371%			3.4960%
				-9.5661% 3.2881%		-7.1114% 9.9410%	-6.8726% 8.4958%			-5.4347% 8.1766%	-6.2828% 4.8525%	-5.7842% 4.7566%			-4.9252% 6.7661%
				-3.3928%		-1.7906%	-1.6369%			-2.6641%	-1.8192%	-0.0430%			-3.3105%
				-8.0732%		-6.0662%	-3.5216%			-5.0762%	-3.4290%	-2.8553%			-3.1081%
				-7.5559%		-3.2071%	-3.9758%			-5.6641%	-3.8168%	-2.6107%			-3.9427%
				2.9592% 3.1715%		7.5885% 7.0582%	5.0400% 6.3026%			7.1659% 9.3460%	2.9576% 7.6104%	4.1318% 8.7185%			6.3565% 7.6528%
				14.0010%		14.8391%	12.3802%			12.5052%	13.6120%	10.9638%			13.5000%
				1.5589%		-1.2039% -2.8821%	-0.6117% -3.0193%			-2.0455% -2.0675%	-2.2740% -4.2984%	1.7331% -1.7036%			1.2876% -4.4983%
				-9.6287% -2.5661%		-2.8821%	-0.7580%			-2.0675% -2.3448%	-4.2984% -2.2231%	-1.7036% -2.6646%			-4.4983% -1.7111%
				-7.1237%		-7.5347%	-7.1183%			-7.8795%	-5.9892%	-5.2414%			-4.1243%
				-3.5408%		-1.4763%	-2.0579%			-1.5971%	0.4572%	-3.7222%			0.2437%
				2.2456% -0.6944%		3.1827% 0.3346%	4.6045% 1.1387%			4.2598% 0.5138%	6.0433% -1.9381%	0.4735% -0.8252%			5.1199% -2.1683%
				7.4118%		8.5486%	9.6135%			9.2734%	10.1407%	7.5463%			6.9230%
	-1.7584%			-3.2694%		-1.4528%	-3.4219%			-2.1069%	-2.9223%	-3.1352%			-4.0205%
	-1.2305% -4.9740%			-4.7059% -2.3227%		-5.0185% -2.5942%	-5.0096% -4.1338%			-4.6602% -4.1194%	-2.5042% -3.2366%	-5.1553% -3.2019%			-5.3657% -3.2519%
	4.9364%	8.1389%		5.9126%		7.5146%	8.4240%			6.8270%	6.6150%	5.6209%			9.1651%
	4.7421%	5.9329%		7.7063%		4.7959%	6.2466%			4.9425%	5.8546%	-5.5323%			5.1707%
	-1.7350% -8.6445%	-6.1160% -7.7891%		-1.7042% -7.0545%		-2.4271% -6.5370%	-3.1289% -10.0359%			-5.1001% -8.3388%	-0.4092% -6.2093%	7.9881% -5.6545%			-3.2052% -6.8943%
	9.3115%	6.7377%		8.6999%		8.1096%	6.9409%			7.8624%	8.2666%	7.2566%			-0.8943 <i>%</i> 6.9124%
	4.2637%	3.8133%		3.9002%		4.9768%	5.1701%			5.4486%	4.1324%	2.4219%			5.0363%
	-2.7734%	1.6003%		-0.3367%		-0.0562%	-0.5634%			0.4940%	-0.7929%	1.1407%			1.2993%
	-8.1577% 3.1553%	-3.9581% 3.3555%		-6.3915% 5.1941%		-7.3354% 4.9470%	-6.7124% 3.6927%			-6.5765% 1.5395%	-6.7381% 3.4322%	-4.0721% 2.7498%			-6.4204% 4.1957%
	-8.8791%	-6.9779%		-8.1877%			-10.2044%			-6.9418%	-7.5144%	-6.6537%			-8.8976%
	3.8304%	2.0744%	= +00.00	2.4693%		4.8108%	2.5291%			3.0952%	2.1953%	2.4721%	3.9705%		5.4829%
	8.4321% 9.4027%	5.3046% 4.5663%	5.1806% 2.2318%	9.0430% 8.3202%		6.5345% 8.3955%	7.3362% 6.3192%			6.7681% 6.6233%	5.7892% 8.7008%	6.3864% 6.4564%	7.7890% 7.5419%		9.8122% 5.9627%
	-2.9645%	-4.4457%	-3.6793%	-2.4115%		-3.2108%	-3.2360%			-4.5587%	-5.4155%	-3.3144%	-2.5850%		-3.4181%
	2.5533%	-0.1899%	-0.7620%	1.5263%		5.0259%	3.0664%			2.3821%	1.0693%	-0.1644%	2.7708%		3.2874%
	1.6398% 2.3989%	1.2358% 7.2702%	0.2963% 8.1487%	0.7428% 2.7091%		2.2569% 3.8028%	1.2910% 3.5506%			0.4135% 4.5163%	1.3501% 5.6713%	0.4963% 2.3931%	1.5069% 2.7764%		-0.5156% 6.8537%
	0.6517%	2.5442%	3.9698%	1.5384%		1.4584%	1.4545%			1.9292%	0.8073%	-0.0994%	1.4913%		2.5936%
	-4.5320%	-2.9732%	0.0157%	-5.0722%		-3.8950%	-3.6147%			-3.5961%	-3.9857%	-2.2066%	-3.8388%		-2.6151%
	10.5503% 4.6929%	-7.4166% 2.8444%	-0.9540% 1.2037%	-8.7426% 2.7326%		-9.3428% 2.7685%	-8.8385% 2.9393%			-8.8531% 4.0177%	-8.7212% 1.5103%	-5.0597% 1.7996%	-10.1760% 3.7228%		-9.4244% 1.7053%
	-1.6317%	0.0468%	-0.0165%	0.6562%		-0.1801%	-0.1573%			0.2562%	1.2824%	-0.8637%	-1.7774%		0.6192%
	-0.4473%	4.4396%	2.3923%	-1.1615%		1.2471%	-0.5916%			1.9115%	0.6209%	0.8704%	-0.6469%		0.7730%
	3.0984% -2.8328%	4.1379% -1.8434%	5.1949% -0.2781%	3.4509% -2.7796%		3.5647% -2.7515%	4.5200% -3.6238%			3.9144% -2.1851%	3.2628% -1.6872%	2.6044% -2.2809%	3.9859% -3.0885%		5.3885% -4.1417%
	-2.8528%	-1.8434%	-0.2781%	-3.6283%		-2.7313%	-3.3953%			-2.1831%	-3.0907%	-2.2809%	-3.7370%		-4.1417%
	-3.9670%	-4.4907%	-1.9816%	-3.7793%		-4.4168%	-3.7673%			-3.3533%	-4.0420%	-3.5331%	-4.2358%		-2.3103%
	-7.5346%	-7.2465%	-5.0482% -2.9815%	-7.1799%		-7.3308%	-7.4399%			-7.6842%	-6.8865%	-4.9233%	-7.3783%		-6.1706%
	-2.3594% 12.1043%	1.7983% 10.8926%	-2.9815% 10.8291%	-2.0102% 12.2909%		0.9558% 10.8887%	-0.2542% 10.9239%			-0.1198% 10.7592%	0.5414% 9.4688%	0.5373% 7.9972%	-1.1555% 10.2628%		1.7208% 10.9045%
	-0.6486%	2.9129%	0.5516%	-0.3845%		0.6110%	0.2678%			1.5110%	1.4465%	0.8094%	1.1165%		2.4974%
	5.1627%	4.8472%	3.6076%	4.7423%		2.5871%	4.6856%			3.0730%	5.0789%	2.3603%	5.0756%		4.3602%
	3.9351% -1.9574%	2.7445% -1.6774%	4.6630% -0.6195%	3.6803% -0.9880%		2.5715% -1.4988%	2.1155% -1.6802%			4.5135% -0.4325%	4.4893% -0.5127%	3.1358% -0.3855%	2.9583% -1.3981%		2.6896% -0.0819%
	7.0110%	8.3989%	6.7287%	5.0662%		8.8866%	8.9612%			9.7127%	3.5737%	6.5979%	6.6284%		7.4004%
	1.5678% 6.5022%	0.9548% 7.0893%	2.0391% 7.3274%	1.4506% 7.4666%		0.6753% 6.2025%	1.1360% 6.9098%			2.6552% 6.5452%	1.0279% 7.4993%	2.1615% 5.9934%	2.7655% 5.1997%		5.2127%
	3.4818%	2.2751%	2.6013%	3.5555%		2.1992%	2.3075%			1.6553%	2.6052%	2.7442%	3.1997%		6.9687% 0.6514%
	0.5164%	-0.2344%	0.6538%	1.2927%		-0.1758%	-0.5673%			0.9610%	0.0130%	-0.8164%	0.5192%		0.3356%
	-0.3892%	1.5518%	1.1673%	0.7131%		0.6930%	0.4002%			0.0889%	0.4888%	0.6436%	0.7421%		2.8146%
	-2.1022% 0.0479%	0.7008% -0.5885%	-1.0202% 0.0214%	-1.5301% -0.0909%		-0.6460% -0.0507%	0.2317% -0.3536%			-0.6672% -1.0792%	-0.8854% -0.0327%	-1.1127% -0.4518%	-2.0077% 0.0295%		-1.9808% -0.3634%
	-0.3351%	0.4406%	0.2414%	-0.1707%		0.7632%	-0.1537%			1.2977%	0.0033%	-0.4434%	-0.2210%		1.4454%
	0.8966%	-1.0413%	0.7533%	-0.1758%		-0.6841%	-1.2606%			-1.7514%	0.1178%	-0.2988%	1.2183%	5 34400/	-1.3836%
	7.9346% 5.8517%	7.7240% 7.7013%	6.3444% 5.3063%	7.0049% 5.4688%		7.6691% 6.6568%	7.0147% 6.3358%			7.5622% 8.2683%	7.1823% 5.1577%	6.7241% 5.8381%	6.4196% 5.9295%	5.7110% 7.3477%	5.7759% 7.3652%
	1.8682%	6.3215%	3.8608%	4.5095%		4.6850%	4.5472%			4.9759%	1.9810%	5.8888%	3.2162%	7.6664%	7.6800%
	8.4879%	7.6043%	7.2275%	7.9900%		8.4607%	7.7789%			9.1156%	8.9306%	7.8641%	8.5392%	8.6775%	8.6946%
	2.5954% 1.1638%	3.4900% -0.3763%	3.6779% -1.1767%	3.5819% 0.3022%		3.5987% -0.6880%	3.8370% -1.1214%			4.0883% -0.4091%	3.8486% 1.5312%	4.4173% 0.9468%	3.9568% -0.2111%	6.0963% 1.2632%	6.1122% 1.1320%
	5.0678%	3.3911%	2.4654%	3.6107%		3.5211%	3.0711%		4.0031%	2.9204%	3.8903%	2.5743%	2.9567%	0.4801%	0.5035%
	-1.2620%	-2.9571%	-0.6597%	-0.9007%		-2.1618%	-2.1302%		-2.3264%	-3.1874%	-2.9914%	-2.0750%	-2.2120%	-2.4083%	-2.3695%
7.1453%	-4.7041% 7.5147%	-1.8288% 6.7950%	-4.6752% 8.3519%	-4.5003% 7.2372%		-2.5579% 6.7220%	-3.6191%		-2.9487% 7.0201%	-2.8301% 6.3726%	-2.6143% 5.5027%	-2.5593% 6.1601%	-4.0153% 6.8280%	-1.4240% 5.9763%	-1.4005% 5.9975%
1.3975%	2.3640%	6.7950% 1.3980%	8.3519% 2.8639%	7.2372% 2.4764%		6.7220% 1.9422%	7.1706% 2.3311%		7.0201% 2.1043%	6.3726% 1.8292%	3.0706%	6.1601% 2.1984%	6.8280% 2.7238%	5.9763% 1.7784%	5.9975% 1.7993%
10.3856%	8.9204%	8.4250%	6.6653%	8.1512%		7.8810%	7.8377%		8.4545%	7.8873%	8.9814%	8.8777%	8.2016%	8.3568%	8.2090%
4.5210%	1.6605%	1.2167%	1.0788%	1.3093%	3.3808%	0.5837%	1.4938%		1.3458%	0.6664%	0.8303%	1.4136%	1.5286%	0.2634%	0.2827%
6.2925% -4.0950%	6.7293% -3.6210%	5.5079% -3.2773%	8.6949% -1.9769%	6.1914% -2.9705%	10.3333% -2.6945%	7.2719% -3.3134%	7.8723% -2.0696%		7.0280% -2.6607%	6.9715% -3.2974%	7.0543% -6.2601%	5.3087% -2.2875%	7.0309% -3.2019%	6.0987% -2.1341%	6.1181% -2.1096%
3.2216%	3.2734%	2.5349%	3.1203%	3.1990%	3.4069%	2.5212%	4.3779%		3.2002%	2.2026%	2.8236%	2.7029%	2.3205%	1.7507%	1.7740%
8.3217%	6.7414%	8.9516%	6.1032%	6.3548%	7.2304%	7.6450%	7.0361%		6.9282%	6.9708%	7.1762%	6.9433%	7.4846%	8.5690%	8.5856%
Table A7.1 Stati	stical	l Resi	ults fo	or Re	turns	on ur	nit tru	st over	r the j	perio	d 1992	2 to 2	011		
(continued)									-						
· · · ·															

14.0004		7.0454%	8.3503%	8.1999%	9.7699%	7.1570%	7.2157%		6.4468%	8.3366%	7.8890%	7.9413%	9.0314%	7.9907%	7.8926%
-2.7474		-0.0599%	-0.3731%	0.1119%	-0.9445%	-0.1226%	1.4543%		-0.3974%	-1.1882% 4.5560%	-0.1168%	0.2376%	-0.9541%	-0.1729%	-0.1502%
6.5334 1.8429		3.9774% 2.2902%	4.4340% 2.0507%	4.4845% 2.8404%	4.8371% 2.9609%	4.5204% 2.3646%	5.7050% 1.0010%		5.0217% 2.1625%	2.3216%	4.7765% 2.0697%	4.5715% 0.9869%	5.5741% 1.9721%	4.8349% 1.0094%	4.8564% 1.0289%
-2.9687		-5.0479%	-2.1097%	-3.2852%	-4.1653%	-4.8110%	-5.5420%		-4.6196%	-5.3759%	-3.6728%	-4.4139%	-3.9473%	-2.7328%	-2.7055%
0.7595	6 -0.2384%	-2.0443%	3.3446%	1.7726%	0.2557%	0.3683%	0.3797%		0.6935%	-1.3054%	0.8375%	0.5301%	0.2892%	-1.8474%	-1.8222%
-0.3400		-0.8457%	-0.5989%	-1.3790%	-1.6375%	-1.8294%	-0.1297%		-0.1713%	-1.8663%	-0.9704%	-0.0701%	-0.5918%	0.9426%	0.8259%
4.2332		4.6669%	3.4599%	4.2265%	5.1034%	4.9202%	5.1685%		4.6578%	4.1495%	4.3865%	4.6456%	4.4876%	4.2889%	4.3126%
0.5213 3.4282		1.9183% 7.0337%	0.9696% 1.6769%	2.5674% 3.6342%	2.2265% 6.1087%	1.4565% 4.4289%	1.3789%		2.0204% 4.6174%	1.8063% 5.3123%	1.1285% 1.6576%	2.4486% 4.2011%	2.1889%	4.7370% 1.8074%	4.7586% 1.8317%
2.0593		4.9582%	4.2254%	3.7670%	4.0515%	4.4289% 3.6599%	5.1897% 4.0465%		3.8494%	4.5805%	2.9947%	4.2011% 3.6963%	3.4053% 3.6720%	4.0320%	4.0525%
4.6505		7.0244%	4.5900%	5.5178%	5.4523%	6.9366%	6.8805%		5.3655%	7.0637%	4.9753%	5.7883%	4.7829%	6.3172%	6.3337%
4.2083	% 3.5032%	2.9410%	2.1540%	1.8540%	5.0614%	2.1708%	3.3496%		1.5652%	2.1626%	4.0433%	3.3631%	3.0724%	2.2004%	2.0970%
1.6308	% 1.0234%	2.1171%	0.2705%	0.3976%	1.0175%	1.1019%	1.9044%		1.0544%	1.0610%	2.3126%	1.0054%	1.4995%	0.5964%	0.6212%
6.7083		5.2375%	4.2346%	5.1113%	4.1934%	5.7541%	5.6622%		5.4312%	5.5422%	6.3195%	4.4154%	4.1559%	2.4311%	2.4614%
2.7402		4.8224%	1.0150%	3.5708%	4.5869%	4.7493%	5.1204%		4.1984%	3.8282%	3.5713%	4.5321%	3.2751%	5.5696%	5.5900%
0.0493 -1.2145		-1.9469% -1.6935%	2.1365% -2.1502%	1.3441% -1.8532%	2.2117% -0.1292%	-0.8272% -1.8254%	0.5720% -1.0398%		0.5439% -1.8220%	-1.6435% -1.9084%	0.8611% -1.3283%	-0.0308% -1.6314%	1.0273% -2.2078%	-1.1063% -1.8661%	-1.0803% -1.8410%
0.1017		1.4486%	-0.0572%	-0.5519%	1.3305%	0.2576%	-1.2506%		0.1809%	1.2448%	1.4073%	-0.1034%	-0.0424%	-0.0085%	-0.1331%
-1.2014		1.8565%	0.0025%	0.1348%	-0.3237%	-0.0614%	0.0693%		0.1943%	1.3258%	0.3036%	-0.4258%	0.2403%	0.0416%	0.0664%
2.8935	6 3.1471%	1.2782%	4.6987%	4.1558%	2.2092%	2.6615%	2.9104%		3.5995%	2.0205%	4.5784%	2.6523%	2.1517%	1.1259%	1.1482%
7.2697		7.2941%	1.8765%	4.2428%	4.9494%	5.7748%	6.0399%		4.9006%	7.2220%	1.9402%	5.4282%	4.3866%	4.3206%	4.3443%
-3.07849		-2.2397%	-1.5081%	-2.3825%	-5.8417%	-3.5203%	-2.9067%		-3.4101%	-2.6739%	-4.4179%	-3.2292%	-4.1335%	-3.1813%	-3.1548%
-1.9434		-4.2336% -7.9072%	-3.9583% -5.7552%	-4.2543%	-3.2289%	-3.0049%	-2.4489% -11.1252%		-3.1403% -11.3460%	-3.8831% -8.5302%	-3.6007% -7.5455%	-1.6115%	-2.8055%	-3.0999%	-3.0726%
-5.7701 13.0082		6.3375%	6.1564%	-8.7350% 9.0481%	-8.1146% 8.0876%	-9.3829% 9.4051%	8.2270%		8.5805%	7.0593%	9.7522%	-10.0921% 7.6656%	-8.4012% 7.6597%	-8.3921% 8.4188%	-8.5073% 8.4409%
-2.1476		-1.6875%	-0.3601%	-1.4855%	-2.5444%	-1.7754%	-1.0799%		-0.8985%	-1.8134%	-1.4019%	-1.8115%	-2.8321%	-0.7630%	-0.7943%
4.7852		2.6941%	-0.7873%	1.8374%	2.5915%	2.6878%	2.2426%		1.4107%	1.1066%	3.2573%	1.0542%	0.8501%	3.3423%	3.3649%
4.7800		1.5414%	1.9513%	4.1415%	1.8050%	3.0550%	1.3011%		0.9135%	2.3084%	3.3715%	1.2302%	1.9061%	2.9281%	2.9517%
-5.5332		-5.3906%	-5.4067%	-4.2896%	-5.5967%	-5.7800%	-7.7365%		-5.5358%	-5.0166%	-3.0886%	-6.6616%	-5.2252%	-5.6027%	-5.5757%
-9.0408		-2.9663%	-3.6276%	-6.6135%	-5.7422%	-5.8456%	-6.2598%		-2.3855%	-3.0996%	-6.8380%	-4.9332%	-1.8885%	-6.0699%	-6.1305%
1.7133 -13.9434		3.0959% -12.3756%	3.7991% -8.5901%	2.2645% -10.2012%	1.9821% -11.1514%	2.7893% -10.2901%	2.5580% -8.4097%		3.5209% -9.4253%	2.2338% -12.0483%	1.2680% -12.8631%	3.5892% -8.7343%	2.7214%	3.6602% -12.7988%	3.6823% -12.7694%
-15.4269		-11.8006%	-9.9943%	-7.8018%	-16.0303%	-9.3551%	-9.2976%	-8.6000%			-12.5002%	-9.1858%		-10.1840%	-10.1537%
-1.2753		1.1564%	-1.6851%	0.5298%	-3.7265%	-2.0480%	0.2586%	-0.4705%	0.0599%	0.6161%	0.7202%	-0.8080%	-1.6931%	-3.2970%	-3.2729%
1.8837	% 3.9422%	1.8582%	6.6641%	3.4213%	5.1918%	3.4903%	5.0443%	4.0013%	3.3006%	2.2050%	1.3859%	2.4306%	3.4368%	2.4651%	2.4875%
-4.3165		-8.9515%	0.6506%	-9.2394%		-12.5117%	-9.9974%	-5.4962%	-7.3928%	-9.2596%	-3.9787%	-3.9898%	-2.4292%	-5.0920%	-5.2209%
-9.2495 11.2220		-11.1323% 11.3385%	-7.3184%	-7.4503%	-10.3824%	-9.7564%	-9.2466% 10.2255%	-9.3278%		-10.5867% 12.2238%	-9.1961%	-9.9726%	-8.8350%		-11.4277%
-3.2769		6.2867%	4.9107% -0.7168%	5.8325% 1.5356%	6.7461% 5.7764%	8.3162% 4.0652%	3.5356%	7.1420% 4.8469%	7.7368% 2.9528%	5.9548%	8.4347% 4.4864%	7.5571% 3.0331%	6.7942% -1.2670%	7.6120% 4.7014%	7.6421% 4.7172%
8.8065		9.0865%	6.3098%	7.0729%	8.9303%	8.8017%	8.5649%	7.5986%	7.0809%	8.1605%	8.4468%	7.0010%	6.4161%	9.5279%	9.5425%
-0.8971		1.3713%	0.7807%	-0.9446%	0.2778%	-0.9035%	-0.6526%	1.3879%	-0.5241%	1.2266%	-0.2783%	-0.1341%	-0.0666%	-1.1209%	-1.0944%
9.5336		5.9547%	7.6172%	6.2341%	7.7761%	8.2452%	7.4664%	5.7675%	8.6079%	5.7808%	6.0011%	4.2129%	8.1060%	8.4331%	8.3077%
3.7887		5.4624%	4.7205%	4.5079%	7.4601%	4.7910%	4.4184%	5.8146%	5.0654%	5.3876%	3.2205%	5.0165%	3.3793%	4.9365%	4.9620%
-0.0066 5.2279		1.5251% 3.3809%	1.8705% 2.0419%	1.7917% 4.3040%	1.3573% 3.4411%	0.8172% 4.0437%	1.5869% 4.3041%	2.1944% 1.4697%	1.3972% 3.9859%	0.7935% 3.7394%	2.1024% 2.1897%	1.1998% 3.8975%	0.8346% 2.7984%	0.4890% 4.5631%	0.5123% 4.5842%
0.8783		1.4518%	-2.1018%	0.0741%	-1.8198%	1.1554%	1.0218%	-0.9454%	-0.1251%	1.6358%	1.6881%	-0.5453%	-1.6870%	0.3678%	0.3928%
4.6173		3.1707%	1.2907%	3.1628%	2.0265%	3.1469%	1.8710%	2.4516%	2.9439%	3.0064%	2.5894%	2.8856%	2.7754%	3.8904%	3.9109%
-3.8455	6 -2.8778%	-2.5585%	-3.0592%	-1.8767%	-3.3633%	-3.0016%	-3.0961%	-1.5811%	-5.9656%	-2.1757%	-4.2331%	-2.2801%	-2.2957%	-3.3425%	-3.4511%
1.7559		1.8840%	1.2070%	0.4229%	2.1595%	1.4122%	0.9267%	1.0681%	1.0500%	1.7745%	0.4675%	0.6360%	1.4208%	-0.2141%	-0.1912%
7.1642		4.4489%	4.3764%	6.1532%	5.1988%	5.6112%	7.4527%	4.7856%	6.6828%	4.7735%	6.5919%	6.3822%	5.4345%	7.1973%	7.2234%
-0.3429 -5.1438		0.1005% -4.0661%	0.8134% -2.5958%	0.3831% -3.9796%	1.6575% -5.0168%	-0.5517% -4.3191%	0.6331% -4.4267%	0.8609% -2.1624%	0.4283% -4.2977%	-0.0189% -3.8684%	-0.1592% -4.5392%	1.0000% -4.9261%	-1.4588% -3.7410%	0.4676% -4.6148%	0.4928% -4.5871%
-2.8817		-3.1218%	-1.4841%	-1.6918%	-4.3680%	-4.3795%	-2.4604%	-2.4595%	-2.5974%	-3.1112%	-4.0546%	-3.0054%	-1.9081%	-2.8131%	-2.7851%
8.3012	6.7941%	5.4911%	3.4684%	4.8655%	7.6439%	8.5667%	5.7860%	5.2815%	7.0702%	5.3841%	8.0307%	6.2639%	6.0016%	6.8303%	6.6900%
-3.7381		-2.5019%	-0.9819%	-2.7397%	-3.0221%	-2.7882%	-3.2493%	-1.7073%	-2.8226%	-2.3986%	-2.7863%	-3.2097%	-2.5961%	-4.1974%	-4.1716%
8.0002		6.9796%	5.5641%	8.3096%	8.0102%	8.8725%	8.3718%	6.4702%	8.1452%	7.0694%	7.4235%	7.7368%	8.0432%	9.0667%	9.0895%
1.8803 -0.5432		3.4103% -0.7024%	0.9625% -0.3117%	3.1157% 0.3922%	2.4198% -0.8130%	2.1523% -0.7637%	2.3764% 1.2702%	2.2112% 0.8321%	2.6340% 0.8530%	3.3697% -0.6065%	1.1163% -0.4923%	2.7589% 0.6525%	2.8431% -0.5671%	1.8045% -0.5607%	1.8260% -0.5348%
5.6177		5.5545%	4.2599%	3.9535%	-0.8130% 5.6464%	4.7658%	5.2342%	4.6962%	4.6516%	5.2888%	4.8990%	4.5266%	5.0814%	5.0196%	5.0386%
-3.4591		-1.8076%	-2.2535%	-2.9899%	-3.4687%	-2.0988%	-2.8134%	-2.7372%	-3.6869%	-1.6756%	-2.6387%	-1.0218%	-2.2116%	-3.3272%	-3.4345%
1.8731	% 2.4227%	1.8044%	1.8701%	2.1331%	2.5626%	2.5379%	2.7582%	2.3206%	1.3281%	1.6294%	1.7535%	1.6905%	2.5280%	2.4267%	2.4487%
1.8544		0.8578%	0.0177%	-0.0381%	-0.6638%	0.9614%	0.5311%	1.4184%	1.0437%	1.0164%	0.2618%	0.4354%	1.0799%	1.5296%	1.5647%
-0.3624		1.4126%	2.2096%	2.6767%	1.2855%	1.7175%	2.2308%	1.2708%	2.1046%	1.5894%	1.8814%	1.3327%	0.9479%	2.3008%	2.3214%
-2.2579 -0.0281		-0.1352%	-0.5394%	-0.0072%	-0.8477%	0.1342%	0.3963%	-0.2594%	-0.1330%	-0.1165%	-0.4358%	-0.3062%	-0.1777%	-0.2171%	-0.1929% -2.4961%
-0.0281		-2.3604% -2.9346%	-2.0538% -1.4898%	-1.6546% -1.9879%	-0.5499% -2.2768%	-2.1218% -3.3641%	-2.1263% -2.8939%	-1.7360% -2.2459%	-1.4505% -1.7324%	-2.3901% -2.6256%	-2.7242% -2.6574%	-2.3715% -1.7285%	-1.7697% -0.4815%	-2.5213% -3.9126%	-4.0352%
0.7174		-1.1559%	-0.2844%	-0.0679%	-3.7278%	-0.8863%	-0.6904%	-2.2439%	-0.9404%	-0.2436%	-1.0443%	-1.3545%	-0.3615%	0.7652%	0.7900%
-3.5773		-4.2302%	-2.7390%	-2.4625%	-3.5116%	-3.7858%	-3.3100%	-2.4641%	-3.0314%	-4.4047%	-4.5046%	-1.0929%	-1.3095%	-3.6318%	-3.6070%
5.7578	8.4290%	7.4968%	5.4972%	9.0312%	6.7619%	8.9954%	8.3545%	5.9404%	7.2110%	7.4965%	5.8575%	8.1740%	6.3329%	9.3013%	9.3195%
3.0167		-0.4611%	-0.3971%	-0.6514%	-0.8678%	-0.6777%	-0.4693%	-0.3652%	-0.2456%	-0.3739%	-0.9587%	-1.5078%	0.6915%	-1.2860%	-1.2622%
-0.2975	6 0.3819%	1.3631%	1.5571%	0.2885%	1.2962%	1.6341%	1.5288%	1.2075%	1.0588%	1.2494%	1.1650%	0.4171%	-1.1979%	1.0157%	1.0378%
Mean 1.325	0 1.0445	1.3161	1.3331	0.9365	1.0002	1.0781	0.9943	0.9580	1.1296	1.1002	1.0282	1.0725	1.1709	1.3477	1.1402
Median 1.514		1.5518	1.0469	1.2092	1.6575	1.2179	1.0010	1.2075	1.0588	1.5110	1.0282	0.9086	1.2183	1.1259	1.1402
Standard Deviation 5.347		4.7075	3.6818	5.3277	5.0343	5.5432	5.1086	3.9023	4.4459	5.3256	5.0303	4.2316	4.1960	4.7706	5.1133
Table A7.1 Sta	tistica	l Resi	ilts fo	or Ref	urns	on un	it tru	st over	• the r	oeriod	1992	2 to 20)11		

 Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011 (continued)

PSGG[CL]	OMAA[CL]	CAEF[CL]	STBI[CL]	INDT[CL]	GDBT[CL]	GDSE[CL]	HLMK[CL]	STCA1[CL]	PTST[CL]	AYEF[CL]	GDBK[CL]	MTLE[CL]	MIEF[CL]	27FB3[CL]	MOEF[CL]
			. ,					-0.2288%			1.5260%				
							1.0624%	1.0624%			-0.9170%				
							-2.7173%	-2.7173%			-1.7696%				
							5.8511%	5.8511%			9.2428%				
							-1.4844%	-1.4844%			-2.6821%				
							-3.9709%	-3.9709%			-6.5462%				
							-3.7561%	-3.7561%			-3.4281%				
							4.5423%	4.5423%			4.4893%				
							-5.2902%	-5.2902%			-3.6625%				
							3.3324%	3.3324%			4.6767%				
							3.9519%	3.9519%			4.7386%				
							4.3759%	4.3759%			0.0616%				
							-0.3288%	-0.3288%			0.4509%				
							0.4216%	0.4216%			2.9828%				
							-0.9334%	-0.9334%			2.582876				
							4.5186%	4.5186%			4.9386%				
							3.0424%	3.0424%			3.6164%				
							-0.6538%	-0.6538%			-1.2205%				
							-2.5237%	-2.5237%			-0.9306%				
							-3.1025%	-3.1025%			-1.7248%				
							2.1195%	2.1195%			0.8630%				
							7.0954%	7.0954%			5.1633%				
							11.4270% -2.5848%	11.4270%			10.1368%				
								-2.5848%			-1.6243%				
							3.0694%	3.0694%			2.0891%				
							0.3824%	0.3824%			2.6591%				
							5.7323%	5.7323%			7.3708%				
							6.1160%	6.1160%			-1.5102%				
							-0.2307%	-0.2307%			1.1184%				
							2.6846%	2.6846%			1.3951%				
							5.0788%	5.0788%			1.6161%				
					-1.9057%		-3.9784%	-3.9784%			-1.7022%				
					2.2665%		0.7653%	0.7653%			2.2324%				
					3.1085%		-1.0595%	-1.0595%			1.2736%				
					1.9354%		2.2410%	2.2410%			2.8278%				
					-12.2684%		-11.3935%				-13.1080%				
					2.7260%		-0.2147%	-0.2147%			1.9629%				
			3.2724%		3.1804%		4.0949%	4.0949%			5.0326%				
			3.4086%		3.5634%		-0.0329%	-0.0329%			3.0238%				
			0.0483%		0.7867%		0.7485%	0.7485%			0.3384%				
			-0.2319%		-2.4828%		-0.2329%	-0.2329%			-1.2867%				
			-0.6682%		1.2923%		0.0504%	0.0504%			0.2375%				
			1.6379%		2.0756%		1.8378%	1.8378%			0.4626%				
			2.3118%		3.5071%		0.9863%	0.9863%			3.7958%				
			2.9721%		3.2621%		1.8898%	1.8898%			2.4159%	4.9065%			
			3.3324%		2.5220%		2.9463%	2.9463%			3.2947%				
			3.6831%		4.3497%		4.1276%	4.1276%			5.2663%				
			7.4615%		5.3838%		6.6094%	6.6094%			4.4106%	8.6388%			
			-2.6967%		-3.4987%		-2.7596%	-2.7596%			-2.0567%				
			1.2029%		1.4919%		0.1823%	0.1823%			2.7329%	-0.9507%			
			3.9271%		1.8889%		0.1324%	0.1324%			2.4059%	1.9141%			
			-2.0709%		-2.1098%		-2.1056%	-2.1056%			-0.7525%	-1.1413%			
			1.1521%		1.4818%		2.4180%	2.4180%			2.4546%				
			-5.1096%		-3.8573%			-5.2098%				-0.7951%			
			1.1838%		1.0477%		1.5224%	1.5224%			3.2684%	1.3377%			
			2.9331%		3.5043%		3.4063%	3.4063%			2.4309%				
			3.2520%		0.3184%		1.1182%	1.1182%			0.3798%	4.1752%			
			-3.4477%		-3.1581%		-1.0596%	-1.0596%			-2.7101%				
			-1.0847%		-0.8952%		0.1051%	0.1051%			0.0121%	0.2538%			
			-0.6324%		-0.9033%		-0.3976%	-0.3976%			-2.4773%	3.1618%			
			6.3235%		6.5516%		4.9097%	4.9097%	6.3889%		6.2209%	4.0560%			
			-0.5455%		-0.7638%		2.3104%	2.3104%	0.7963%		-0.7756%	0.3098%			
			0.3809%		2.2629%		2.0020%	2.0020%	2.0076%		2.2272%	0.6085%			
			-0.9107%		-1.4075%		-0.9698%	-0.9698%	-1.3759%		-0.6094%	0.8155%			
			4.5799%		4.4049%		5.5976%	5.5976%	7.4002%		4.0948%	5.8989%			
			0.0513%		0.1974%		1.4141%	1.4141%	-0.9892%		0.1769%				
			-1.4420%		-1.4303%		-1.2956%	-1.2956%	-2.6586%		-2.1990%	-0.3302%			
			-1.5596%		-1.9545%		-1.0959%	-1.0959%	-1.9011%		-2.3751%	-2.6371%			
			-9.2795%		-7.7701%		-5.0257%	-5.0257%	-5.8502%		-8.3856%	-4.4274%			
			-3.4262%		-0.7450%		-1.9545%	-1.9545%	-2.8218%		-0.4507%	1.4008%			
			-1.4725%		-0.1650%		-2.1323%	-2.1323%	-1.6408%		-0.0705%	1.9742%			
0.24009/			3.0502%		3.5033%		2.3681%	2.3681%	4.1351%		2.1557%	8.9913%			
9.3400%			7.6584%		7.4639%		9.0117%	9.0117%	9.6408%		6.1742%	14.5752%			
14.3406%			110001110				8.8046%	8.8046%	5.8266%		9.0411%	7.3935%			
			7.8226%		8.6094%		0.004070				5.0411/0	7.5555370			
14.3406%					8.6094% 8.3510%		7.5753%		5.2213%			10.4617%			
14.3406% 9.4945%			7.8226%				7.5753%	7.5753%	5.2213% -7.1093%		5.9364%				
14.3406% 9.4945% 7.2029%			7.8226% 7.1309%		8.3510%		7.5753%	7.5753% -3.3757%			5.9364% -9.8634%	10.4617%			
14.3406% 9.4945% 7.2029% 2.1397%			7.8226% 7.1309% -10.5094%		8.3510% -6.5459%		7.5753% -3.3757%	7.5753% -3.3757% -8.4102%	-7.1093% -11.2490%		5.9364% -9.8634%	10.4617% -2.7073% -6.9891%			
14.3406% 9.4945% 7.2029% 2.1397% -3.5826%			7.8226% 7.1309% -10.5094% -7.9713%		8.3510% -6.5459% -12.0770%		7.5753% -3.3757% -8.4102% -0.3875%	7.5753% -3.3757% -8.4102% -0.3875%	-7.1093% -11.2490%		5.9364% -9.8634% -11.6253% -1.0187%	10.4617% -2.7073% -6.9891%			
14.3406% 9.4945% 7.2029% 2.1397% -3.5826% 2.1104%			7.8226% 7.1309% -10.5094% -7.9713% 1.5651%		8.3510% -6.5459% -12.0770% -2.1280%		7.5753% -3.3757% -8.4102% -0.3875%	7.5753% -3.3757% -8.4102% -0.3875%	-7.1093% -11.2490% 2.8842% -30.8363%		5.9364% -9.8634% -11.6253% -1.0187%	10.4617% -2.7073% -6.9891% 9.0151% -32.2064%			
14.3406% 9.4945% 7.2029% 2.1397% -3.5826% 2.1104% -28.0545%			7.8226% 7.1309% -10.5094% -7.9713% 1.5651% -27.4603%		8.3510% -6.5459% -12.0770% -2.1280% -30.2276%		7.5753% -3.3757% -8.4102% -0.3875% -26.1550% 3.4105%	7.5753% -3.3757% -8.4102% -0.3875% -26.1550% 3.4105%	-7.1093% -11.2490% 2.8842% -30.8363%		5.9364% -9.8634% -11.6253% -1.0187% -26.5104% 5.7715%	10.4617% -2.7073% -6.9891% 9.0151% -32.2064%			

 Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011 (continued)

-1.6320%			-2.9912%		-1.2589%	-2.2431%	-2.5931%	-2.5931%	-3.0870%	-3.5892%	0.5135%	
7.7211%			5.3359%		4.2155%	6.1975%	3.6896%	3.6896%	5.8760%	3.1210%	7.7022%	
1.9887%	2.0697%		2.6801%		3.0387%	2.1896%	4.6074%	4.6074%	1.6068%	3.6951%	1.0205%	
5.0614%	7.6148%		8.0526%		7.2003%	7.5420%	9.6369%	9.6369%	6.9874%	5.3206%	5.3271%	
						7.5397%						
1.6980%	2.0818%		10.2536%		7.8599%		2.7713%	2.7713%	9.7180%	7.9491%	0.9404%	
-5.8942%	-5.7068%		-7.5052%		-4.9106%	-7.0437%	-6.4931%	-6.4931%	-6.1819%	-4.7629%	-8.0021%	
8.0871%	7.0653%		8.5594%		9.2397%	9.0789%	7.0070%	7.0070%	10.5917%	9.6123%	6.1524%	
-2.3591%	-1.8645%		0.8589%		-0.3189%	1.5053%	-1.4503%	-1.4503%	-0.6262%	-2.5552%	-2.4019%	
-6.6776%	-4.0531%		-1.6034%		-2.3353%	-2.7835%	-2.8804%	-2.8804%	-3.2620%	-1.4868%	-4.5132%	
-6.1416%	-2.8770%		-0.9512%		-0.9089%	-1.6478%	-3.7257%	-3.7257%	-0.4981%	0.1248%	-3.1973%	
8.8734%	5.4947%		4.3215%		5.6524%	6.4278%	6.2669%	6.2669%	5.9112%	6.3357%	4.7310%	
3.7635%	5.8635%		5.7421%		5.9523%	5.5252%	9.4303%	9.4303%	6.7994%	5.4651%	8.4111%	
13.7890%	12.3378%		12.6302%		14.2035%	13.7213%	11.4614%	11.4614%	13.7629%	11.1859%	12.0441%	
0.9792%	-0.5529%		-2.4012%		0.7692%	-2.2274%	-1.5127%	-1.5127%	-1.1522%	-3.0473%	0.2153%	
-3.8649%	-4.5376%		-4.3427%		-5.4461%	-6.1304%	-7.3919%	-7.3919%	-2.8005%	-5.1530%	-0.9847%	
-3.1690%	-1.2965%		0.4615%		-1.8250%	0.5590%	-3.5764%	-3.5764%	-1.3861%	-0.2557%	0.3571%	
-7.2547%	-6.0010%		-5.2553%		-6.0949%	-5.6924%	-4.7573%	-4.7573%	-5.9302%	-4.8788%	-9.5308%	
-5.2573%	-1.2903%		-0.9340%		-1.9575%	-1.2758%	0.2770%	0.2770%	-2.4931%	0.3124%	-0.2242%	
3.6321%	3.9320%		4.8075%		4.7887%	5.2071%	2.7362%	2.7362%	3.5813%	4.7177%	5.5298%	
0.9330%	-1.4727%		-0.6729%		0.2077%	0.8836%	0.7330%	0.7330%	0.0499%	-0.6510%	1.7036%	
6.0606%	8.1254%		9.3744%		8.9278%	10.0114%	6.0735%	6.0735%	8.4732%	10.3102%	7.9875%	
-5.3505%	-2.7896%		-1.7824%		-1.8833%	-1.7864%	-4.5458%	-4.5458%	-3.1628%	-1.6195%	-1.6720%	
-7.5506%	-4.1222%		-1.7890%		-4.0730%	-2.9656%	-1.5198%	-1.5198%	-2.8628%	-2.9653%	-4.3286%	
-5.8981%	-3.5476%		-3.5384%		-1.9940%	-2.1597%	-8.0086%	-8.0086%	-3.6473%	-2.8028%	-0.9089%	
8.7345%	6.7029%		7.0715%		7.8395%	7.5246%	8.1833%	8.1833%	7.2328%	5.4548%	6.4584%	
6.0183%	5.6997%		6.5347%		5.8843%	4.0607%	5.3625%	5.3625%	5.7442%	5.7013%	6.0955%	
-7.0818%	-2.8287%		-0.6015%		-3.9437%	-0.7569%	-6.4462%	-6.4462%	-3.0849%	-1.6924%	-4.2991%	
-12.0897%	-7.3505%		-8.4177%		-6.7908%	-8.2703%	-10.9783%	-10.9783%	-8.4730%	-7.1179%	-6.7699%	
7.2427%	7.9623%		9.8064%		7.3342%	9.7179%	7.9814%	7.9814%	9.6438%	9.6213%	7.0348%	
3.6730%	4.1038%		4.1644%		3.9676%	3.9255%	4.4336%	4.4336%	4.0224%	4.4629%	3.8379%	
3.2879%	0.9852%		-1.9332%		2.4069%	-0.6754%	0.2588%	0.2588%	-0.9207%	0.0832%	-1.2330%	
-5.1324%	-6.6788%		-8.0310%		-6.1560%	-6.4143%	-7.9579%	-7.9579%	-8.5563%	-6.6476%	-9.8918%	
2.4852%	4.0808%		4.3059%		3.7893%	4.8994%	2.8660%	2.8660%	4.0728%	4.3812%	3.9854%	
-12.0371%	-7.8495%		-8.3840%		-7.9145%	-8.1643%	-10.4242%		-10.1156%	-8.0909%	-9.9089%	
								3.6588%				
1.1545%	4.1217%		5.0036%		3.2043%	4.3316%	3.6588%		4.2583%	4.3969%	5.4555%	
3.5616%	6.9718%		9.9855%		7.7292%	9.2311%	6.6601%	6.6601%	6.0515%	6.6875%	9.9138%	
0.0570%	7.1311%		10.0615%		6.9732%	9.2064%	4.5177%	4.5177%	8.0091%	10.2177%	8.3328%	
-3.7695%	-3.9628%		-2.1666%		-3.6817%	-4.0114%	-4.2913%	-4.2913%	-4.0678%	-2.9303%	-4.7343%	
-3.4761%	2.3818%		4.8669%		5.7023%	3.0711%	0.9128%	0.9128%	2.6094%	5.7073%	1.9109%	
1.0846%	1.0731%		1.0941%		0.2534%	0.8407%	0.2007%	0.2007%	1.2715%	1.1610%	1.9110%	
6.5235%	3.3141%		0.1510%		4.7586%	3.4036%	4.9426%	4.9426%	2.9491%	0.9122%	1.6724%	
3.8077%	1.0935%		2.5885%		2.2362%	1.0132%	2.2651%	2.2651%	0.2624%	0.6664%	0.2775%	
-4.8148%	-3.8874%		-5.5509%		-3.8441%	-5.0299%	-5.3560%	-5.3560%	-5.9618%	-3.5578%	-5.4486%	
-7.0721%	-9.3133%		-12.6725%		-9.9669%	-9.2097%	-10.6015%	-10.6015%	-10.4685%	-9.9094%	-10.7354%	
4.8716%	2.6619%		2.0255%		4.0574%	2.0609%	-0.6514%	-0.6514%	1.5540%	2.9233%	2.8213%	
2.9427%	-0.5200%		-0.6870%		0.7153%	-0.9860%	-2.6377%	-2.6377%	-1.7452%	-1.3064%	-1.4816%	
-0.1877%	1.2010%		-0.3635%		2.4154%	0.8924%	3.1588%	3.1588%	0.6735%	-0.1521%	0.3068%	
4.8280%	3.5889%		1.2003%		3.7234%	4.0942%	5.6637%	5.6637%	3.7127%	2.2433%	2.6187%	
							-4.4023%	-4.4023%				
-4.0968%	-2.7945%		-2.2500%		-2.6438%	-4.2796%			-5.0391%	-3.6461%	-3.0629%	
-0.2605%	-4.6151%		-5.9775%		-5.1336%	-4.7547%	-5.5460%	-5.5460%	-5.8839%	-5.3946%	-4.3559%	
-0.3139%	-4.0544%		-5.2948%		-3.3242%	-3.9490%	-3.5824%	-3.5824%	-4.1137%	-4.2609%	-4.0031%	
-10.0499%	-6.5271%		-7.9621%		-7.1131%	-8.9856%	-5.1860%	-5.1860%	-6.8962%	-5.9709%	-6.5182%	
0.9476%	-0.2909%		-1.7055%		0.7382%	0.3690%	4.1274%	4.1274%	-0.4446%	1.2640%	-1.0906%	
10.9209%	10.9890%		14.2351%		8.7268%	12.5500%	7.8364%	7.8364%	12.4543%	10.3632%	12.4672%	
2.1386%	-0.0825%		-2.0392%		-0.5660%	-0.7139%	2.8164%	2.8164%	-2.3829%	0.6879%	-1.7838%	
7.3227%	3.3738%		3.1181%		3.4620%	4.8743%	4.9939%	4.9939%	3.3380%	2.1676%	3.2865%	
4.1984%	3.2786%		4.9094%		3.2482%	2.7684%	0.8640%	0.8640%	4.1160%	1.4174%	4.3542%	
	-1.3554%		-2.2304%		-1.0225%	-1.0892%	-1.8756%	-1.8756%	-2.5095%	-1.6536%	-0.6854%	
8.8333%	8.3127%		8.2947%		7.3424%	8.0577%	5.1367%	5.1367%	10.1023%	7.5832%	8.0491%	
3.8418%	1.7388%		-1.1273%		1.0147%	2.3784%	3.0515%	3.0515%	-0.9207%	0.6319%	0.0779%	
8.2494%	6.6547%		7.0109%		7.3197%	6.7352%	5.4460%	5.4460%	7.3616%	8.0690%	6.5347%	
3.6078%	1.6798%		3.3629%		1.7057%	2.0106%	-0.5547%	-0.5547%	4.3203%	2.1352%	3.7522%	
0.6885%	0.3425%		0.4066%		1.5573%	-0.4022%	2.7237%	2.7237%	0.0072%	0.2976%	-0.6816%	
0.1393%	0.2853%		-1.5968%		-0.3308%	0.4624%	0.5951%	0.5951%	-1.1543%	-1.7523%	-0.0907%	
-0.2234%	-0.7301%		-1.8189%		-2.9326%	-1.1565%	0.9168%	0.9168%	-2.0655%	-0.3930%	-0.8402%	
1.0141%	-0.4811%		0.0738%		0.1083%	-0.2437%	-1.5896%	-1.5896%	-0.5515%	-1.6794%	-0.3464%	
-0.2269%	0.5612%		-1.6054%		0.4366%	0.0715%	1.4386%	1.4386%	-1.5513%	-0.1504%	-1.7924%	
1.5269%	-1.2268%		-1.0560%		-0.6443%	0.1791%	0.5336%	0.5336%	0.7155%	-1.2256%	-0.5236%	
7.5965%	7.5917%		9.3387%		7.2953%	7.2741%	5.9673%	5.9673%	9.6440%	7.9162%	7.4037%	
5.9059%	6.1435%		5.2499%		6.9954%	5.8541%	7.2557%	7.2557%	3.6120%	5.4989%	5.3904%	
3.1116%	4.4049%		-0.2673%		3.7463%	3.7318%	6.5520%	6.5520%	-0.0665%	2.6269%	2.6262%	
8.2788%	7.8534%				8.9355%	8.1640%	7.2277%	7.2277%	6.9103%	9.4075%	7.2163%	
8.2788% 1.8057%	7.8534% 3.9363%		6.6830% 1.9531%		8.9355% 3.2230%	8.1640% 4.1876%				3.3286%		
				2.04110/			2.5903%	2.5903%	1.9553%		3.3924%	
0.9199%	-1.5081%		0.1946%	3.0411%	-0.4693%	-1.2870%	-1.3520%	-1.3520%	1.2276%	0.2403%	0.0731%	
4.7718%	2.3928%		5.2943%	3.4825%	5.4572%	2.8854%	2.1402%	2.1402%	5.2311%	3.1609%	4.5199%	
-0.4257%	-2.5110%	_	-0.4274%	-3.3008%	-2.7660%	-2.2504%	-2.3313%	-2.3313%	-1.6627%	-1.2994%	-2.0367%	
-4.1565%	-2.5283%	-2.4095%	-5.0373%	-2.9253%	-2.9993%	-3.2927%	-2.1424%	-2.1424%	-4.6645%	-3.3026%	-3.4718%	
8.2054%	6.8843%	6.8231%	9.1936%	7.8533%	6.0884%	6.7327%	4.6654%	4.6654%	9.4673%	7.1638%	7.0040%	
2.1288%	2.5685%	1.1125%	2.1751%	0.7246%	2.3206%	2.6758%	2.4706%	2.4706%	1.7208%	1.6302%	2.2588%	
9.4582%	8.3455%	8.7546%	5.9884%	7.2677%	7.7255%	7.6339%	7.7307%	7.7307%	7.7443%	7.1117%	7.9179%	
2.3650%	1.4294%	1.7443%	1.1316%	2.3837%	0.5698%	1.4822%	0.8997%	0.8997%	1.0603%	1.0224%	1.3040%	1.14
9.4301%	6.8926%	6.1375%	9.0390%	7.1926%	8.8584%	6.9700%	5.1682%	5.1682%	7.9445%	7.9917%	8.1264%	6.43
-1.0327%	-2.5099%	-2.8509%	-2.7858%	-4.7521%	-2.6530%	-2.1828%	-1.4860%	-1.4860%	-2.6916%	-2.4056%	-3.0109%	-1.82
	2.8956%	2.2279%	3.1198%	3.8776%	2.7241%	2.2756%	2.4805%	2.4805%	3.2751%	3.0803%	2.9755%	1.01
2,9817%			0.1100/0	0.077070	2.7241/0	2.2/30/0	2.400070	2	3.2/31/0		2.373370	1.01
2.9817% 7.5603%	7.2105%	5.9201%	6.9262%	6.3225%	6.9393%	7.4270%	6.8445%	6.8445%	7.0120%	6.4938%	8.2202%	6.87

Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011(continued)

Standard Deviation 5.8171 4.6789 4.2695 5.5353 4.5150 5.4433 4.6726 4.6292 4.6292 5.8578 3.5736 5.0212 5.1963 4.2 Table A7.1 Statistical Results for Returns on unit trust over the period 1992 to 2011 (continued)

	8.7650% -4.8806%	8.2768% -1.5423%	8.6009% -2.1733%	10.2305% -0.9977%	10.5088% -1.4700%	9.5688% -0.9776%	7.5845% -2.8627%	-0.0682% -3.4719%	-0.0682% -3.4719%	10.6888% -1.5529%	6.7229% -2.2793%	8.9469% 0.2180%	8.8799% -1.9297%			9.4173% -3.2737%
	-4.8806% 2.0683% -0.5699%	-1.5423% 2.4510% 2.6137%	-2.1733% 2.8157% 1.8291%	-0.9977% 3.3096% 4.3172%	-1.4700% 2.6017% 4.7963%	-0.9776% 0.8409% 2.3709%	-2.8627% 1.9946% 1.8524%	-3.4719% -0.0383% -0.5122%	-3.4719% -0.0383% -0.5122%	-1.5529% 3.8875% 4.2604%	-2.2793% -1.8406% 0.1648%	0.2180% 2.2611% 3.3968%	-1.9297% 1.9138% 1.9514%			-3.2737% 3.9095% 3.6950%
	-7.2041% -0.5042%	-5.2469% -7.5563%	-7.4661% -3.6903%	-3.0269% -11.4945%	-5.2910% -11.1406%	-5.8355% -9.7067%	-5.2439% -3.0356%	-4.9316% 4.0081%	-4.9316% 4.0081%	-3.9879% -9.6635%	-5.9812% 0.0955%	-5.2436% -9.7245%	-5.4863% -4.3917%	-4.0712% -3.1751%		-6.6157% -4.9244%
	5.3698% -14.7044% -11.8963%	2.7962% -10.6768% -9.6640%	1.1905% -8.1860% -4.2970%	0.6118% -15.2071% -11.4139%		2.5371% -16.6174% -19.0216%	2.6830% -10.1965% -9.3585%	6.0015% -1.8216% -3.5890%		0.3288% -13.7077% -12.5038%			1.5990% -12.1113% -12.0162%	3.5281% -6.0840% -4.2965%	-10.3532%	3.7093% -10.1881% -15.2208%
	-4.2820% 3.1364%	-0.3502% 2.6959%	-0.3861% 3.3446%	2.2703% 1.1804%	-1.7455% 2.2173%	-3.9992% 1.8722%	-2.8181% 1.6869%	0.3094% 5.1780%	0.3094% 5.1780%	1.9746% 1.2808%	2.1082% 3.7625%	-4.5620% 0.7699%	1.4919% 3.5050%	-0.5815% 1.6963%	-0.6233% 1.5030%	-3.3112% 2.5078%
	-3.2378% -7.8253%	-9.6628% -7.9818%	-4.0953% -9.4298%	-8.8539% -9.5773%		-7.2986% -11.2080%	-5.1044% -7.8950%	-2.6066% -7.5424%	-7.5424%	-10.0391% -9.2864%	-8.2719%	-10.7492% -8.6132%	-8.4494%	-11.8716% -9.1241%	-4.4188% -8.8192%	-3.3781% -7.1498%
	6.6593% 4.5667% 10.7407%	7.0721% 1.6605% 7.8144%	7.8696% 3.8931% 7.8673%	11.7564% 0.7813% 10.8929%	4.7625% -2.8189% 7.4466%	9.0261% 3.4767% 8.7065%	5.6227% 2.7868% 7.1500%	1.7310% 4.2341% 3.5422%	1.7310% 4.2341% 3.5422%	10.8933% 1.7674% 10.1373%	5.7706% 0.6151% 5.0981%	9.4825% 0.8793% 7.7274%	10.7198% 4.8525% 7.4874%	6.0902% 2.9786% 6.1267%	8.7492% -2.6079% 6.5681%	7.2909% 1.4782% 7.1854%
	1.6607% 9.9315%	-0.5950% 6.1348%	-1.0197% 8.5967%	-2.5225% 6.3965%	-2.0037% 7.8127%	-0.7639% 3.4868%	0.2337% 5.1355%	0.9720% 4.8128%	0.9720% 4.8128%	-3.2270% 7.3399%	0.9192% 7.9831%	-1.0779% 4.9707%	-0.9159% 5.6436%	1.1521% 7.4954%	-0.0830% 9.6679%	-0.4997% 8.0587%
	4.7832% 0.3105%	4.3393% 1.0800%	3.7571% 0.6354%	4.0368% 1.1574%	3.7436% 0.1103%	3.1591% 1.8218%	5.0369% 1.1846%	3.0061% 4.2482%	3.0061% 4.2482%	4.3880% 0.1285%	5.6531% 1.8798%	2.9516% 1.5900%	5.2223% 1.5890%	4.5232% 1.1881%	2.5527% 0.3797%	3.7414% 2.0253%
	4.5979% -0.7096%	3.2881% 1.3629%	3.7009% -0.2524%	4.7234% 2.7978%	3.7507% 1.3367%	3.1840% 0.3567%	3.8629% -0.2666%	3.5912% -1.3348%	3.5912% -1.3348%	5.7788% 2.5384%	3.5132% -0.2564%	3.1731% -0.3858%	2.8364% -0.1673%	3.1455% -0.0104%	4.2030% -0.6151%	0.8547% -2.6739%
	4.9980% -4.2044%	3.3701% -3.1301%	2.3571% -3.3112%	2.5076% -4.8490%	2.5796% -2.7277%	3.7182% -3.5784%	2.9859% -2.0328%	5.0163% -1.2593%	5.0163% -1.2593%	2.5285% -4.6377%	4.2744% -0.6696%	3.8211% -2.8800%	3.3214% -3.8340%	3.2797% -0.8495%	3.7236% -2.2107%	4.0245% -4.5783%
	-0.4695% 5.0479%	0.9681% 7.1961%	0.9978% 6.0021%	0.2215% 7.6060%	-0.9662% 7.2849%	1.3018% 8.1573%	1.2812% 5.7614%	0.8809% 4.3541%	0.8809% 4.3541%	0.4873% 8.0629%	1.1238% 6.0261%	1.3958% 7.2322%	0.2837% 7.5205%	0.4386% 7.1697%	0.7502% 6.8606%	1.7806% 5.3319%
	0.8813% -1.7044%	0.5633% -3.5513%	0.9695% -3.9519%	0.0625% -5.0846%	-0.2487% -5.8110%	-0.2978% -4.4317%	-0.0098% -4.1321%	0.0108% -1.6069%	0.0108% -1.6069%	-0.1890% -5.1335%	-1.7416% -4.3641%	-0.2802% -4.4969%	0.8414% -4.6209%	-0.1990% -5.3456%	-1.6631% -4.5540%	0.3575% -4.4637%
	-1.7044%	-3.5697%	-3.9519%	-3.3566%	-3.2330%	-3.0922%	-4.1521%	0.3266%	0.3266%	-3.6218%	-4.3041% -1.3398%	-4.4909% -2.4918%	-4.8209%	-5.5450% -1.4044%	-4.5540% -2.0194%	-4.4637%
	5.3308% -3.4269%	7.2707% -3.2250%	5.8121% -4.2421%	5.9767% -3.8282%	5.3870% -3.5904%	6.6922% -3.5284%	4.7627% -2.8839%	5.0434% -2.0050%	5.0434% -2.0050%	7.2620% -4.0242%	5.4788%	5.6482% -2.7491%	5.9529% -3.4120%	5.9823%	6.7893% -3.4532%	5.9512% -3.4572%
	-3.4269% 9.4414%	-3.2250% 9.0882%	-4.2421% 7.1982%	-3.8282% 9.5351%	-3.5904% 9.4490%	-3.5284% 9.2633%	-2.8839% 7.8545%	-2.0050% 7.1428%	-2.0050% 7.1428%	-4.0242% 9.2222%	-2.7170% 7.4654%	-2.7491% 8.3320%	-3.4120% 9.3693%	-3.4751% 7.7176%	-3.4532% 9.0152%	-3.4572% 8.2675%
	4.7078%	1.8081%	4.8645%	3.1715%	1.0526%	1.7675%	3.2685%	1.8413%	1.8413%	3.9122%	1.3076%	1.8259%	1.8419%	3.6746%	2.0225%	5.8508%
	0.6506%	0.8258%	0.4119%	0.5867%	0.5203%	0.6230%	0.1401%	0.8335%	0.8335%	-0.5817%	1.1687%	0.6309%	0.8026%	0.2494%	1.1101%	-0.0100%
	6.7527%	4.6720%	4.2744% -3.6313%	5.3276%	5.0065%	5.8527% -4.4396%	4.2602%	3.6018%	3.6018%	6.4749%	3.6349%	4.3681%	5.3297%	5.3922%	5.3590% -3.2834%	4.7062%
	-1.8323% 1.9213%	-3.4530% 1.2915%	-3.6313% 0.1074%	-3.3205% 2.1602%	-3.1871% 1.8517%	-4.4396% 1.9409%	-2.1557% 1.4109%	-5.4143% 0.4972%	-5.4143% 0.4972%	-3.3968% 2.7156%	-0.3625% 1.4687%	-2.3994% 2.1308%	-4.0476% 0.6580%	-1.6605% 1.9971%	-3.2834% 1.4110%	-5.3119% -0.3872%
	1.0610%	1.4976%	-0.8369%	0.4958%	1.6877%	2.8204%	1.2797%	1.2916%	1.2916%	0.4726%	0.7804%	2.1308%	1.2423%	0.6050%	1.5263%	0.2625%
	2.3065%	2.0799%	1.5625%	2.3333%	1.5677%	2.0506%	1.8604%	2.6526%	2.6526%	2.1582%	-1.5831%	2.3896%	2.2046%	2.1801%	-0.6146%	1.5142%
	-1.0031%	-0.0635%	-1.1592%	-0.4140%	-0.3934%	-0.5216%	-0.3694%	0.7411%	0.7411%	-0.9077%	0.6076%	0.1952%	-0.7229%	-0.4006%	-0.3009%	-1.0998%
	-1.6453%	-1.6850%	-2.4102%	-2.3383%	-2.0137%	-0.7423%	-1.9170%	-0.7303%	-0.7303%	-1.9977%	-1.4856%	-1.0950%	-1.6662%	-1.6169%	-1.6681%	-0.9542%
	-0.7929%	-3.1552%	-1.9572%	-3.4845%	-2.1926%	-3.0506%	-2.2037%	0.6428%	0.6428%	-3.1617%	-1.3555%	-2.1706%	-3.0444%	-0.8509%	-2.1737%	-0.8453%
	-2.2582%	-0.7892%	-1.0950%	-0.3843%	0.4123%	1.3958%	-1.0045%	-0.3140%	-0.3140%	-0.5480%	-0.1374%	0.3867%	-0.6552%	0.1515%	-0.3398%	-1.2092%
	-1.1848%	-4.2597%	-3.1347%	-4.1082%	-3.2763%	-3.9608%	-2.9339%	-0.3140%	-0.3140%	-3.9201%	-1.2240%	-1.4726%	-4.3763%	-0.9661%	-3.8472%	-2.7099%
	6.7110%	9.1535%	7.9210%	10.7014%	7.2486%	9.1222%	8.1758%	4.7768%	4.7768%	9.2391%	6.7965%	8.5303%	8.9830%	6.8968%	8.7297%	6.4299%
	0.7600%	-0.5469%	-0.5579%	-0.2911%	-1.1126%	0.0744%	-0.0683%	0.4230%	0.4230%	1.4607%	0.1703%	-0.1222%	-1.1471%	-0.6984%	-0.8698%	-0.9910%
	0.4414%	1.4898%	2.4457%	-1.0505%	-0.1478%	-0.7449%	0.6018%	1.1767%	1.1767%	-1.8496%	1.4575%	-0.5013%	0.8879%	1.2787%	1.3499%	-0.0816%
Mean	1.1648	1.0669	1.1442	0.9988	1.0630	0.9246	1.1941	0.8805	0.8805	0.9294	0.9803	0.9320	1.0355	0.6571	0.7116	0.7890
Median	1.1195	1.2010	0.9695	0.8431	1.1946	1.4382	1.2321	0.8335	0.8335	1.0603	0.9192	1.0224	1.0138	0.4386	-0.0830	0.8547
dard Deviation	5.8171	4.6789	4.2695	5.5353	4.5150	5.4433	4.6726	4.6292	4.6292	5.8578	3.5736	5.0212	5.1963	4.2752	4.5746	4.6052
															÷	

Median Standard Deviation Table A7.1	0.3420 5.0376	0.8325 4.5404	1.1889 4.7511	0.9974 4.7397	0.9974 4.7397	-0.1417 4.8053	0.5065 3.6535	0.9791 4.4330	0.5598 5.0597	0.3675 1.6443	-0.1142 5.6536	1.7436 4.7153	-0.0377 5.0018 02 to '	0.6674 2.3890	0.4977 4.8271	0.5897 6.3827
Mean	0.7442	0.6540	0.6180	0.6375	0.6375	0.4157	0.7379	0.6945	0.5917	0.3782	0.3135	1.2715	-0.0056	0.8332	0.0433	0.0876
	-1.1665%	0.9983%	0.5976%	-0.2258%	-0.2258%	0.6062%	-0.0895%	0.5158%	1.1583%	0.4329%	-1.6288%	2.9348%	-0.4777%	0.7206%	0.9245%	0.5256%
	5.4749% 0.9256%	-0.5988%	9.2168% -0.8680%	-1.1971%	-1.1971%	8.3300% -0.5753%	4.2495%	9.4366% -1.1518%	8.4902% -0.5940%	2.1708% 0.2749%	9.0536%	-0.0535%	8.7725% -0.8291%	5.4959% 0.6156%	-0.2700%	6.2943% 1.1411%
	-0.6209% 5.4749%	-2.1451% 5.9779%	-3.4435% 9.2168%	-3.7174% 10.6139%	-3.7174% 10.6139%	-4.1623% 8.3300%	-2.1346% 4.2495%	-3.7459% 9.4366%	-4.2524% 8.4902%	2.1143% 2.1708%	-4.0896% 9.0536%	-3.4374% 6.1717%	-2.9773% 8.7725%	-0.3064% 5.4959%	-2.4278% 6.4829%	-4.1340% 6.2943%
	0.5149%	-0.5076%	0.9534%	-0.3961%	-0.3961%	-1.4483%	0.1755%	-0.5079%	0.0497%	-0.2501%	-0.3641%	-1.5897%	-0.3172%	0.5826%	-2.1461%	-0.2000%
	-2.9836% -1.2024%	-1.5851% -1.6796%	-1.0397% -1.8782%	-2.0326% -2.7180%	-2.0326% -2.7180%	-0.8103% -1.7624%	-1.9945% -1.8437%	-1.4977% -3.1496%	-1.1216% -1.6976%	-0.2574% -0.5036%	-2.3531% -3.3630%	-1.0986% -1.6050%	-2.4210% -3.0849%	-1.9518% -1.0166%	-1.4060% -2.6222%	0.3252% -2.6370%
	-0.8526%	-0.3349%	-0.1280%	-0.3513%	-0.3513%	-0.2090%	-0.9107%	-0.3199%	-0.4366%	0.6493%	-0.7126%	-0.1653%	-0.4267%	0.6491%	0.1977%	-0.4905%
	2.3524%	0.3965%	2.4557%	0.6669%	0.6669%	-0.5512%	2.7173%	2.4155%	-0.1853%	-0.2667%	1.6104%	2.0745%	1.6370%	2.3882%	1.7533%	2.4976%
	2.3278% 1.9653%	1.7471% 1.3966%	1.5052% 1.2394%	2.2513% 0.3738%	2.2513% 0.3738%	2.2936% 1.2812%	1.4391% 0.8730%	2.6802% 0.3222%	0.9733% 2.3995%	0.0601% 0.1661%	3.0557% 0.5515%	1.9227% 1.1702%	1.3503% 0.7317%	1.1515% 0.6857%	1.2207% 0.0882%	-1.5949% 1.0794%
	-1.5895%	-2.4542%	-3.5603%	-2.2461%	-2.2461%	-3.3740%	-2.4271%	-3.3515%	-3.7028%	0.5493%	-2.3186%	-3.4029%	-3.4722%	-0.6044%	-0.7619%	-5.9280%
	0.3420% 4.1636%	0.3748% 4.9599%	4.5530%	5.3321%	1.5631% 5.3321%	-0.1417% 4.5786%	0.2539% 4.8987%	4.6940%	4.9884%	0.8312%	-1.0306% 6.5651%	4.9843%	0.2374% 4.4759%	2.1995%	4.3035%	5.7829%
	2.1038% 0.3420%	0.9384% 0.3748%	3.5576% 1.3313%	3.1244% 1.5631%	3.1244% 1.5631%	2.1322% -0.1417%	1.6781% 0.2539%	4.2352% 1.1309%	1.7530% 0.5598%	0.6223% 0.6312%	2.2072% -1.0306%	4.0276% 0.1681%	3.7501% 0.2574%	2.8016% 0.9897%	2.7988% 0.4977%	3.0761% -1.1051%
	5.8534%	9.1021%	9.5003%	9.0328%	9.0328%	8.3732%	5.3917%	9.9240%	9.6198%	3.0008%	8.7359%	9.9137%	7.8783%	5.7780%	6.0173%	8.5592%
	0.2294%	-3.3768%	-4.0060%	-3.3682%	-3.3682%	-3.4520%	-1.2306%	-4.6111%	-3.5353%	-0.6751%	-3.7965%	-4.4287%	-3.2946%	4.0333%	4.2545% -1.8826%	4.5897% -3.6634%
	-1.5417% 5.0218%	-2.5825% 6.9370%	-1.8330% 5.2599%	-2.7891% 5.9111%	-2.7891% 5.9111%	-2.8842% 6.7105%	-2.1031% 2.9712%	-1.8421% 6.0934%	-2.7672% 7.6222%	-0.3278% 2.0643%	-3.7946% 8.3225%	-4.7814% 7.2240%	-3.0636% 5.2122%	-1.8257% 4.0333%	-2.1606% 4.2543%	-3.3948% 4.5897%
	-3.1283%	-4.3102%	-4.8165%	-5.1619%	-5.1619%	-3.9796%	-3.5149%	-6.0944%	-4.1876%	-1.2882%	-5.6904%	-3.6833%	-4.7087%	-3.2674%	-5.4386%	-4.0329%
	-0.0265%	-0.8947%	0.6347%	-0.6129%	-0.6129%	-0.3375%	1.1058%	-0.3893%	-1.1702%	-1.3718%	-0.0738%	-0.8362%	-0.0353%		0.0205%	1.0019%
	-0.5502% 6.1322%	0.8813% 6.9773%	2.1679% 6.3656%	-0.8772% 7.8005%	-0.8772% 7.8005%	0.9233% 6.6522%	0.8998% 5.1020%	0.7193% 5.3711%	1.5661% 6.6374%	1.0975% 1.7917%	-0.1547% 8.5888%	1.4704% 6.2015%	-0.3517% 7.1221%		1.6866% 1.7588%	-0.7423% 8.5465%
	-1.1066%	-2.4189%	-3.1410%	-2.6144% -0.8772%	-2.6144%	-3.9800%	-2.9906%	-2.4993%	-2.5431%	-0.5884%	-3.4151%	-4.8879%	-2.2830%		-2.1331%	-3.8125%
	2.7478%	2.9380%	3.6794%	2.0190%	2.0190%	2.0036%	0.2151%	4.0360%	3.3662%	1.5929%	2.2058%	2.0912%	2.4136%		2.7719%	2.1068%
	4.8959% -0.6869%	2.8795% 0.0553%	1.4398% -2.0012%	3.6909% 1.1634%	3.6909% 1.1634%	5.1152% -0.0850%	0.1703% -1.2182%	4.8248% 0.1710%	4.5530% 0.2068%	1.5219% -0.5605%	6.5103% 2.0249%	3.2675% 0.6386%	2.9362% -0.0377%		-0.6050% 1.1310%	-0.5764% -3.1680%
	0.0395%	0.7837%	2.3711%	1.1330%	1.1330%	0.9931%	1.2572%	1.1625%	0.4712%	0.5897%	-0.4783% 6 5103%	1.7436% 3.2675%	0.9796%		1.2995%	3.7614% -0.5764%
	3.6116%	4.6291%	5.3632%	4.4289%	4.4289%	5.3643%	4.7562%	3.1027%	4.3987%	2.5328%	3.5613%	1.8589%	4.2910%		5.0311%	7.5038%
	2.7070% 8.6966%	-0.7851% 8.2592%	0.6284% 4.4113%	-1.5202% 7.0057%	-1.5202% 7.0057%	-0.8336% 9.1394%	0.5289% 5.9227%	-1.5897% 5.5730%	-0.9825% 8.7804%	-0.0687% 3.5211%	-1.9455% 9.9656%	-1.3051% 5.5355%	-1.8408% 5.9002%		-2.2721% 1.0138%	1.6144% 3.4537%
	7.5949%	7.7363%	6.5896%	8.7494%	8.7494%	8.0637%	6.5306%	7.5104%	8.5360%	3.2822%	10.4099%	7.5273%	7.1299%		7.3459%	7.4627%
	7.6323%	-1.5474%	4.4926%	-6.3660%	-6.3660%	-2.4325%	0.3770%	2.1830%	-5.4830%	-1.8174%	4.4198%	0.7125%	1.6656%		1.6770%	7.2229%
	-13.6758% 15.0510%	-8.7053% 7.9324%	-6.2198% 8.8062%	-11.2132% 9.8382%	-11.2132% 9.8382%	-10.5259% 9.5145%	-7.4423% 7.8558%	-8.0985% 8.2554%	-9.1589% 10.1424%	-3.1165% 2.4123%	-11.0727% 10.5233%	-9.0846% 8.9047%	-8.8486% 10.2346%		-5.6681% 6.3734%	-12.2592% 8.2074%
	-9.4349%	-4.6384%	-9.8255%	-6.7907%	-6.7907%	-2.3164%		-11.6493%	-4.8660%	-0.8653%	-8.1094%	-5.0930%	-14.1203%		-4.9952%	-10.7420%
	2.0768%	3.0684%	-0.6193%	1.7060%	1.7060%	3.3890%	5.1703%	-2.2589%	3.2476%	2.1900%	2.1711%	1.0201%	2.4543%		2.9486%	-1.0456%
	-6.2443% 0.0729%	-0.6329%	-0.3702%	-9.2256% -0.6284%	-9.2256% -0.6284%	-8.2673%	-10.9319%	-3.0817% -1.4296%	0.4033%	-3.8382% 0.2533%	1.8251%	-9.9113%	-0.3126%		-18.3243%	-17.9119% -8.2749%
	-4.3696% -6.2443%	-9.8615% -13.9525%	-11.3911% -13.3102%	-9.9307% -9.2256%	-9.9307% -9.2256%	-9.9515% -8.2673%	-7.9868% -10.9319%	-12.6886% -3.0817%	-10.7341% -12.8902%	-2.4585% -3.8382%	-11.3675% -10.6407%	-12.3385% -9.9113%	-11.6212% -7.2491%		-12.7616% -18.3243%	-15.5343% -17.9119%
	4.4503%	2.1536%	1.2477%	1.9017%	1.9017%	2.8123%	2.0486%	1.6970%	1.7194%	2.8070%	1.6862%	0.3901%	1.3094%		0.4058%	0.0980%
	4.8199%	-4.1968%	-4.2429%	-3.4786%	-3.4786%	-2.2831%	-6.4924%	-7.6526%	-4.9499%	-1.0489%	-7.5056%	-10.2867%	-4.4749%		-9.6603%	-12.5411%
	-1.4647% -7.7076%	2.4934% -5.7899%	4.5324% -5.6439%	2.8737% -4.8283%	2.8737% -4.8283%	-6.0692%	2.6730% -3.4161%	4.1097% -4.1914%	2.4751% -6.7233%	0.3954% -1.3927%	1.6064% -5.1761%	5.0108% -3.4620%	2.8061% -4.1150%		4.6659% -4.3185%	2.7857% -7.3170%
	1.5871%	2.1805%	1.1384%	1.7667%	1.7667%		0.4840%	2.3668%	0.8932%	-1.1548%	2.2697%	3.2558%	1.8072%		2.3398%	0.0621%
	-3.7041%	-2.1454%	-1.3788%	-3.9856%	-3.9856%		0.1434%	0.2004%	-3.2479%	0.0499%	-1.0405%	-0.5485%	-1.7229%		0.9353%	-0.7512%
	-9.6191% 7.0195%	-10.0535% 9.3740%	-8.6828% 7.3092%	-5.7447% 10.5515%	-5.7447% 10.5515%		-1.7927% 8.2551%	-5.8325% 7.6829%	-7.4151% 11.6962%	-3.3632% 4.1832%	-7.0114% 10.5030%	-7.0893% 10.1001%	-5.9961% 8.0680%		-3.9050% 9.7749%	-12.8895% 11.0552%
	-2.2675%	-3.2544%	-3.4227% -8.6828%	-4.2190% -5.7447%	-4.2190%		-3.9526%	-2.8176% -5.8325%	-2.7493% -7.4151%	-1.1299% -3.3632%	-4.1675% -7.0114%	-3.4448% -7.0893%	-5.3772%		-2.5230% -3.9050%	1.7958%
		-3.6907%	-5.1664%	-4.7093%	-4.7093%		-2.0886%	-4.8782%	-4.3842%	-0.9803%	-2.6846%	-2.2218%			-2.1840%	-4.6083%
		6.21132%	5.9996%	5.8986%	5.8986%		1.2369%	3.2123%	6.5320%	0.4907%		3.9535%			4.5432%	8.1650%
		-0.1683% 2.6132%	-0.4366% 3.6787%	2.3697% 2.5718%	2.3697% 2.5718%		0.4297% 6.7650%	1.3851% 2.6063%	0.5490% 3.8115%	-0.2287% 1.3830%		-0.8239% 6.9488%			1.8342% 6.6305%	0.8881% 10.4628%
		-0.8824%	0.6479%	0.9974%	0.9974%		-1.0629%	-0.5151%	0.7148%	-0.1073%		1.4774%				0.6556%
		-1.5589%	-0.8857%	-0.3063%	-0.3063%		-1.4235%	-2.3833%	-2.2345%	-0.6315%		-0.5892%				0.5897%
		4.1786% -0.0071%	3.4124% 1.8340%	2.6467% 0.4217%	2.6467% 0.4217%		1.0901% 2.9228%	3.1667% 2.1954%	3.7530% 0.6051%	0.9255% 1.2782%		4.9837% 3.6036%				7.0785% 3.4625%
		5.4849%	4.7638%	4.6121%	4.6121%		5.2794%	3.8833%	6.8784%	1.4702%		7.3857%				6.1543%
		0.8841%	2.8390%	1.1597%	1.1597%		1.8542%	1.0332%	1.9209%	0.3675%		4.8578%				6.5166%
		5.8572% 1.8958%	4.4442% 3.4838%	4.8351% 1.6054%	4.8351% 1.6054%		2.6950% 1.4061%	3.1321% 1.7722%	4.0501% 2.5827%	2.4300% 1.6863%		3.4387% 3.7434%				
		3.6728%	4.1773%	2.4323%	2.4323%		3.8086%	3.0237%				4.9557%				
		4.8788%		4.5930%	4.5930%		2.3824%	1.9110%				3.7834%				
		4.6190% 1.8602%		4.2695% 0.7841%	4.2695% 0.7841%		4.2151% 0.0625%	4.5809% 0.5685%				4.0191% 1.2816%				
		-0.9608%					-2.2200%	-0.5165%				-1.7015%				
		-4.0339% 2.5877%					5.2022%	0.9249%				1.7850%				
		1.8605% -4.6339%					3.2692% -1.8581%	0.8749% -5.3633%				4.1174% -2.7805%				
		4.3620%					5.2996%	5.3263%				4.8082%				
								0.4842%				-1.0863%				
								5.1870% 7.8918%				7.1755%				
								1.9261% 5.1870%				2.5234% 7.1755%				
												-2.9050%				
												9.8160%				
												7.7580% 2.8113%				
												1.7688%				
												6.3137%				
												-3.1441%				

(continued)

	Risk-free Rate	10.6764	0.10676	
UNIT TRUSTS	Mean Returns	Median Rate of Returns	Standard deviation	Sharpe Ratio
KAGISO EGUITY ALPHA - KEAF[CL]	1.7302	1.7913	4.5480	0.3570
ABSA SELECT EQUITY- ASEF[CL]	1.5479	1.6623	4.1461	0.3476
NEDGROUP INV. RAINMAKER- NICA[CL]	1.0602	-0.1875	3.4316	0.2778
KAGISO ISLAMIC EQUITY- KAIE[CL]	1.2427	0.9631	2.7582	0.4118
ALLAN GRAY EQUITY- AGEF[CL]	1.9486	1.7746	4.7672	0.3864
OASIS GENERAL - OGEN[CL]	1.4572	1.3166	4.1247	0.3274
PRESCIENT EQUITY QUANT. A1- PEQF[CL]	1.4076	1.0140	5.4506	0.2387
OLD MUTUAL HIGH YIELD- OMHY[CL]	1.3585	1.5248	4.6824	0.2673
FOORD EQUITY- FEQF[CL]	1.4132	1.5221	4.2912	0.3044
PRUDENTIAL EQUITY- PRUO[CL]	1.3988	1.5473	4.6485	0.2779
INVESTEC EQUITY- METF[CL]	1.2719	1.3458	5.1712	0.2253
PERSONAL TRUST SA EQUITY- PTSAE[CL]	1.0659	0.5056	2.2448	0.4273
OASIS CRESCENT EQUITY- OCEF[CL]	1.6603	1.8122	3.9361	0.3947
OLD MUTUAL ALBARAKA EQUITY- STPF[CL]	1.2296	1.2182	4.8979	0.2292
CORONATION EQUITY- CORG[CL]	1.2633	1.1469	4.7616	0.2429
FNB GROWTH- FNBG[CL]	1.4601	1.1662	4.9363	0.2742
INVESTEC ACTIVE QUANTS A- INXA[CL]	1.3250	1.5141	5.3478	0.2278
ANALYTICS MANAGED EQUITY- FEWS[CL]	1.0445	0.9754	4.7091	0.1991
OLD MUTUAL GROWTH- OMGR[CL]	1.3161	1.5518	4.7075	0.2569
ELEMENT EARTH EQUITY- FEFA[CL]	1.3331	1.0469	3.6818	0.3331
ABSA GENERAL- ABSA[CL]	0.9365	1.2092	5.3277	0.1557
CANNON EQUITY- MCEF[CL]	1.0002	1.6575	5.0343	0.1775
OLD MUTUAL INVESTORS EQUITY- OMTL[CL]	1.0781	1.2179	5.5432	0.1752

 Table A7.2 Mean Sharp Ratio of returns over the period 1992 to 2011

LION OF AFRICA GENERAL EQUITY- MLAG[CL] BJM CORE EQUITY- BCEA2[CL]	-0.0056 0.8332	-0.0377 0.6674	5.0018 2.3890	-0.0225 0.3041
EFFICIENT GENERAL EQUITY- VAGE[CL]	1.2715	1.7436	4.7153	0.2470
OLD MUTUAL RAFI 40 TRACKER- OMUA[CL]	0.3135	-0.1142	5.6536	0.0366
NFB EQUITY- NFEA2[CL]	0.3782	0.3675	1.6443	0.1651
PRESCIENT EQUITY ACTIVE QUANT- PEAB4[CL]	0.5917	0.5598	5.0597	0.0958
SASFIN EQUITY- MSSR[CL]	0.6945	0.9791	4.4330	0.1326
ELEMENT ISLAMIC EQUITY- FIEU[CL]	0.7379	0.5065	3.6535	0.1728
AFENA EQUITY- AFEA1[CL]	0.4157	-0.1417	4.8053	0.0643
HUYSAMAR EQUITY- HUEF[CL]	0.6375	0.9974	4.7397	0.1120
HARVARD HOUSE GENERAL EQUITY- MHGE[CL]	0.6375	0.9974	4.7397	0.1120
MI-PLAN IP BETA EQUITY- PBEB2[CL]	0.6180	1.1889	4.7511	0.1076
NEFG EQUITY- MNEF[CL]	0.6540	0.8325	4.5404	0.1205
DISCOVERY EQUITY- DIEF[CL]	0.7442	0.3420	5.0376	0.1265
MAESTRO EQUITY- MOEF[CL]	0.7890	0.8547	4.6052	0.1481
27FOUR SHARI'AH ACTIVE EQUITY B3- 27FB3[CL]	0.7116	-0.0830	4.5746	0.1322
IMARA EQUITY- MIEF[CL]	0.6571	0.4386	4.2752	0.1287
METROPOLITAN COLLECTIVE INV. GEN. EQUITY- MTLE[CL]	1.0355	1.0138	5.1963	0.1787
STANLIB EQUITY R- GDBK[CL]	0.9320	1.0224	5.0212	0.1644
AYLETT EQUITY- AYEF[CL]	0.9803	0.9192	3.5736	0.2445
GRYPHON ALL SHARE TRACKER- PTST[CL]	0.9294	1.0603	5.8578	0.1404
SIM TOP CHOICE EQUITY- STCA1[CL]	0.8805	0.8335	4.6292	0.1671
MARRIOT DIVIDEND GROWTH- HLMK[CL]	0.8805	0.8335	4.6292	0.1671
STANLIB MM EQUITY- GDSE[CL]	1.1941	1.2321	4.6726	0.2327
STANLIB SA EQUITY- GDBT[CL]	0.9246	1.4382	5.4433	0.1503
INDEQUITY TECHNICAL- INDT[CL]	1.0630	1.1946	4.5150	0.2118
STANLIB INDEX- STBI[CL]	0.9988	0.8431	5.5353	0.1611
CAPSTONE ACTIVE EQUITY FoF- CAEF[CL]	1.1442	0.9695	4.2695	0.2430
OLD MUTUAL ACTIVE QUANT EQUITY- OMAA[CL]	1.0669	1.2010	4.6789	0.2052
PSG EQUITY- PSGG[CL]	1.1648	1.1195	5.8171	0.1819
MOMENTUM EQUITY R- RMEF[CL]	1.1402	1.2993	5.1133	0.2021
MOMENTUM EQUITY A- REFA[CL]	1.3477	1.1259	4.7706	0.2601
INVESTMENT SOLUTIONS MM EQUITY- ISPE[CL]	1.1709	1.2183	4.1960	0.2536
SMMI EQUITY FoF- SAFF[CL]	1.0725	0.9086	4.2316	0.2282
COMMUNITY GROTH EQUITYT- CGMG[CL]	1.0282	1.2752	5.0303	0.1832
OLD MUTUAL TOP COMPANIES- OMTC[CL]	1.1002	1.5110	5.3256	0.1865
NEDGROUP INV. QUANTS. CORE EQUITY R- NQCE[CL]	1.1296	1.0588	4.4459	0.2301
VERSO LT SA EQUITY- MVLT[CL]	0.9580	1.2075	3.9023	0.2181
	0.9943	1.0010	5.1086	0.1737

Table A7.2 Mean Sharp Ratio of returns over the period 1992 to 2011 (continued)

JSE ALSI Tota	al Return								
31/01/1992	-2.04563	31/08/1996	4.59096	31/03/2001	7.64318	31/10/2005	16.9099	31/05/2010	32.4817
29/02/1992		30/09/1996	4.68176	30/04/2001	7.01513	30/11/2005	16.5084	30/06/2010	30.8213
31/03/1992	-2.03405	31/10/1996	4.81672	31/05/2001	7.72129	31/12/2005	16.8619	31/07/2010	29.8448
30/04/1992	-2.04405	30/11/1996	4.8704	30/06/2001	8.04341	31/01/2006	18.2187	31/08/2010	32.246
31/05/1992	-2.04345	31/12/1996	4.70688	31/07/2001	7.91781	28/02/2006	19.9017	30/09/2010	31.0927
30/06/1992	-2.04566	31/01/1997	4.6537	31/08/2001	7.37643	31/03/2006	19.2604	31/10/2010	33.8114
31/07/1992	-2.04431	28/02/1997	4.67595	30/09/2001	7.77317	30/04/2006	20.633	30/11/2010	35.0118
31/08/1992	-2.04503	31/03/1997	5.00166	31/10/2001	7.05703	31/05/2006	21.5053	31/12/2010	34.8537
30/09/1992		30/04/1997	4.96994	30/11/2001	7.48805	30/06/2006	20.9311	31/01/2011	37.0133
31/10/1992		31/05/1997	5.0304	31/12/2001	8.32044	31/07/2006	21.6369	28/02/2011	36.2162
30/11/1992		30/06/1997	4.92512	31/01/2002	9.26632	31/08/2006	21.3212	31/03/2011	37.232
31/12/1992		31/07/1997	5.24199	28/02/2002	9.16991	30/09/2006	22.4817	30/04/2011	37.4265
31/01/1993		31/08/1997	5.2979	31/03/2002	9.65887	31/10/2006	23.0073	31/05/2011	38.2656
29/02/1993		30/09/1997	5.13931	30/04/2002	9.84525	30/11/2006	24.0593	30/06/2011	37.9699
31/03/1993		31/10/1997	5.03145	31/05/2002	9.87993	31/12/2006	24.7029	31/07/2011	37.1991
30/04/1993		30/11/1997	4.60173	30/06/2002		31/01/2007	25.73	31/08/2011	36.4583
31/05/1993		31/12/1997	4.39994	31/07/2002	9.5817	28/02/2007	26.3044	30/09/2011	36.3409
30/06/1993		31/01/1998	4.33225	31/08/2002	8.3229	31/03/2007	26.6993	31/10/2011	35.0283
31/07/1993		28/02/1998	4.62599	30/09/2002	8.7478	30/04/2007	28.4011	30/11/2011	38.3033
31/08/1993		31/03/1998	4.98901	31/10/2002	8.6129	31/05/2007	29.3891	31/12/2011	37.9635
30/09/1993		30/04/1998	5.37823	30/11/2002	8.5612	30/06/2007	29.9031	51/12/2011	37.5035
31/10/1993		31/05/1998	5.89274	31/12/2002	8.7455	31/07/2007	29.619		
30/11/1993		30/06/1998	5.42538	31/01/2003	8.4966	31/08/2007	29.9027		
31/12/1993		31/07/1998	4.8343	28/02/2003	8.0744	30/09/2007	30.1038		
31/12/1993 31/01/1994		31/08/1998	5.08728	31/03/2003	7.7267	31/10/2007	31.6072		
29/02/1994		30/09/1998	3.59672	30/04/2003	7.1138	30/11/2007	33.1224		
31/03/1994		31/10/1998	3.79799 4.32802	31/05/2003	6.9956	31/12/2007	32.0656		
30/04/1994 31/05/1994		30/11/1998 31/12/1998	4.32802	30/06/2003 31/07/2003	7.9796 7.8027	31/01/2008 29/02/2008	30.6687 28.9485		
30/06/1994		31/01/1999	4.21001	31/08/2003	8.2461		32.5533		
31/07/1994		28/02/1999	4.07034	30/09/2003	8.6696	31/03/2008 30/04/2008			
31/07/1994 31/08/1994			4.41222		8.4216		31.5636		
30/09/1994		31/03/1999	4.90203	31/10/2003	9.2452	31/05/2008	32.8871 34.1119		
		30/04/1999		30/11/2003		30/06/2008			
31/10/1994		31/05/1999	5.48152	31/12/2003	9.2243	31/07/2008	32.6245		
30/11/1994		30/06/1999	5.04974	31/01/2004	9.8632	31/08/2008	29.7806		
31/12/1994		31/07/1999	5.53148	29/02/2004	10.3208	30/09/2008	29.8736		
30/01/1995	3.65873	31/08/1999	5.61925	31/03/2004	10.3702	31/10/2008	25.9185		
31/02/1995	3.86553	30/09/1999	5.50128	30/04/2004	10.2258	30/11/2008	22.8999		
31/03/1995	3.67136	31/10/1999	5.49288	31/05/2004	9.984	31/12/2008	23.1907		
30/04/1995	3.78546	30/11/1999	5.77209	30/06/2004	10.0146	31/01/2009	23.5429		
31/05/1995	3.69435	31/12/1999	6.156	31/07/2004	9.7428	28/02/2009	22.5424		
30/06/1995	3.67654	31/01/2000	6.96312	31/08/2004	9.9525	31/03/2009	20.3167		
31/07/1995	3.66596	29/02/2000	6.87327	30/09/2004	10.823	30/04/2009	22.5554		
31/08/1995	3.69868	31/03/2000	6.44921	31/10/2004	11.4413	31/05/2009	22.9116		
30/09/1995	3.76985	30/04/2000	6.50223	30/11/2004	11.3711	30/06/2009	25.2787		
31/10/1995	3.87535	31/05/2000	6.10368	31/12/2004	12.1964	31/07/2009	24.5064		
30/11/1995	3.95887	30/06/2000	6.04447	31/01/2005	12.3725	31/08/2009	26.9816		
31/12/1995	4.07006	31/07/2000	6.38752	28/02/2005	12.5401	30/09/2009	27.845		
31/01/1996	4.24963	31/08/2000	6.441	31/03/2005	13.2242	31/10/2009	27.9142		
29/02/1996	4.69721	30/09/2000	7.07447	30/04/2005	13.1086	30/11/2009	29.5937		
31/03/1996	4.57518	31/10/2000	6.94304	31/05/2005	12.4308	31/12/2009	30.2243		
30/04/1996	4.63682	30/11/2000	6.8461	30/06/2005	13.6542	31/01/2010	31.1079		
31/05/1996	4.845	31/12/2000	6.56054	31/07/2005	14.0581	28/02/2010	30.0179		
30/06/1996	4.75281	31/01/2001	6.98774	31/08/2005	15.0662	31/03/2010	30.1299		
31/07/1996	4.77069	28/02/2001	7.65411	30/09/2005	15.3756	30/04/2010	32.5011		

 Table B.1 JSE ALSI Returns over the 20-year period (January 1st 1992 to December 31st 2012)

	1
JSE ALSI Periodic Statistical Res	ults
Period 1992 to 1996	
Mean Return	16.76501
median rate of return	4.702045
standard deviation of returns periodic average risk free rate	20.71678 0.1328
JSE ALSI Sharpe Ratio	0.809248
SE ALSI Sharpe Natio	0.005240
Period 1997 to 2001	
Mean Return	5.802876
median rate of return	5.49708
standard deviation of returns	1.20552
periodic average risk free rate	12.6248
JSE ALSI Sharpe Ratio	-5.65891
Period 2002 to 2006	
Period 2002 to 2000	
Mean Return	12.74199
median rate of return	10.2733
standard deviation of returns	4.990741
periodic average risk free rate	8.7716
JSE ALSI Sharpe Ratio	0.79555
Period 2007 to 2011	
Mean Deturn	20 60021
Mean Return median rate of return	30.69031 30.4465
standard deviation of returns	4.582378
periodic average risk free rate	8.029
JSE ALSI Sharpe Ratio	4.945317
Period 1992 to 2001	
Mean Return	11.28395
median rate of return	5.19065
standard deviation of returns	15.66401
periodic average risk free rate	12.9524
JSE ALSI Sharpe Ratio	-0.10652
Period 2002 to 2011	
Mean Return	21.71615
median rate of return	22.72765
standard deviation of returns	10.17293
periodic average risk free rate	8.4003 1.30895
JSE ALSI Sharpe Ratio	1.20892
Period 1992 to 2011	
Mean Return	16.50005
median rate of return	9.871565
standard deviation of returns	14.19974
periodic average risk free rate	10.67635
JSE ALSI Sharpe Ratio	0.410127
Table B 2 Summary Result of the	Statistical

 Table B.2 Summary Result of the Statistical Measures and Sharpe Ratio of Returns on JSE ALSI for the Seven Evaluation Period.

	Quarterly rate (%)
31/03/1992	15.45
30/06/1992 30/09/1992	13.8
31/12/1992	12.55
31/03/1993	11.85
30/06/1993	12
30/09/1993	11.35
31/12/1993 31/03/1994	10.17
30/06/1994	10.2
30/09/1994	11.7
31/12/1994	12.45
31/03/1995	13.25
30/06/1995 30/09/1995	14.07
31/12/1995	14.52
31/03/1996	14.1
30/06/1996	15.15
30/09/1996 31/12/1996	15.22
31/03/1997	15.95
30/06/1997	15.32
30/09/1997	14.9
31/12/1997	14.85
31/03/1998 30/06/1998	12.9
30/09/1998	20.37
31/12/1998	17.53
31/03/1999	14.361
30/06/1999	13.03
30/09/1999 31/12/1999	11.035
31/03/2000	9.849
30/06/2000	10.177
30/09/2000	10.095
31/12/2000	10.262
31/03/2001 30/06/2001	10.322 9.642
30/09/2001	8.82
31/12/2001	9.549
31/03/2002	10.738
30/06/2002 30/09/2002	11.672
31/12/2002	13.046
31/03/2003	12.985
30/06/2003	11.232
30/09/2003	8.976
31/12/2003 31/03/2004	7.579
30/06/2004	7.945
30/09/2004	7.121
31/12/2004	7.334
31/03/2005	7.411
30/06/2005 30/09/2005	6.835
31/12/2005	6.928
31/03/2006	6.969
30/06/2006	7.402
30/09/2006 31/12/2006	8.144
31/03/2007	8.974
30/06/2007	9.542
30/09/2007	9.959
31/12/2007	10.943
31/03/2008 30/06/2008	11.061
30/09/2008	11.699
31/12/2008	11.109
31/03/2009	8.615
30/06/2009	7.435
30/09/2009 31/12/2009	6.896 7.101
31/03/2010	6.561
30/06/2010	6.508
30/09/2010	5.936
31/12/2010	5.474
31/03/2011 30/06/2011	5.499
30/09/2011	5.499
30/03/2011	

 Table C. 90-day Banker's Acceptance Rate over the Entire Evaluation Period (1992 to 2011)