

**ASSESSING THE IMPACT OF EXCHANGE RATE FLUCTUATIONS
ON THE REVALUATION OF FOREIGN CURRENCY IN TANZANIA:
A CASE OF THE BANK OF TANZANIA**

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**A DISSERTATION SUBMITTED IN FULFILLMENT OF THE
REQUIREMENTS FOR THE MASTER DEGREE OF BUSINESS
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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania, a Dissertation entitled: "**Assessing the Impact of Exchange Rate Fluctuations on the Revaluation of Foreign Currency in Tanzania**", in partial fulfillment of the requirement for the degree of Master of Business Administration, of the Open University of Tanzania.

.....
Dr. Benjamin Mutagwaba

(Supervisor)

.....
Date

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DECLARATION

I, **Glory Maembe**, do hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

.....
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.....
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DEDICATION

This work is dedicated to God, the Almighty Father.

ACKNOWLEDGEMENT

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ABSTRACT

There are inadequate studies in Tanzania regarding the impact of exchange rate fluctuation on the revaluation of foreign currencies in Tanzania. This study was conducted for assessing the impact of exchange rate fluctuation on the revaluation of foreign currencies and its associated impact on the purchase of goods and services in United States Dollar (USD), European Union Currency (EUR) and Great Britain Pound (GBP) foreign currencies. In this study, data was collected using interviews, questionnaires and documentary reviews. The sample size for the study involved three (3) respondents from the Bank of Tanzania and was established through judgment as the population for the study was not homogeneous. The collected data were analyzed using descriptive statistics methods through calculation of average exchange rates for each year and revaluations of foreign currency. From the study it was realized that the fluctuation of exchange rates has an impact on the revaluation of USD, EUR and GBP foreign currencies. The impact is indicated by the study findings which showed that all the revaluations obtained were negative which implied that as time goes business people in Tanzania require more local money in order to get the equivalent USD, EUR and GBP currencies to buy the required goods and services. It is hence, recommended that the Government under the guidance of the Bank of Tanzania put in place appropriate policies and guidelines for managing risks resulting from fluctuation of exchange rates.

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LIST OF ABBREVIATIONS AND ACRONYMS

BOT	Bank of Tanzania
EUR	European Union Currency
GBP	Great Britain Pound
PPP	Purchasing Power Parity
TZS	Tanzanian Currency
USD	United States Dollar

CHAPTER ONE

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

This chapter elaborates on the brief descriptions of the objectives and the functions of the Bank of Tanzania. It further elaborates on the background information, the statement of the problem, objectives of the study, research questions, significance of the study, definition of key terms and the organization of the dissertation.

1.1.1 The Objectives of the Bank of Tanzania

The primary objective of the Bank of Tanzania is to formulate, define and implement monetary policy, directed to the economic objective of maintaining domestic price stability, conducive to a balanced and sustainable growth of the national economy of Tanzania. In other words, it is the primary responsibility of the Bank to establish monetary conditions conducive to price stability over time. Thus, in order to achieve price stability, the Bank has been given the task of regulating the quantity of money in circulation and of credit supplied to the economy in order to conduct monetary policy (Bank of Tanzania Act, 2006).

1.1.2 Basic Requirements of the Bank of Tanzania

In connection with the objectives above, the Bank of Tanzania is responsible in dealing with the following: (i) ensuring that there is steady and acceptable rate of increase in the money supply (ii) ensuring that the rate of increase in domestic bank credit expansion does not place undue demand pressures on production resources and

that it is consistent with the money supply objectives (iii) ensuring realistic interest rates that must at least be above the level of the rate of inflation (iv) making sure that the level of foreign reserves is sufficient to enable the Central Bank to intervene in the foreign exchange market from time to time in order to smoothen out reversible short-term fluctuations for meeting import requirements, external obligations, and unexpected foreign exchange requirements in times of crisis (v) ensuring that there is a relatively stable exchange rate for the national currency and (vi) protecting and developing sound and well-managed banking institutions (Bank of Tanzania, 2015).

1.2 Background Information

For more than five decades, central banks and financial institutions have been managing investment risks; and the practice has been more formal since the Global Financial Crisis of 2008. It is in line with this concern that the researcher decides to conduct the study at the Bank for assessing the impact of exchange rate fluctuations on the revaluation of foreign currencies. The Global Financial Crisis of 2008 is the worst financial crisis since the Great Depression of the 1930 that threatened the total collapse of large financial institutions (Norgren, 2010).

1.2.1 Revaluation of Foreign Currency

As far as this study is concerned, revaluation of foreign currencies is very significant for explaining the ability of business people to buy the goods and services using foreign currencies in Tanzania. In chapter two various determinants of exchange rates fluctuation have been elaborated at length. Such elaboration provides an input to the explanation on the revaluation of USD, EUR and GBP foreign currencies.

Basing on the current exchange rate (for day, month or year) and the previous exchange rate (whether exchange rate for previous day or average exchange rate for previous month or year) one calculates the revaluation of foreign currency using selected range of TZS against USD, EUR and GBP exchange rates (Anastopoulos, 2013).

The results for revaluations are twofold, that is, positive and negative revaluations. The positive revaluations implying that people have ability to buy goods and services in foreign currencies and the negative revaluation meaning that there is limited foreign currency and business people or citizens get difficulties in finding required foreign currency to buy the required goods and services (Anastopoulos, 2013).

1.2.2 Causes of the Global Financial Crisis

There are various causes for the Global Financial Crisis. The three major crises are: (i) the misperception and management of the risk (ii) the low level of interest rate and (iii) the poor regulation of the financial system. The three causes are elaborated in this section.

1.2.2.1 The Misperception and Mismanagement of Risk

The mentality that things operating well will do the same for the coming days or years is just psychological and not a reality to be proved beyond reasonable doubt. That being the case, it goes without saying that during the Global Financial Crisis the most basic underlying driver of the crisis was the inherent cycle of human psychology around risk perceptions. As shown in Figure 1, investors' perception of

risk changed in the years leading up to the crisis. For instance yields on emerging market bonds or US companies at the riskier end of the spectrum all narrowed relative to those on US government bonds and other securities that were seen as very safe (Ellis, 2009). The spreads have even widened out dramatically as investors became more risk conscious and the search for profit turning into move to safety. The psychological effects are amplified when investors use leverage. Moreover, borrowing to purchase assets is rewarding whenever asset costs are rising due to the fact that all the benefits beyond the interest costs goes to the investor and not to the lender. What is surprising is the scenario that when times are bad and asset valuations are falling, investors' losses are magnified by leverage.



Figure 1.1: Bond Spreads: To US Government Bonds

Source: The Global Financial Crisis (Ellis, 2009)

1.2.2.2 The Level Of Interest Rates

Likewise as shown in Figure 2, the low level of interest rates is a second element that coincides with the perceptions of lower risk in the past decade. Hence, at the end,

policy interest rates in the major economies reached levels that were unusually low compared with those experienced in history.

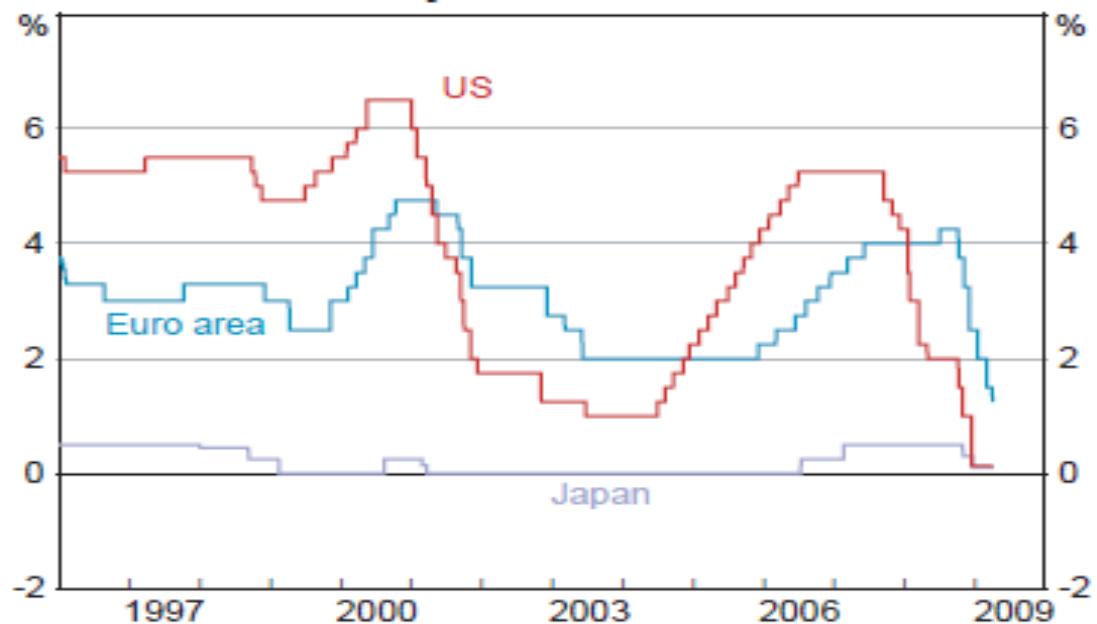


Figure 1.2: The effect of Policy Interest Rates

Source: The Global Financial Crisis (Ellis, 2009)

1.2.2.3 The Regulation Of The Financial System

According to Ellis (2009), a lack of appropriate financial regulation in some countries is widely regarded as one of the important causes of the crisis. Some of the shortcomings so far identified in this area include: the capital requirements on complex financial products such as collateralized debt obligations (CDO); the use of ratings provided by the private-sector rating agencies in the regulation of banks; the way credit rating agencies have themselves been regulated; and the structure of remuneration arrangements and the risk-taking incentives they create. Hence, the regulation of financial system was also a measure cause to the Global Financial Crisis.

1.2.3 Consequences of the Global Financial Crisis

When risk aversion (risk pessimism) rises, the macroeconomic consequences can be severe. Since the past two decades to date, it has been recognized that economies run in large part on confidence (Ellis, 2009). The past decade has witnessed that when firms and consumers no longer feel confident, they pull back from spending and when banks and other financial institutions no longer feel confident, they pull back from lending.

In some circumstances, projects that seemed likely to be profitable in the good times suddenly seem risky and less attractive. Trade and confidence effects explain why the North Atlantic banking crisis has escalated into a global problem. From this observation and explanation, it goes without saying that Central Banks or regulators have to strike a balance between risk taking and risk aversion (i.e. risk fearing) for avoiding falling into the global financial crisis.

Likewise, Norgren (2010) declared that causes to financial crisis include low inflation and low interest rates, higher risk taking and that the Global Financial Crisis was due to the inherent weaknesses in the financial system, the economic policies pursued in some countries and inadequate regulation in which financial institutions built up liquidity risks on a large scale. Central banks have portfolio management units and departments dealing with management of portfolio. Such portfolio include: US Dollar, Euro, Sterling Pound, Australian and Chinese Yen portfolios. Banks and financial institutions worldwide invest in both local and foreign currencies. Due to exchange rate fluctuations, central banks and government institutions have

appropriate controls for managing the risks of the fluctuations in exchange rates. Such controls include entering into forward contracts with banks or companies owning foreign currencies.

The elaboration above explains on the Global Financial Crisis as a background to this study; the whole significance of the explanation is to pave a way to the explanation on the effect of exchange rate fluctuation on revaluation of foreign currencies in Tanzania. The relationship of the exchange rate with the revaluation of foreign currency is that for a fixed TZS currency, there will be different foreign currencies for the same TZS value in a number of months or years. Hence, with this study the difference of the current foreign currency value from the previous foreign currency value (whether previous day, month or year) is referred to as revaluation. The difference may be positive or negative and this is directly associated to the ability of business people to purchase goods or services in foreign currencies. Hence, to assess the impact of exchange rate fluctuation on the revaluation of foreign a particular TZS value was fixed and was compared against its equivalent foreign currency values for a number of years basing on the average exchange rates for each selected year.

1.3 Statement of the Problem

For the past two decades to date, Central Banks and financial institutions have engaged themselves with management of currency movements (Pojarliev et al, 2014 and Kechemba, 2012). The government gets foreign currencies from its various sources including selling of mining products, inviting tourists into the country, exporting industrial and agricultural products and the like (Kechemba, 2012;

Goldberg, 2006; Auboin and Ruta, 2011). Despite the existing good business investment in Tanzania and the appropriate initiatives done by the Bank of Tanzania in managing fluctuations of exchange rates, still there are variations in exchange rate almost on daily bases.

Besides the good business practice existing in central banks, fluctuations in exchange rates have major impact to the revaluation of foreign currencies. The fluctuation of exchange rates creates uncertainty not only to Bankers but also to all business people and other citizens (Hung, 1993; Kapila and Hendrickson; 2012; Auboin and Ruta , 2011). Due to the dynamic nature of the exchange rates, the ability of the business people to buy goods and services in foreign currencies is highly influenced by the fluctuation of exchange rates (bidin, Ariff, Nassir and Mohamad, 2004; Atella, Atzeni, 2003; and Goldberg, 2006).

Experience shows that if currency movement is not managed the country may collapse as civilians may not be able to buy most of the imported goods especially from the developed countries with dominating currencies namely US Dollar, Euro, Australian Dollar and sterling pound (Kapila and Hendrickson, 2012; Zainal, 2004; Michael, 2007; Kwame and Goh, 1998).

Although studies on exchange rate fluctuations and management of related risks have been conducted by a number of scholars worldwide, there are inadequate studies done in Tanzania for assessing the impact of exchange rate fluctuations on the revaluation of foreign currencies. Hence, this study is meant to assess the impact of exchange rate fluctuation on the revaluation of foreign currencies in Tanzania.

1.4 Objective of study

1.4.1 General Objective

The general objective of this study was to assess the impact of exchange rate fluctuations on the revaluation of currency in Tanzania and propose appropriate measures for managing fluctuations of exchange rates in Tanzania.

1.4.2 Specific Objectives

- i). Assess the impact of exchange rate fluctuation on the purchase of goods and services in foreign currencies using the three theories of exchange rate determination of TZS against USD, EUR and GBP exchange rates from 2001 to 2006.
- ii). Assess the impact of exchange rate fluctuation on revaluation of foreign currency using TZS against USD, EUR and GBP exchange rates from 2001 to 2006;
- iii). Recommend proper techniques for managing risks of exchange rate fluctuations.

1.5 Research Questions

- i). How does the exchange rate fluctuation affect the purchase of goods or services in foreign currencies and how does one show that the exchange rate fluctuation affects the purchase of goods or services in USD, EUR and GBP using the average exchange rates for each year from 2001 to 2006?
- ii). How does one assess the revaluation due to exchange rate fluctuation in terms of foreign currencies by using USD, EUR and GBP exchange rates against

TZS currency for year from 2001 to 2006?

- iii). What are the proper techniques for managing risks of exchange rate fluctuations in Tanzania?

1.6 The Significance of the Study

This study plays a tangible role to the contribution to knowledge and has regulation and policy implications to the investment, foreign reserves and portfolio management in Banking and related institutions in Tanzania.

1.6.1 Contribution to Knowledge

This study has significant contribution to knowledge as it focuses on the analysis of exchange fluctuation on selected parameters in Tanzania. Hence, intensive analysis is provided in this study on how exchange rate fluctuations affect revaluation on foreign currencies. For being able to manage exchange rate effectively, the other contribution to knowledge is the identification of techniques for managing risks of exchange rate fluctuations and their applicability in Tanzania.

1.6.2 Regulation and Policy Implications

This study provides inputs to the banking sector and related institutions during development and review of regulations, guidelines and procedures for managing risks resulting from the fluctuations of exchange rates.

1.7 Definition of Key Terms

1.7.1 The impact

This is the influence, effect which one aspect has on the other. The impact may cause

some parameters to change, for example rising or falling, increasing or decreasing or in general changing behavior. Impact is the measure of the tangible and intangible effects or consequences of one entity's action or influence upon another (Ebrahimi, 2012).

1.7.2 Exchange Rate Fluctuation

The exchange rate between two currencies is the rate at which one currency will be exchanged for another. It is also regarded as the value of one country's currency in terms of another currency. The exchange rate changes whenever the values of either of the two component currencies change. A currency will tend to become more valuable whenever demand for it is greater than the available supply. It will become less valuable whenever demand is less than available supply. Hence, exchange rate fluctuation is the rise and fall of the exchange rate (Tokunbo and Lloyd, 2009).

1.7.3 Revaluation

According to this study, revaluation is the difference between the previous year's value of foreign currency and the current year's value of foreign currency. This revaluation is determined over a range of years from 2001 to 2006 in which case foreign currency values are computed against a selected value of Tanzania currency for each year from 2001 to 2006 and average exchange rates for mentioned years are the ones used for analysis. The fixed value of the Tanzanian currency used in the revaluation computation process is the equivalent of the foreign currency reported in the levels of foreign reserves at the Bank of Tanzania as of 30th June, 2012 for US dollar, European Currency and Sterling Pound. These figures are selected by the

researcher basing on personal judgment otherwise any other Tanzanian figure or value would have been used for analysis of the impact of revaluation on foreign currencies.

The revaluation may lead to loss or gain in terms of foreign currency which by implication results to loss or gain in the local currency due to variation of foreign currency exchange rate against local currency. The phrase “revaluation of currency” with this study refers to any effort or attempt to find the equivalent value of the local currency for sake of buying goods or services in foreign currencies; particularly the USD, EUR and GBP foreign currencies.

With this study in order to assess revaluation of foreign currency a given amount of local currency e.g. TZS amount is expressed in terms of various foreign currencies using exchange rates for each year. If the revaluation is negative this has an implication that local buyers or business people will require more local money in order to buy foreign currencies compared to the amount of local money they required in the previous year.

If the revaluation of currency is positive this has an implication that local buyers or business people will require less local money in order to get the equivalent foreign currency compared to the amount of local money they required in the previous year.

1.7.4 Investment

This implies buying or creating an asset with the expectation of capital appreciation, dividends, interest earnings, rents or some combination of these returns. Investment

involves some form of risk, such as investment in equities, property, and even fixed interest securities which are subject to inflation risk. It is indispensable for project investors to identify and manage the risks related to the investment (Horobet and Ilie, 2011).

1.7.5 Foreign Reserves

These are assets held by central banks and monetary authorities, usually in different reserve currencies and mostly the United States dollar, Euro, Sterling Pound and Japanese yen that are used to back up their liabilities. Foreign reserves are holdings of foreign currency held by a government. Substantial foreign reserve can dampen the effect of inflation or of currency crisis (Jorion, 1985).

1.8 Organization of the Dissertation

This work is organized in five chapters. Chapter one elaborates on the study background information, statement of the problem, research objectives, research questions and significance of the study. Chapter two expounds on the theoretical and conceptual frameworks by pointing out theories, models and empirical frameworks that are related to this study. Besides, chapter two summarizes on the conceptual framework as designed by the researcher mainly for identifying independent and dependent variables as a strategy for managing risks of exchange rate fluctuations in Tanzania.

Chapter three elaborates on the research design, area of study, population of the study, sample and sampling procedures, data collection methods, data analysis and

ethical considerations. Chapter four mainly expounds on the results of the study by focusing on determining the average exchange rates for each year from 2001 to 2006 and the associated revaluations in foreign currencies for each year from 2001 to 2006 respectively. Chapter four also explains on measures for managing risks related with fluctuation of exchange rates in Tanzania. Chapter five covers the summaries, conclusions and recommendations of the study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter elaborates on the theoretical and empirical frameworks for analyzing the impact of exchange fluctuation on revaluation of foreign currency and the techniques for managing risks of exchange rate fluctuations. The discussions in this chapter are done in line with the research objectives and with reference to theories of exchange rate determination. The theories of exchange rate determination described in this section include trade approach theory, the purchasing power parity, the theory of supply and demand, the portfolio balance models and the economies of fixed exchange rates. Previous studies by other researchers have been covered in the empirical framework section. The chapter further expounds on the conceptual framework for highlighting on the research concept with reference to the research questions and objectives.

2.2 Theoretical Framework

In this section, theories are described as basic principles providing highlight on the study basic terminologies. The section further links the theories with the study in question.

2.2.1 Theories of Exchange Rate Determination

According to previous scholars (Anastopoulos, 2013; Twarowska and Kąkol, 2014); the analysis of exchange rate fluctuation on the revaluation of currency is done

basing on the theories of exchange rate fluctuation namely the Trade Approach Theory, the Purchasing Power Parity (PPP), the Demand and Supply theory, the Uncovered Interest Parity, the Portfolio Balance Models and the Economics of the Fixed Exchange Rates.

The three theories namely the Trade Approach Theory, the Purchasing Power Parity (PPP) and the Demand and Supply theory are more focused as far as the assessment of exchange rate fluctuation on the revaluation of foreign currency is concerned (Anastopoulos, 2013; Twarowska and Kąkol, 2014; Mussa, 2011; Priewe, 2014).

Hence, the mentioned theories enable the Central Bank to manage their portfolio and risks resulting from exchange rate fluctuations.

2.2.1.2 The Trade Approach Theory

According to Habib (2001), one of the first theories of exchange rate determination is the trade approach; this approach is similar to the microeconomic approach as it maintains that the equilibrium exchange rate is the one that balances the flows of exports and imports. For example, if imports exceed exports then the domestic currency depreciates. This is of great significance in addressing the research objectives. For instance, in order to properly analyze the effects of exchange rate fluctuation on the revaluation of foreign currency, understanding issues of imports and exports and how they are related to currency appreciation and depreciation is very important. With this theory it implies that trade with imports in foreign currencies and buying of goods and services in foreign currencies cannot be not done

if citizens or local business people do not have sufficient foreign currencies to do the business.

The depreciation of the currency makes imports expensive to residents and exports cheaper to foreigners, thereby giving trade balance. The trade balance is the difference between the total output produced and the absorption (sum of consumption, investment and government expenditure) in the economy. If absorption in an economy exceeds the output produced, there is a deficit in the trade balance and pressure on the exchange rate to depreciate. The depreciation of the exchange rate reduces absorption (imports) and increases output (exports) and then bringing balance in the trade flows (Mussa, 2011; Priewe, 2014).

It is in such circumstances that exchange rate fluctuations have an impact on the revaluation of foreign currencies when it comes to imports or buying goods or services in foreign currencies other than the local currency. According to Bank of Tanzania exchange rates report, the exchange rates almost change on daily bases. Hence, since they change on daily bases, the purchasing cost or charges in foreign currencies almost change on daily bases and the matter becomes more serious when items are bought from a certain business center at intervals of months or years.

The costs in two successive months for the same item may be even greater when the item is charged or sold in foreign currency than when the item is sold or charged in local currency. Unlike purchasing in local currencies where the cost of an item may be the same throughout a month or year, the purchasing cost in foreign currency

changes or grows every day and it even grows higher at intervals of months or years as will be explained in details in chapter four.

2.2.1.3 The Purchasing Power Parity Theory

The theory of purchasing power parity (PPP) is the benchmark when it comes to exchange rate formation. It is based on the law of one price for the same product in different countries, adjusted for transaction costs, especially transportation costs. Perfect competition is assumed, leading to goods market arbitrage. Strictly speaking, the theory of absolute PPP only applies to tradable goods. In developed countries, however, the prices and costs of tradable and non-tradable goods develop largely in parallel (Priewe, 2014).

By definition the PPP states that using a unit of a currency, let us say one euro, which is the purchasing power that can purchase the same goods worldwide. The theory is based on the ‘law of one price’, which argues that should a euro price of a good be multiplied by the exchange rate ($\text{€}/\text{US\$}$) then it will result in an equal price of the good in US dollars (Anastopoulos, 2013).

However, the limitation of the PPP theory is that it applies on tradable goods and the fact is that not all goods are traded internationally (for example, buildings) and secondly, the transportation cost should represent a small amount of the good’s worth. However, theory was selected as the basis for this study to demonstrate how the exchange rate fluctuation affects the purchasing power of the local business people.

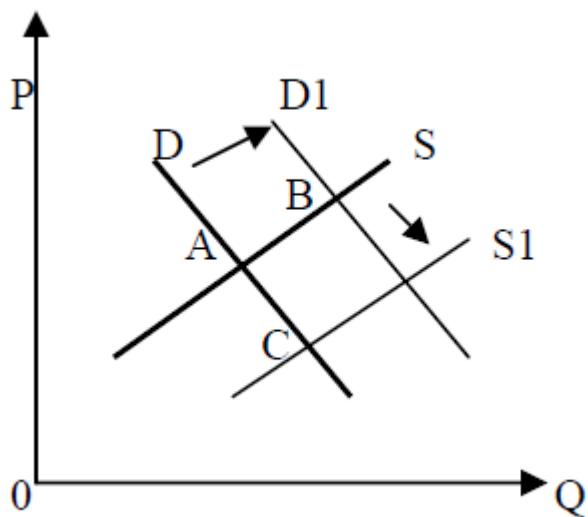
Under PPP the exchange rate (E) is determined by arbitrage as the ratio of the price levels (or inflation rates) of two countries as shown below:

$$E = P/P^*$$

where P is the domestic price level and P^* is the world (foreign) price level.

2.2.1.4 The Supply and Demand Theory

According to Anastopoulos (2013), the exchange rate determines its price responding to the forces of supply and demand. Therefore, if for some reason people increase their demand (shift of the curve from D to D1) for a specific currency, then the price will rise from A to B, provided the supply remains stable. On the contrary, if the supply is increased (shift of the curve from S to S1), the price will decline from A to C, provided the demand remains stable (Figure 2).



Source: Theories of Exchange Rate Determination (Anastopoulos, 2013)

In Figure 1.2, P denotes the exchange rate, Q implies the amount of currency demanded and supplied. A, B and C show the equilibrium exchange rate

Any excess supply above the equilibrium point or excess demand below the equilibrium point will increase or decrease temporarily foreign currency reserves accordingly. Finally, such disequilibrium situations will be eliminated through the pricing, e.g. the market itself. Hence, exchange rate fluctuation is determined by the supply and demand of foreign currency.

With reference to revaluation, positive revaluation of foreign currency implies that there is good supply of foreign currency that enables local business people to purchase goods or services in foreign currencies. The negative revaluation implies that there is scarce foreign currency which makes it difficult for local business people to buy goods or services in foreign currencies.

2.2.1.5 Portfolio Balance Models

According to Habib (2001), in portfolio balance models, exchange rate is determined as an asset price (Dornbusch, 1975). Agents hold domestic and foreign bonds dominated in foreign currency, along with money. One characteristic of these models is that interest parity (in the assets market) determines the short run exchange rate and PPP (in the goods market) governs the long run exchange rate. However, there are differences in the adjustment rates in the assets and goods markets.

2.2.1.6 The economics of fixed exchange rates

Under this theory are the speculative attack models that were originally developed to provide an understanding of currency crisis in Latin America and, in particular, the failure of stabilization plans in the 1970s and 1980s. The so-called first generation models of Krugman (1979) had at their core the relationship between a fixed

exchange rate and inconsistent economic fundamentals, namely, monetary and fiscal policy. In particular, this class of model was designed to show how a combination of fixed exchange rates and excessive money supply growth prior to an attack could push an economy into crises, with the private sector trying to profit from unraveling what they see as inconsistent policies.

The possibility of economic crisis is the one that necessitates portfolio managers to manage risks resulting from the fluctuation of exchange rates. An alternative perspective on the economics of fixed exchange rates under this class of models is to say they demonstrate that currency crises associated with the stabilization policies pursued in Latin America in the 1970s and 1980s were not a sign of market malfunction, but rather they are the consequence of an inappropriate fiscal–monetary mix pursued by these countries (Jeanne, 2000).

2.2.2 Summary on Theoretical Framework

This section has summed up on the theories determining exchange rates and their influence on the revaluation of foreign currency. The theories discussed are the Trade Approach Theory, the Purchasing Power Parity (PPP) Theory, the Theory of Supply and Demand, Portfolio Balance Models and the Economies of Fixed Exchange Rates. The preceding section gives empirical studies on the effect of exchange rate fluctuations on the revaluation of currency.

2.3 Empirical Framework

This section explains on the studies done by other researchers basing on the research objectives. The section addresses on the impact of exchange rate fluctuation on the

revaluation of currencies and the techniques for managing risks of exchange rate fluctuations.

2.3.1 Impact of Exchange Rate Fluctuation on the Revaluation of Currency

Petersuch (2013) conducted the study to assess the impact of exchange rate fluctuation on the revaluation of currency basing on the supply and demand theory. He collected data using open-ended questionnaires from the graduates in economics dealing with provision of importation of goods from developed countries. He used stratified and judgmental sampling techniques to obtain the sample of 106 respondents. He analyzed data basing on three hypotheses namely (i) the influence of exchange rate fluctuation on availability of goods (ii) the influence of exchange rate fluctuation on the supply of foreign currencies and (iii) the influence of exchange rate fluctuation on the demand of foreign currencies.

Having analyzed data using Statistical Package for Social Sciences he realized that there is a positive correlation between the exchange rate fluctuation and the availability of goods that are imported from developed countries and sold in foreign currencies. The findings by Petersuch (2013) are of significant contribution to this study due to the fact that the essence of this study was to determine the impact of exchange rate fluctuation on the revaluation of foreign currency.

According to Petersuch (2013) there is time when there are limited supply of foreign currencies in the market, this implies that local business people are not able to buy the foreign currencies and hence not able to buy the goods or services using the

foreign currencies (for his case namely USD and GBP foreign currencies). Such scarce foreign currencies is caused by the fluctuations of exchange rates that happen at the expense of developing countries.

2.3.2 Factors affecting Movements of Exchange Rates

Kechemba (2012) of the Open University of Tanzania conducted the study to determine the factors that influence movement in exchange rates in Tanzania using documentary review for getting both quantitative and qualitative data. He used data mainly from the Bank of Tanzania (BOT) Economic and Operations Report and Tanzania Bureau of Statistics publications. The main investigation for Kechemba was to examine the factors that influence movements in exchange rates in Tanzania in order to establish facts that contribute to the movements of exchange rates in Tanzania using explanatory and descriptive models. He used the unit root test and regression analysis to establish the relationship between the selected dependent variables (that is, increase in exports versus and exchange rate, demand and supply, imports, high interest rates on investment and inflation trends) and the exchange rate as the dependent variable.

According to Kechemba, the exchange rate fluctuates due to changes in the mentioned independent variables. Hence, during Kechemba's study, the quantitative data involved exchange rates, exports, imports, money supply and the rate of inflation. The qualitative information involved an explanation for the trend of exchange rate movements, the factors causing the movements and the effects of such movements. The ordinary least square (OLS) method on 164 observations based on

monthly data was employed in the study. The study revealed that factors that determine the fluctuation of exchange rates in Tanzania include: change in prices of goods and services, demand and supply of foreign currencies (market forces), economic trend particularly low economic growth, trend of domestic inflation rates, dollarization, global financial crisis, foreign direct investment trend and interest rates.

The study conducted by Kechemba mainly focused on establishing the independent and dependent factors involved in the movement of exchange rates and partly on the effect of exchange rate fluctuation on investment. In the study by Kechemba the emphasis of revaluation of foreign currency due to the fluctuation of exchange rates, was not indicated. This study comes with a systematic approach to show how exchange rate fluctuation affects citizens in buying goods or services in foreign currencies.

Hence, in this study, instead of focusing on the establishing factors leading to movements of exchange rates in Tanzania, the author focuses on assessing the impact of exchange rate fluctuations on the revaluation of USD, EUR and GBP foreign currencies in Tanzania as a means of establishing appropriate measures for managing the impact of exchange rate fluctuation on the revaluation of foreign currencies in Tanzania.

In principle, in this study, the researcher discusses in details on how fluctuation of exchange rates affects revaluation of foreign currencies and how such fluctuation

affects the purchasing costs of imported goods in foreign currencies. The value of local currency always falls when it comes to buying goods or services in foreign currency as long as exchange rates keep on changing as times goes.

2.3.3 Effect of Exchange Rate Fluctuation on the Variability Of Returns

Tokunbo and Lloyd (2009) of Nigeria conducted the study to investigate the effect of exchange rate volatility on foreign direct investment (FDI) in Nigeria, using secondary time series data from 1970 to 2004. They used the error correction model as well as OLS method of estimation. The results suggested that exchange rate volatility need not be a source of worry by foreign investors. They also found that there is a significant positive relationship between real inward FDI and exchange rate. It was recommended after the study that Nigeria has to attain a stable and realistic exchange rate that will boost domestic production, increase real inward FDI and maintain internal and external balance. This conclusion in the study is very relevant to the study in question. Hence, this empirical study is very useful in the sense that it points out the study methodology that is also applicable to this study.

Horobet and Ilie (2011), conducted the study to examine the impact of changes in the Romanian currency exchange rates against the US dollar and the euro on an investment in the Romanian stock market from the perspective of a US dollar and euro based investor. The analysis was directed towards identifying the significance of exchange rate volatility for the total risk of a Romanian investment from the perspective of investors with the US dollar and euro as reference currencies. The results indicated that during more turbulent times investors were better off if invested

in their home markets. It was also realized that the exchange rate risk decreased the risk that a US dollar or a euro-based investor was exposed to in Romania.

The impact of exchange rate fluctuations is felt at the level of risk when imported goods are sold in foreign currency. Jorion (1985) and Levy and Lim (1994) have shown that investors that do not control for the uncertainty associated to exchange rate movements are in the difficult position of obtaining gains from international investments that are not able to exceed the costs attached to holding assets abroad.

2.3.4 The Techniques for Managing Risks of Exchange Rate Fluctuations

This section is meant for addressing the third specific objective of this study that is, recommending on proper techniques for managing risks of exchange rate fluctuations. Management of foreign reserves and investment in foreign reserves goes hand in hand with management of related risks such as management of risks of exchange rate fluctuations on the revaluation of foreign currency. The studies conducted by Zainal (2004) have found that managing these risks of foreign exchange can successfully reduce the company's foreign exchange exposure.

Managing foreign exchange risk provides the following benefits to many Canadian companies:

- i). Minimizing the effects of exchange rate movements on profit margins
- ii). Increasing the predictability of future cash flows
- iii). Eliminating the need to accurately forecast the future direction of exchange rates

- iv). Facilitating the pricing of products sold on export markets Protecting, temporarily, a company's competitiveness if the value of the Canadian dollar rises

Measuring and managing exchange rate risk exposure is important for reducing a firm's vulnerabilities from major exchange rate movements, which could adversely affect profit margins and the value of assets (Michael, 2007).

2.3.4.1 Managing Foreign Exchange Risk

As shown in Figure 3 managing foreign exchange risk has the following four steps:

Identify and Measure: Step one involves identifying and measuring the foreign exchange exposures that one wants to manage. The focus for most companies is on transaction risk. For an exporting company paid in U.S. dollars, measuring exposure involves subtracting the U.S. dollars it expects to receive over a one year period against the money it will need in order to make payments in U.S. dollars over the same period. The difference determines the exposure to be hedged. If the company already has U.S. dollars in the bank, then it has to subtract the account balance to determine the net exposure (Michael, 2007).

Develop the Company Foreign Exchange Policy: When the exposure calculations are done, then one has to develop the company's foreign exchange policy as part of step two. This policy has to be endorsed by the company's senior management and usually provides details on the following:

- a) Specifying time for hedging foreign exchange exposure
- b) Identifying the tools and instruments and the circumstances in which they will be used.
- c) Identifying the one responsible for managing foreign exchange exposure
- d) Tasking one for being responsible in measuring the performance of the company's hedging actions.
- e) Identifying the regular reporting requirements

Hedge Exposure Using Trades and other techniques

Step three involves putting in place hedges that are consistent with the company's policy. For example, one may want to increase the value of raw materials imported from the U.S. to partly offset the exposure created by sales to U.S. buyers.

Evaluate and adjust periodically: Step four requires that the responsible personnel have to periodically measure whether the hedges are effectively reducing the company's exposure. Furthermore, they have to establish clear objectives and benchmarks that will help facilitate this evaluation. It will also alleviate the fear of those responsible for implementing the policy that they have somehow failed if the exchange rate moves in the company's favor.

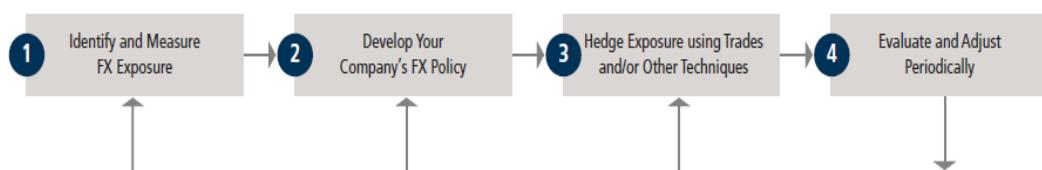


Figure 2.1: Steps for Managing Foreign Exchange Risk

Source: EDC Corporate Research Department

Likewise, central banks and financial institutions have to have in place, various techniques and methods for managing risks resulting from exchange rate fluctuations.

2.3.4.2 Techniques for Managing Risks of Foreign Exchange Rates

There are two methods that companies use to manage foreign exchange risk, that is, (i) natural hedging and (ii) financial hedging.

Natural hedging: The objective of natural hedging is to reduce the difference between receipts and payments in a given foreign currency. The company could decide to build or buy a production facility in the foreign country to eliminate most of the transaction exposure.

Financial hedging: The other method involves buying foreign exchange hedging instruments that are typically sold by banks and foreign exchange brokers. The ones most commonly used are: foreign exchange forward contracts, currency options and swaps.

Forward contracts allow a company to set the exchange rate at which it will buy or sell a given quantity of foreign currency in the future. They are flexible instruments that can easily match future transaction exposures (generally up to one year). For example, if a company expects to have, over the coming year, a foreign exchange exposure where it receives US\$350,000 more than it needs to pay every month, it can enter into a series of forward contracts to sell, at a predetermined exchange rate, this

(or a lower amount) of U.S. dollars each month. By entering into these forward contracts, the company will have eliminated all or most of the transaction exposure it faces (Kwame and Li (1998).

2.3.5 Summary of Empirical Framework

The empirical framework has been focused on studies done by other researchers on the impact of exchange rate fluctuation on the revaluation of currency and the factors that affect movements of exchange rates. Other studies were focused on the techniques for managing risks of exchange rate fluctuations. The proceeding discussion is on the study conceptual framework.

2.4 Study Conceptual Framework

As shown in Figure 4, the Conceptual Framework involves four independent variables namely:

- i. Analyzing the Effect of Exchange Rate Fluctuation on the Purchase of Goods in Foreign Currencies using three theories for determining exchange rates;
- ii. Assessing the Impact of Exchange Rate Fluctuation on the Revaluation of Foreign Currency;
- iii. Recommending proper techniques for managing risks of exchange rate fluctuations.

Furthermore, the conceptual framework involves one independent variable that is, reducing impact of exchange rate fluctuation on the revaluation of foreign currency in Tanzania.

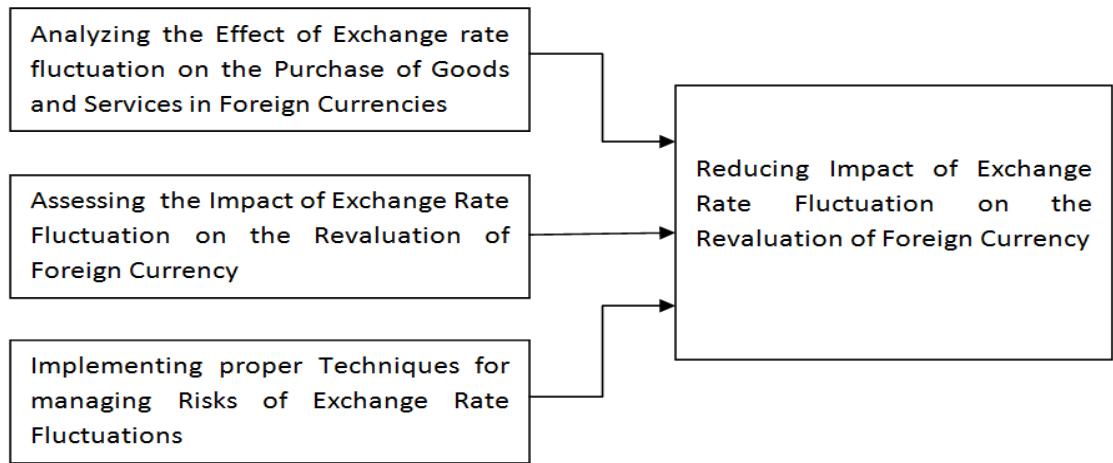


Figure 2.2: The Conceptual Framework

Source: Researcher's Design of the Conceptual Framework

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter elaborates on the research design, area of the study, population of the study, sample size and sampling procedures. The chapter further describes on data collection methods and data analysis techniques employed during the study. The ethical clearance for allowing the researcher to conduct the study is also described in this chapter.

3.2 Research Design

The research began with the literature review for assisting in the design of study conceptual framework. It was followed by the design of the statement of the problem which was in turn followed by writing of research objectives (Kothari, 2004). The data collection methods were chosen as applied in other literatures; these methods include questionnaires, interviews, documentary review and Broomberg data collection software. This was followed by decision on data analysis techniques and design of data collection instruments. In this study the collection of data was followed by analysis of data. Having analyzed data discussion of research findings was done. This was followed by the summary on the study, conclusions and recommendations of the study.

3.3 Area of Study

This study was conducted at the Bank of Tanzania as the case study and further

inputs were obtained from employees specializing in financial markets and risk management.

3.4 Population of the Study

The Bank of Tanzania has about 1500 employees. Employees at the Bank of Tanzania are specialized in various disciplines including economics, investment, engineering, finance and risk management. The data on exchange rate are available at the Bank and are reported accordingly on daily, weekly or monthly bases. Hence, most of the employees from the Bank have access to such information for reference. For this study, there were only three (3) respondents from the Bank of Tanzania Head Office although Bank of Tanzania has five branches, that is, Mbeya, Zanzibar, Arusha, Dodoma, Mwanza and one training Institute in Mwanza.

Study Information was obtained from the three respondents due to the fact that the information used in the study was the secondary data on exchange rates. Assessing and analyzing information basing on secondary data reduces human bias and subjectivism (Twarowska, 2014). Besides, the information was also posted on the Bank website. The three respondents were sufficient to provide the researcher with relevant literature sources and appropriate guidance for collecting and analyzing data for assessing the impact of exchange fluctuation on revaluation of foreign currency.

3.5 Sample and Sampling Procedures

As explained above, in this study there were mainly secondary data. Such data were the exchange rates that are circulated to staff on daily bases. Further clarification on

such information and its relevance at the Bank of Tanzania was obtained from three respondents. Two of the respondents were from domestic markets department and one respondent was from the directorate of risk management. Bearing in mind that data was already available at the Bank; the three staff just assisted the researcher for putting the explanation and responses in a more professional way.

Most of responses from the three respondents were more or less the same as the answers were already documented at the Bank. Questions were given to three respondents due to the fact that having responses from more than a single person especially for questions that need explanation leads to better understanding of the concept by the researcher. Since the study population was not homogeneous (Kothari. 2004); both stratified sampling and judgmental sampling were used in identifying the three respondents as the sample size for the study.

Hence the questionnaires were given to three respondents as explained above. The author decided to interview only three employees since secondary data was available at the Bank and this was obtained from reports at the Bank that are distributed to staff on annual bases. Data were also obtained from systems such as Bloomberg. Thus, three respondents were interviewed due to the need of the researcher to minimize the error that would arise by getting responses from a single respondent.

3.6 Data Collection Methods

Throughout the study, the researcher collected data using interviews, questionnaires, documentary review and Bloomberg data collection terminal.

3.6.1 Interviews

Interviews were conducted with three employees at the Bank basing on the questionnaire. One respondent was the one familiar with risk management issues, the other respondent was conversant with documentation and management of exchange rate fluctuations and the third respondent was familiar with management of foreign reserves portfolio. The three respondents was a number chosen by the author for representing the entire population at the Bank and it was sufficient to provide all relevant responses regarding the study.

Face to face interviews were conducted for getting information on general practice at the Bank regarding the influence of exchange rate fluctuations on the revaluation of foreign currencies. Interviews provided room for giving raw information that is simplified unlike questionnaires in which one may twist the answers for pleasing the researcher.

The interviews in this research just supplemented to what was obtained from questionnaires. After filling questionnaires the author made face to face interviews with the respondents on the same questions as given in the questionnaire. Furthermore, the advantages with interviews, is that they are better in producing a higher response rate than the questionnaires.

The interviewer can probe deeper into response given by an interviewee. Interviews are useful for simplifying complex topics (Ranjit, 1999). The interviews are applicable for respondents requiring rapid and more elaborate response.

3.6.2 Questionnaires

Questionnaires were some of the data collection tools. There were open-ended questions; this was due to the fact that the author was targeting secondary data which were either available at the Bank or in various literature; such data were not from the individual's opinion. The advantage with the collection of data using questionnaires is that, they allow gathering of responses in a better standardized way. Questionnaires are more objective. It is relatively, quick to collect information using questionnaires especially in situations where there are tight time limitations and budget constraints (Kothari, 2004). Questionnaires were provided to 3 employees at the Bank of Tanzania. Hence questionnaires were meant to gather information on the practice at the Bank regarding managing risks related with the fluctuation of exchange rates in Tanzania.

3.6.3 Bloomberg Data Collection Terminal

The Bloomberg Terminal is a computer system provided by Bloomberg L.P. that enables professionals in finance and other industries to access the Bloomberg Professional service through which users can monitor and analyze real-time financial market data and place trades on the electronic trading platform (Mercer, 2011). Like other financial regulators worldwide, the Bank of Tanzania uses the Bloomberg terminal in some of the selected business units like financial markets and risk management business unit.

Bloomberg terminal also provides news, price quotes, and messaging across its proprietary secure network. Most large financial firms have subscriptions to the

Bloomberg Professional service. Most Bloomberg setups have between two and six displays (Mercer, 2011).

Besides using interviews and questionnaires, Bloomberg data capturing terminal was used to get the real time information on exchange rate fluctuations. Bloomberg terminal has capabilities for giving real-time information on every minute or on hourly bases; for instance Bloomberg provided the exchange rate data at any time. Bloomberg terminal gives more accurate data for the issues already raised in the interviews and questionnaires.

Bloomberg alone cannot meet the requirements of getting all the research data; for instance Bloomberg cannot give the level of response given by respondents using interviews and questionnaires. Hence, these methods were used so that they can supplement each other for improving validity and reliability of data.

3.6.4 Documentary Reviews

Besides interviews and questionnaires, documentary review was a preferable method for getting documented information. Such information included data from published documents, unpublished and published dissertations, theses and journals, conference and workshop papers. Hence, documentary review was used in getting information on the impact of exchange rate fluctuation on the revaluation of foreign currencies.

3.7 Three Theories used to explain on the analysis of Data

According to various literatures elaborated in chapter two, exchange rates are determined by five theories namely the Trade Approach Theory, the Purchasing

Power Parity (PPP), Demand and Supply theory, the Uncovered Interest Parity, the Portfolio Balance Models theory and the Economics of the Fixed Exchange Rates (Anastopoulos, 2013; Twarowska and Kąkol, 2014; Mussa, 2011; Priewe, 2014).

For the purpose of meeting the objectives of the study, the calculations for this study were based on the three theories, namely the Trade Approach Theory, the Purchasing Power Parity (PPP) Theory and the Supply and Demand Theory. The Trade Approach theory was selected as the basis due to the fact that there is a positive revaluation of foreign currency in case business people obtain sufficient foreign currency from the available local currency for facilitating their trade.

The Purchasing Power Parity was selected as the basis due to the fact that the value of the local currency was determined by the resulting revaluation of foreign currency basing on the average exchange rate of the year. Hence, the ability to purchase (i.e. purchasing power parity) was determined by the amount of the available foreign currency. The availability of such foreign currency depends on the daily exchange rates from which the average annual exchange rate was determined.

The third theory on which calculations were based was the Supply and Demand Theory. Having the positive revaluation in particular year implied that there was more supply of the foreign currency compared to the demand; having negative revaluation of foreign currency implied that there was more demand of foreign currency compared to the supply. The availability of more foreign currency implied that local business people could buy goods and services in the foreign currency including the imports.

The unavailability of foreign currency implied that people could not buy the goods and services in the foreign currency do the impact of exchange rate fluctuations. Hence, all the theories analysis was meant to show that the fluctuation of exchange rate fluctuation affects more buying of goods and services in foreign currencies than in local currencies.

Besides the factors explained in chapter two on the fluctuation of exchange rates, the calculations that resulted in favorable results were those in which the revaluation of foreign currency was positive. This implied that more local business people could purchase goods and services in foreign currencies and this implied that there were balances in the supply and demand of the USD, EUR and GBP foreign currencies in Tanzania. Such favorable results would imply that the Government through the Bank of Tanzania has managed to control the supply and demand of both local and foreign currencies.

3.8 The Relationship between Research Objectives and Data Collected

3.8.1 Impact of exchange rate fluctuation on Trade

The first objective was to assess the impact of exchange rate fluctuation on the purchase of goods and services in foreign currencies using the three theories of exchange rate determination and TZS against USD, EUR and GBP exchange rates from 2001 to 2006. The data collected from the Bank of Tanzania were the daily exchange rates from the year 2001 to 2006. Almost the exchange rates change on daily bases, since the concern of the study was to find the annual average of exchange rates for the years from 2001 to 2006, all the exchange rates for each were

summed up and the average exchange rate for each obtained. The average exchange rate for each year was used as the reference for assessing the revaluation of foreign currencies basing on the exchange rates for the years 2001 to 2006. This objective was meant to gather the data that show how the fluctuation of exchange rates affects the purchase of goods and services using the foreign currencies. Hence, with this in mind it was required to assess the impact of exchange rate fluctuation to the value of selected TZS currency in terms of foreign currencies basing on TZS against USD, EUR and GBP exchange rates from 2001 to 2006.

The data range for exchange rate from 2001 and 2006 was chosen due to the fact that such information was already put in special tables in such a way that it was easier for the researcher to perform analysis relating to the study objectives. In this objective it was required to explain the impact of exchange rate on the purchase of goods or services in foreign currencies using the daily exchange rates at the Bank.

With the first study objective, it was required to answer the question “how does one show that the exchange rate fluctuation affects the purchase of goods or services in USD, EUR and GBP using the average exchange rates for each year from 2001 to 2006?”

The amount of foreign currency one gets by converting the available TZS currency depends on the current exchange rate that keeps on changing with time. If the exchange rate rises then one gets fewer foreign currencies (e.g. for the case of USD, EUR and GBP currencies). If the exchange rate drops then one gets more foreign

currencies (e.g. for the case of USD, EUR and GBP currencies). For the buyer of goods or services in foreign currencies the exchange rate fluctuation (for the case where the rate rises) makes one get less foreign currency compared to the previous day, month or year. For the buyer of goods or services in foreign currencies the exchange rate fluctuation (for the case where the rate drops) makes one get more foreign currency from given TZS currency compared to the previous day, month or year.

The exchange rate fluctuation increases or drops the amount of purchasing goods or services in foreign currencies (e.g. for the case of USD, EUR or GBP currencies). For the case when goods or services are bought in foreign currencies one may get amount of foreign currency from his available TZS currency depending on the exchange rate; volatility of the cost of goods or services in foreign currency rises or falls depending on the value of the local currency.

The local currency is valuable, if citizens can buy goods or services in foreign currency within little variations in exchange rates from one day to the other, from one month to the other and from one year to the other. High fluctuations in exchange rates may reduce the market for goods or services that are sold using only foreign currencies.

3.8.2 Impact of Exchange Rate Fluctuation on revaluation of Foreign Currency

The second study objective was to assess the impact of TZS against USD, EUR and GBP exchange rate fluctuation on the revaluation of foreign currencies using the exchange rates for the years from 2001 to 2006. In order to meet this objective the

data required were the daily exchange rates from which the averages exchange rates for each year was obtained. The sign obtained from difference between the current year and the previous year was used as the criteria for assessing on the revaluation. With this objective, it was required to answer the research question “how does one assess the revaluation due to exchange rate fluctuation in terms of foreign currencies by using USD, EUR and GBP exchange rates against TZS currency for year from 2001 to 2006?”

Revaluation may be low, medium or high depending on the fluctuation of exchange rate against selected currencies (e.g. USD, EUR or GBP).

Suppose one decides to use his local currency for buying goods or services under the condition that the seller wants cash in foreign currency; the value of the foreign currency to be obtained from the local currency depended on the exchange rate i.e. a given amount of money in TZS currency the researcher obtained different equivalent foreign currencies for USD, EUR and GBP currencies depending provided exchange rates.

The amount X in TZS had a different value in USD for consecutive years from 2001 to 2006 (basing on average exchange rate for each year). Differences in exchange rates between two days led to revaluations in their equivalent foreign currency. Difference in exchange rates between two months (taking average rate for a month) led to revaluations in their equivalent foreign currency; Difference in exchange rates between two years (taking average rate for a year) led to revaluations in their equivalent foreign currency.

Fixing X TZS shillings and finding their equivalent foreign currency in a number of years using average exchange rate for each year the researcher found that each time the same X TZS shilling has different foreign currency for each year. This difference is measured in terms of revaluation which is given by the difference between the foreign currencies for current year from the foreign currency for the previous year.

In this study, if the average exchange rate for the current year is higher than the average exchange rate for the previous year then the revaluation is positive; and if the value for the current year is less than the value for the previous year then the revaluation is negative. Being negative or positive expresses the impact of exchange rate fluctuation on the purchase of goods or services in foreign currency.

The result for positive revaluation, it implies that the exchange rate for the previous year and the current year are a bit closer. This implies that there is no big difference on the cost of goods and services for the current year and the previous year. However, having the negative revaluation implies that there is a difference in cost for the same goods or services that are sold during the current year compared to the previous year. The exchange rate affects more those who buy goods and put them in stores expecting to sell them later.

Hence, since exchange rate fluctuates always in the upward direction, the buyers (always local business people) require more local currency in order to get the equivalent foreign currency to pay for the required goods or services.

3.8.3 Techniques for managing Risks of Exchange Rate Fluctuations

The third objective was to recommend on proper techniques for managing risks of exchange rate fluctuations. in order to meet this objective, it was required to answer the research question “What are the proper techniques for managing risks of exchange rate fluctuations in Tanzania?” Exchange rate fluctuation affects revaluation of foreign currencies; hence measures for managing exchange rates fluctuation were meant to reduce the impact of exchange rate fluctuation on the revaluation of foreign currency. The proper techniques for managing exchange rate fluctuations have been explained at length in chapter two.

3.9 Data Analysis

Data were analyzed by using descriptive methods basing on the averages of exchange rates and revaluations of foreign currencies put in tabular form. The methods included explained the results in terms of percentages differences between average exchanges rates for selected years. The average exchange rate for each year (AV) was obtained by dividing the sum of all the exchange rates (Total_Exch) by the number of exchange rates in a year (Num) as provided by the Bank of Tanzania.

Hence, the formula: $AV = \text{Total_Exch} / \text{Num}$, was used to calculate the average exchange rates for selected years. This included finding the average of annual exchange rates that assisted in finding the revaluation in foreign currencies. Getting the revaluation assisted in explaining the effect of exchange rate fluctuation on buying goods and services in foreign currencies.

3.10 Criteria for assessing Impact of Exchange Rate Fluctuation on Revaluation

The following criteria were used for assessing the impact of exchange rate fluctuation on revaluation of foreign currencies:

- i. Fixing value of TZS currency and comparing it with the equivalent USD, EUR and GBP foreign currencies basing on TZS against USD, EUR and GBP exchange rate for years from 2001 to 2006;
- ii. The impact of exchange rate fluctuation being determined by the sign of the revaluation of foreign currencies calculated from the exchange rates for the years from 2001 to 2006;
- iii. Taking the positive sign of revaluation of foreign currencies to imply the ability of business people to purchase goods or services in foreign currencies;
- iv. Taking the negative sign of revaluation of foreign currencies to imply the ability of business people to purchase goods or services in foreign currencies.

3.11 Ethical Consideration

For complying with research ethics, the respondents were informed on the aim of collecting data and the aim of the study. Emphasis was put on the fact that the study was done for academic purposes and that every information obtained was only for the academic use only and for assessing the impact of exchange rate fluctuations on the revaluation of foreign currencies in Tanzania. Besides, respondents were assured that the answers would be kept confidentially.

CHAPTER FOUR

4.0 DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter elaborates on the analysis of data and discussion of research findings for showing the impact of exchange rate fluctuation on the revaluation of foreign currency in Tanzania and its effect on the purchase of goods and services in foreign currencies. As explained in chapter three, selected criteria were used for assessing the impact of exchange rate fluctuation on revaluation of foreign currencies mainly the USD, EUR and GBP currencies basing on the daily exchange rates from the year 2001 to 2006.

The selected value of TZS currency was fixed and compared with the equivalent USD, EUR and GBP foreign currencies basing on exchange rates for the years from 2001 to 2006. The impact of exchange rate fluctuation was determined by the sign of the revaluation of foreign currencies calculated from the average of exchange rates for each year from 2001 to 2006. The ability of business people to purchase goods or services in foreign currencies was determined by the sign of revaluation of foreign currencies.

During the data analysis the daily exchange rates obtained from the Bank of Tanzania (BOT) were used. Basing on the daily exchange rates for USD, EUR and GBP foreign currencies against TZS currency, the average annual exchange rates were obtained for years from 2001 to 2006. Basing on the report showing the

position of reserves at the Bank as of 30th June 2012, the foreign currency positions for US dollar (USD), European Union currency (EUR) and Sterling Pound (GBP) were obtained.

The Tanzanian currency equivalents for such foreign reserves were then computed using the exchange rates for 26th June 2015; the exchange rates for this day were selected since the analysis was done during that particular day. Hence, it was more appropriate for the researcher to select Tanzanian currency as a reference for analysis with reference to 26th June, 2015. This was mainly for emphasizing on how the exchange rate fluctuation affects purchase of goods or services in foreign currencies such as US dollar and Sterling pound. The Tanzanian currencies obtained were used for calculating the foreign currency equivalents using the exchange rates of the years from 2001 to 2006. The revaluation for each year in terms of foreign currencies was obtained. This was followed by the discussion of the research findings.

4.2 The Selected Level of Reserves at BOT

At the Bank of Tanzania, the Foreign Markets department report on the position of the reserves for each financial year at the start of the financial year and at the end of the financial year. As shown in Figure 5, at the end of 30th June 2012, the portfolio had 583.46 EUR, 176.80 GBP and 1,976.97 USD. The financial year at BOT begins in 1st of July of every year and ends in 30th June of every year (BOT, 2013).

Foreign reserves at the Bank of Tanzania are in three categories, that is, those for liquidity and investment and those for stable. Foreign reserves under liquidity are

used for meeting Government obligations timely; the other part of foreign reserves is used for investment in various portfolios. Other part of the foreign reserves is given to managers outside the Bank for assisting in maintaining the portfolio. The Bank of Tanzania maintains various portfolios including the US dollar, Sterling Pound, Australian dollar, Euro and Chinese Yen. At the end of each financial year the Bank reports on the respective foreign reserves in each portfolio and its equivalent amount in USD. The total USD equivalents for all currencies are then obtained and its TZS equivalent is then obtained and reported to relevant authorities accordingly (BOT, 2014).

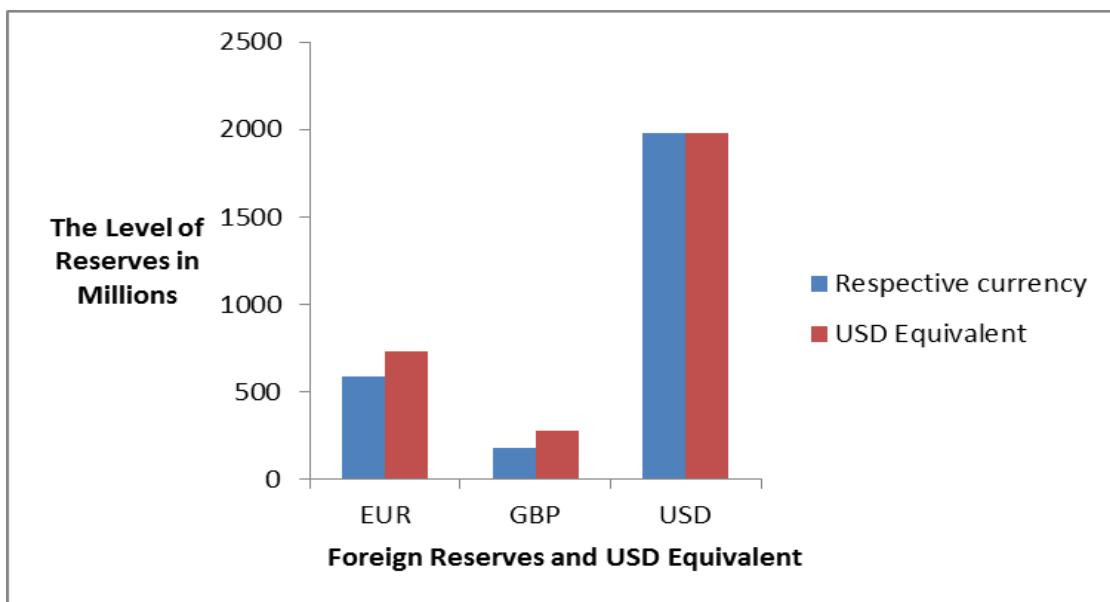


Figure 4.1: The Level of Foreign Reserves as of 30th June, 2012

Source: Bank of Tanzania Report (2012)

With the purpose of this study the levels of foreign reserves used for analysis were those of 30th June, 2012, however, these values were reported with the level of reserves for 30th June, 2013 as shown in Table 4.1.

Table 4.1: The Level of Reserves in Millions at the Bank of Tanzania

	Position of Reserves			
	At the end of 30-Jun-12		At the end of 30-Jun-13	
Portfolios	Respective Currency	USD Equivalent	Respective currency	USD Equivalent
EUR	583.46	731.93	437.71	584.03
GBP	176.80	276.28	202.94	315.80
USD	1,976.97	1,976.97	1,984.35	1,984.35
TOTAL (USD)		2,985.18		2,884.18
TOTAL (TZS)		4,706,793.01		4,547,544.29

Source: Report on Positions of Foreign Reserve at BOT (2013)

4.3 Calculation of Average Exchange Rates for Selected Currencies

4.3.1 Exchange Rate at the Bank of Tanzania

The exchange rates of foreign currency against TZS currency varies almost on daily bases. The researcher was provided at her will with the data for the years from 2001 to 2006 for TZS exchange rates against Euro, Sterling Pound and the US dollar. The daily exchange rates for the years from 2001 to 2006 are shown in appendix 3. Since for each day the date, the spot buying rate, the mean and the spot selling rate were given, the author considered the spot selling rate due to the fact that the Bank sells foreign currencies. The bank buys foreign currencies only in rare cases. Since the selling rates are given in equivalents to 100 units of foreign currencies the selling price for each exchange rate was divided by 100 to get the exchange rate for one unit of foreign currency.

4.3.2 Calculating the Average Exchange Rates for Selected Years

Having obtained the exchange rates for one unit of foreign currency against one unit of the TZS equivalent, the researcher proceeded with the calculation of average exchange rates for each year from 2001 to 2006. The exchange rates for the year

from 2001 up to 2006 were compiled and uploaded on the website of the Bank of Tanzania; the concern of the researcher and the study was to assess the impact of exchange rate fluctuation on revaluation of foreign currency; this was to be obtained from the available data from the Banking authority that is already public. Six years was sufficient according to the researcher for assisting in the analysis of the impact of exchange rate fluctuation on revaluation of foreign currency. Hence from the daily exchange rates given in appendix 3, the average exchange rate for each year from 2001 to 2006 was calculated using Microsoft excel data analysis program. The average exchange rate for each year (AV) was obtained by dividing the sum of all the exchange rates (Total_Exch) by the number of exchange rates in a year (Num) as provided by the Bank of Tanzania. Hence, the formula: $AV = \text{Total_Exch} / \text{Num}$, was used to calculate the average exchange rates for selected years.

The computation of the average of exchange rates involved only three foreign currencies and those were the US dollar (USD), the Euro (EUR) and the Sterling Pound (GBP). The computation of the average exchange rates for years from 2001 to 2006 started with the USD/TZS exchange rates. Using the formula given above and the Microsoft excel data analysis program, the USD/TZS average exchange rates were obtained and tabulated as shown in Table 4.2.

In order to generate Table 2 above, the total exchange rates were obtained. This was referred to in the formula as “Total_Exch”. Then the number of daily exchange rates was obtained which in Table 4.2 such data was referred to as “Frequency of Data” and in the computation formula as “Num”. The last column named “USD / TZS

Exchange Rate” is the average exchange rates for USD against TZS for each year from 2001 to 2006. In the computation formula such average was referred to as “AV”.

Table 4.2: Average USD / TZS Exchange Rates for Years from 2001 to 2006

Year	Total Exchange Rate	Frequency of Data	Average TZS / USD Exchange Rate (100 Units)	TZS / USD Exchange Rate (1 unit)
2001	21,767,734.12	246	88486.72	884.8672
2002	24,102,621.82	247	97581.46	975.8146
2003	25,797,982.57	246	104869.8	1048.698
2004	27,832,994.20	253	110011.8	1100.118
2005	21,599,655.98	191	113087.2	1130.872
2006	22,068,842.39	172	128307.2	128307.2

Source: Computations of Average by the Researcher (2015)

Following the same formula and steps, the average exchange rates for EUR against TZS was also calculated and the results were tabulated as shown in Table 4.3.

Table 4.3: Average EUR / TZS Exchange Rates for Years from 2001 to 2006

Year	Total Exchange Rate	Frequency of Data	Average EUR / TZS Exchange Rate (100 Units)	EUR / TZS Exchange Rate (1 unit)
2001	19,503,570.35	246	79282.81	792.83
2002	22,796,470.71	247	92668.58	926.69
2003	29,186,771.27	246	118645.4	1186.45
2004	34,599,434.91	253	136756.7	1367.57
2005	27,218,678.49	191	142506.2	1425.06
2006	46,252,339.25	297	155731.8	1557.31

Source: Computations of Average by the Researcher (2015)

Similarly, the average exchange rates for GBP /TZS for years from 2001 to 2006 were also calculated and tabulated as shown in Table 4.

Table 4.4: Average GBP / TZS Exchange Rates for Years from 2001 to 2006

Year	Total Exchange Rate	Frequency of Data	Average GBP/TZS Exchange Rate (100 Units)	GBP/TZS Exchange Rate (1 unit)
2001	31,354,895.96	246	127458.9	1274.59
2002	36,231,422.15	247	146685.9	1466.86
2003	42,166,323.81	246	171407.8	1714.07
2004	51,006,991.15	253	201608.7	2016.09
2005	50,632,460.42	244	207510.1	2075.10
2006	57,030,292.73	244	233730.7	2337.30

Source: Computations of Average by the Researcher (2015)

4.4 Determination of the Criteria for Computing Revaluations

On daily bases revaluation, that is, loss or gain in foreign currency or local currency is calculated by finding the difference in the current value (today's value) from the previous value (yesterday's value). If today's value is greater than yesterday's value then there is a gain in terms of revaluation (or just the simplicity for buying goods or services in foreign currencies). However, if today's value is less than yesterday's value then there is loss in terms of revaluation. Such loss or gain in revaluation has an impact when it comes to purchase of goods or services in foreign currencies.

Hence, basing on this perspective, revaluations (that is, gain or loss) were computed by finding the difference between the foreign currency for the current year and the foreign currency for the previous year. If the foreign currency for the current year was greater than the foreign currency for the previous year then there was gain in terms of revaluation; the case in which the TZS equivalent would result to a bigger amount of the foreign currency. This would in turn favor the purchase of good in foreign currencies such as US dollar and the sterling pound.

However, if the current year's foreign currency was less than the previous year's value then there was loss in terms of revaluations. Such circumstances showed that the business persons in Tanzania intending to buy the goods or services in foreign currencies would definitely require a lot of TZS currencies in order to be able to find the equivalent values in foreign currencies, for instance, the US dollar or sterling pound.

4.5 Analysis of Revaluations for Selected Foreign Currencies

4.5.1 Determination and Analysis of Revaluation for USD Foreign Currency

As shown in Table 2, the report on the level of foreign reserves in 30th June 2012 showed that there were 1,976.97 million USD in foreign reserves. In order to assess the impact of exchange rate fluctuation on the total revaluation of USD foreign currency in Tanzania, the researcher based on the exchange rates provided by the Bank and her preferred portfolio position for analysis basing on the level of reserves reported at the end of 30th June 2012. As of 26th June 2015, the 100 USD had equivalent TZS of 209,926.00 as the selling price. Hence according to Bank of Tanzania reports USD/TZS exchange rate was 2,099.26 i.e. 1 USD was equivalent to 2,099.26 TZS as shown in Table 4.5.

Table 4.5: Exchange Rate for Computing the TZS Equivalent

Currency	Spot Buying (in 100 units)	Spot Selling (in 100 units)	Exchange Rate against selected currency in One Unit
USD	207847.52	209926	2099.26
Pound STG	327235.14	330549.48	3305.49
EURO	232581.38	234928.19	2349.28

Source: BOT - USD / TZS Exchange Rates for 26th June, 2015

The computed TZS equivalent for 1,976.97 USD Using the USD / TZS exchange rate shown in Table 5, was 4,150,174.04 in millions (that is approximately TZS 4,150 billion). Hence, for the sake of analysis in order to show the impact of exchange rate fluctuation on revaluation of USD foreign currency, the amount TZS 4,150 billion was used to compute the equivalent in foreign currencies for each year from 2001 to 2006 basing on the average USD / TZS exchange rates for each year from 2001 to 2006. Such computations resulted to Table 4.6.

Table 4.6: Determination of Revaluation due to USD / TZS Exchange Rates

Year	TZS Currency in Billions	USD/TZS Exchange Rate	USD Equivalent for each Year (TZS/Exchange Rate)	Approximated USD Equivalent in Billions	Revaluation due to exchange rate fluctuation (Billion)
2001	4,150	884.8672	4,689,969,297.09	4.7	Reference Value
2002	4,150	975.8146	4,252,857,048.87	4.3	- 0.4
2003	4,150	1048.698	3,957,287,989.49	4.0	- 0.3
2004	4,150	1100.118	3,772,322,605.39	3.8	- 0.2
2005	4,150	1130.872	3,669,734,505.76	3.7	- 0.1
2006	4,150	1249.475	3,321,394,985.89	3.3	- 0.4

Source: Excel Data Analysis Results (2015)

As shown in Table 4.6, the USD / TZS exchange rates for the investment of the assumed 4150 billion TZS resulted to different foreign currencies equivalents for the years from 2001 to 2006. The essence of the study was to assess the fluctuation of exchange rate fluctuation on the revaluation of foreign currencies. From Table 6, it was realized that using the TZS 4150 billion, the equivalents for USD currencies dropped every year from 2001 to 2006 hence leading to loss in revaluation of the US dollar. This implied that the local business person spending TZS 4150 billion will suffer more if he purchase goods or services in US dollar 2006 than when he buys

the items in 2001 or 2002. This shows that local buyers are forced to buy items at times when they think they can make profit out of the US dollar. Hence, decision to buy items or goods in the US dollar is highly determined by the fluctuation of USD / TZS exchange rates. The revaluation of – 0.3 in the year 2003 as shown in Table 6 implied that if the business person in Tanzania had TZS 4150 billion in hand he would buy goods or services at cheaper price in 2002 than in 2003 whose exchange rates for USD against TZS was higher compared to the one of 2002.

According to the researcher, such trends showed that there is a possibility of people just keeping their money anyhow and waiting to buy items when the exchange rates favor their business profits. However, according to the results in Table 6, the average USD/TZS exchange rates kept on dropping throughout from 2001 to 2006 and hence the purchaser of goods or services in the US dollar has no choice when it comes to deciding on the year to buy the items in the US dollar since the value of the TZS against the US dollar keeps on dropping now and then. This was further summarized in Table 4.7.

Table 4.7: Percentage of USD Equivalents with Reference to the USD Value for 2001

Year	TZS Currency in Billions	USD/ TZS Exchange Rates	USD Equivalent	Fraction with Reference to the USD in 2001	Percentage with reference to the USD amount in 2001 (%)
2001	4,150	884.8672	4,689,969,297.09	1	100
2002	4,150	975.8146	4,252,857,048.87	0.906798484	90.68
2003	4,150	1048.698	3,957,287,989.49	0.84377695	84.38
2004	4,150	1100.118	3,772,322,605.39	0.804338444	80.43
2005	4,150	1130.872	3,669,734,505.76	0.782464505	78.25
2006	4,150	1249.475	3,321,394,985.89	0.7081912	70.82

Source: Microsoft Excel Data Analysis Results (2015)

Due to the effect of exchange rate fluctuation, the value of the USD equivalent for 2006 is just 70.82% of the USD equivalent for 2001 which implies that the business person with TZS 4150 billion in 2001 will have more US dollars in 2001 than in 2006. The same explanation applies for USD equivalents for TZS 4150 billion for the years from 2002 to 2005. This has a great impact on purchases of goods and services that are mandatory to buy in US dollars. Hence, the variations in exchange rates almost on daily bases have an impact to the purchases of goods or services in foreign currencies.

4.5.2 Assessing Revaluation of EUR Foreign Reserves

On 26th June, 2015, the EUR / TZS exchange rate according to the daily exchange rates report at the Bank of Tanzania was TZS 2349.28. According to Table 5, the level of EUR in the foreign reserves portfolio was EUR 583.46 which is equivalent to 1370711 in millions (1370.7 billion). The exchange rate has been fluctuating from past days to date and this has an impact to those with TZS money and would like to purchase goods or services using the EURO currency. For instance, to analyze the impact of exchange rate fluctuation of the EUR currency, the researcher used the assumed value of the TZS amount which is the equivalent of EUR 583.46.

Hence values of EUR equivalent for TZS 1370.7 billion for each year from 2001 to 2006 was determined using the average exchange rates shown in Table 3. The revaluation in each year was obtained by getting the difference of the current year from the previous year as shown in Table 4.8.

Table 4.8: Analysis of Revaluation of EUR Foreign Currency

Year	TZS Currency in Billions	EUR / TZS Exchange Rate	EUR Equivalent for each Year (TZS/Exchange Rate)	Approximated EUR Equivalent in Billions	Revaluation due to exchange rate fluctuation (in billions)
2001	1370.7	792.83	1,728,869,997	1.70	Reference Value
2002	1370.7	926.69	1,479,135,417	1.50	- 0.20
2003	1370.7	1186.45	1,155,295,208	1.20	- 0.30
2004	1370.7	1367.57	1,002,288,731	1.00	- 0.20
2005	1370.7	1425.06	961,854,238	0.96	- 0.04
2006	1370.7	1557.31	880,171,578	0.88	- 0.08

Source: Microsoft Excel Data Analysis Results (2015)

As shown in Table 8, there is a big impact on exchange rate fluctuation on the revaluation of foreign currency in Tanzania. This impact is easily expressed in terms of purchase of goods and services; for instance if the goods have to be imported by purchasing using the EURO currency, the buyer of the goods would require more local currency (in this case TZS) in order to buy goods in the EUR currency. The values in revaluation column have negative signs which shows that the exchange rate have a negative impact in the purchase of goods and services in foreign currency.

As shown in Table 8, the equivalent of TZS 1370.7 billion in 2001 was EUR 1,728,869,997; however, the equivalent of the same TZS 1370.7 billion in 2002 was EUR 1,479,135,417 which is 85.55% of the equivalent amount in 2001. Likewise, the equivalent amount for TZS 1370.7 billion in 2006 was EUR 880,171,578 which is 50.9% of the equivalent amount in 2001 as shown in Table 9. Hence, basing on the annual values, exchange rate fluctuation leads loss in value of the money for importing goods or buying goods in Tanzania in foreign currencies. The exchange

rate affects more local business people who buy goods or services in foreign currencies than local currencies. Even those whole sellers who import goods or services arrange their selling prices basing on the extent by which they bought in order to get profit.

Table 4.9: Percentage of the Equivalent EUR with Reference to the Value in 2001

Year	TZS Currency in Billions	EUR Currency	Fraction with reference to the EUR amount of 2001	Percentage with reference to the EUR amount in 2001 (%)
2001	1370.7	1,728,869,997	1	100
2002	1370.7	1,479,135,417	0.8555504	85.55
2003	1370.7	1,155,295,208	0.668237178	66.82
2004	1370.7	1,002,288,731	0.579736321	57.97
2005	1370.7	961,854,238	0.556348505	55.63
2006	1370.7	880,171,578	0.509102234	50.91

The loss in value of the EUR currency decreases gradually from the 2001 to 2006 as shown in Table. For instance in 2002, revaluation was – 0.2 whereas in 2003 revaluation was – 0.3. This showed that the business person with TZS 1370.7 billion in 2002 would get more EUR amounts when he exchanges his money into EUR currency than when he exchanges the same money into EUR currency in 2003. This shows how the exchange rate fluctuation affects the business in whole especially in the third world countries or developing countries. Table 9 clarifies more on the impact of exchange rate fluctuation on the purchase of goods or services in EUR currency. To be more specific the amount TZS 1370.7 billion had equivalent of EUR 880,171,578 in 2006 this is less compared to its equivalents in EUR for the years 2004 and 2005 respectively which were EUR 1,002,288,731 and EUR

961,854,238 respectively. The EUR values for 2004 and 2005 were just 57.97% and 55.63% respectively of the EUR value for 2001.

The column for percentage with reference to the EUR amount in 2001 as shown in Table 9 was obtained by dividing the EUR amount in each year by the equivalent EUR value in 2001 and then multiplying each value in the given rows by 100. The column was computed just to show how the fluctuation of exchange rate in most cases degrades the value of the local currency in the sense that as time goes one requires more Tanzanian money in order to afford to buy an item in the foreign currency be it EUR, US dollar or Sterling Pound. As shown in Table 3, the EUR / TZS exchange rate keeps on increasing, this creates hardships for local people to import materials where they have to do the purchase in EUR currency. Hence, fluctuation of exchange rates leads to revaluation of foreign currencies in Tanzania.

4.5.3 Assessing Revaluation of GBP Foreign Currency

As explained previously in this chapter regarding the impact of exchange rate fluctuation on the revaluation of foreign currency, the same applies to the fluctuation of GBP / TZS exchange rates. With reference to Table 1, the position of GBP in the Portfolio was 176 GBP in millions at the end of 30th June 2012. Following the fluctuation of exchange rates on daily bases, the impact on revaluation of foreign currency is explained by calculating the value of this amount in terms of TZS as of 26th June, 2015. With reference to Table 5, the GBP / TZS exchange rate as of 26th June, 2015 was TZS 3305.49. Hence, as of 26th June 2015, the equivalent of GBP 176 when converted to TZS currency resulted to TZS 581.8 billion. In order to

explain the revaluation of GBP foreign currency, the figure TZS 581.8 billion was fixed and its equivalent in GBP currency for each year from 2001 to 2006 was calculated and the results were tabulated as shown in Table 10.

Table 4.10: Analysis of Revaluation of GBP Currency

Year	TZS Currency in Billions	GBP / TZS Exchange Rate	GBP Equivalent for each Year (TZS/Exchange Rate)	Approximated GBP Equivalent in Billions	Revaluation due to exchange rate fluctuation (Billion)
2001	581.8	1274.59	456,460,509	0.46	Reference Value
2002	581.8	1466.86	396,629,535	0.40	- 0.06
2003	581.8	1714.07	339,426,044	0.34	- 0.06
2004	581.8	2016.09	288,578,387	0.29	- 0.05
2005	581.8	2075.10	280,372,030	0.28	- 0.01
2006	581.8	2337.30	248,919,694	0.25	- 0.03

Source: Microsoft Excel Data Analysis Results (2015)

As shown in Table 10, the TZS currency in billions was fixed for the consecutive years from 2001 and 2006 in order to determine its equivalent GBP currency for each year from 2001 to 2006 respectively. This was mainly done in order to facilitate the analysis of the revaluation due to GBP / TZS exchange rate fluctuation in Tanzania.

With reference to Table 10, the researcher identified and analyzed the impact of GBP / TZS exchange rate fluctuation on the revaluation of GBP foreign currency at the Bank. As of 26th June, 2015, the GBP / TZS exchange rate at the Bank of Tanzania was TZS 3305.49 for each one unit currency of GBP. The equivalent of GBP 176 in TZS was fixed for the purpose of analysis for each year from 2001 to 2006. The basing on the current exchange rate as of 26th June, 2015, 176 GBP was equivalent to TZS 581.8 billion. The major concern was to assess the impact of exchange rate

fluctuation on revaluation of GBP foreign currency in Tanzania; by fixing the amount TZS 581.8 billion and by finding its equivalent for each year from 2001 to 2006 basing on the GBP / TZS exchange rates obtained from the Bank of Tanzania, it was realized that the amount of the GBP currency with reference to 581.8 in each year was diminishing in value from 2001 to 2006 consecutively. The researcher realized that this had a major impact as far as imports into Tanzania are concerned; for instance importation of cars, industrial machinery where the purchase has to be done in GBP currency.

Table 4.11: Percentage of GBP Currency with Reference to the Value in 2001

Year	TZS Currency in Billions	GBP Currency	Fraction with reference to the GBP amount of 2001	Percentage with reference to the GBP amount in 2001 (%)
2001	581.8	456,460,509	1.0000	100.00
2002	581.8	396,629,535	0.8689	86.89
2003	581.8	339,426,044	0.7436	74.36
2004	581.8	288,578,387	0.6322	63.22
2005	581.8	280,372,030	0.6142	61.42
2006	581.8	248,919,694	0.5453	54.53

The equivalent of TZS 581.8 billion in 2001 was GBP 456. 5 million whereas the equivalent of TZS 581.8 billion in 2006 was GBP 248.9 million. The value for TZS 581 billion in 2006 was only 54.53% of the GBP equivalent in 2001. Suppose there was a business person from Tanzania who wanted to buy an item that costs GBP 456.5 million and instead of buying it in 2001 he buys it in 2006, since the GBP / TZS exchange rates for 2001 and that for 2006 are quite much different, such business person in 2006 would require more GBP 207.6 in order to buy the item at

GBP 456.5 million in 2006 which implies that such business person needs additional GBP amounts to GBP 248.9 million in order to buy the item. Hence, any GBP / TZS exchange rate fluctuations have a great impact to the buyers in foreign currencies.

Hence, there is always a gain or loss in the amount of the foreign currency with reference to the previous amount be it previous day, month or year.

In Table 10, the GBP equivalent for 581.9 billion in 2001 was GBP 0.46 billion; whereas the GBP equivalent for 581.9 billion in 2002 was GBP 0.40 billion. This showed a revaluation of GBP - 0.06 billion. The minus sign (-) indicated that with reference to the GBP amount in 2001, there was a loss of GBP 0.06 billion. Such big difference was brought about by the GBP / TZS exchange rate fluctuation.

Hence, the trend of exchange rate fluctuations affects more the buyer in foreign currencies and in this case the buyer of goods or services in GBP currency. Locally, the business persons need more TZS money during exchange in order to be able to get sufficient foreign currency for buying goods and services; they require more TZS money to supply to officers at exchange bureau. If this is not controlled using appropriate risk management methods by the central Bank; it may lead to serious devaluation of the Tanzanian currency.

4.6 Techniques for Managing Risks of Exchange Rate Fluctuations

There are two methods that companies use to manage foreign exchange risk, that is, (i) natural hedging and (ii) financial hedging. The objective of natural hedging is to

reduce the difference between receipts and payments in a given foreign currency. The company could decide to build or buy a production facility in the foreign country to eliminate most of the transaction exposure. The other method involves buying foreign exchange hedging instruments that are typically sold by banks and foreign exchange brokers. The ones most commonly used are: foreign exchange forward contracts, currency options and swaps (Kwame and Li (1998)).

Besides the two methods above for managing risks of exchange rate fluctuation, further description is provided below regarding management of the risks related with the fluctuation of exchange rates in worldwide.

4.6.1 General Techniques for Managing Risks of Exchange Rate Fluctuations

The previous sections in this chapter have detailed on the impact of exchange rate fluctuation on investment of foreign reserves and the buying of goods and services in the foreign currency. As explained in chapter two, the following are recommended for managing risks of exchange rate fluctuations:

- i). Minimizing the effects of exchange rate movements on profit margins
- ii). Increasing the predictability of future cash flows
- iii). Eliminating the need to accurately forecast the future direction of exchange rates
- iv). Facilitating the pricing of products sold on export markets
- v). Protecting, temporarily, a company's competitiveness if the value of the Canadian dollar rises

4.6.2 Specific Techniques for Managing Risks of Exchange Rate Fluctuations

In order to manage risks of exchange rate fluctuations Governments and central banks have to do the following:

4.6.2.1 Identify and Measure

In the first step, regulators have to identify and measure the foreign exchange exposures that one wants to manage. For an exporting company paid in U.S. dollars, measuring exposure involves subtracting the U.S. dollars it expects to receive over a one year period against the money it will need in order to make payments in U.S. dollars over the same period (Michael, 2007).

4.6.2.2 Develop the Company Foreign Exchange Policy

When the exposure calculations are done, then one has to develop the company's foreign exchange policy as part of step two. This policy has to be endorsed by the company's senior management and usually provides details on time for hedging of foreign exchange exposure, identifying the tools and instruments and the circumstances in which they will be used, identifying the one responsible for managing foreign exchange exposure, tasking one for being responsible in measuring the performance of the company's hedging actions and identifying the regular reporting requirements.

4.6.2.3 Hedge Exposure Using Trades and Other Techniques

In this case regulators may want to increase the value of raw materials imported from the developing countries, for instance Europe and the U.S in order to partly offset the exposure created by sales to Europe and U.S. buyers.

4.6.2.4 Evaluate and Adjust Periodically

Regulators have to periodically measure whether the hedges are effectively reducing the company's exposure. Furthermore, they have to establish clear objectives and benchmarks that will help facilitate this evaluation.

4.7 Chapter Summary

This chapter has elaborated on the impact of exchange rate fluctuation on the revaluation of USD, EUR and GBP foreign currencies. Specifically, the chapter has summarized the calculations of the average exchange rates for the years from 2001 to 2006. The chapter has further provided a detailed assessment on the impact of the fluctuation of exchange rates on the revaluation of foreign currencies. The chapter has also highlighted on how the fluctuation of exchange rates affects more purchasers of goods and services in foreign currencies than in local or Tanzanian currency.

The chapter has also shown how more Tanzanian notes are required for being able to obtain the equivalent amount in foreign currency as time goes. The chapter has entirely described on the impact of exchange rate fluctuation on the revaluation of foreign currencies in Tanzania using the basic assumptions made by the researcher as drawn from the positions of foreign reserves reported at the Bank of Tanzania in 30th June, 2013. The chapter is summed up with provision and description of appropriate techniques for managing risks of exchange rate fluctuations as obtained from literature reviews and respondents at the Bank of Tanzania.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter explains on study conclusions by summing up what is already elaborated in this work. The chapter further elaborates on appropriate recommendations for managing risks related with fluctuation of exchange rates in Tanzania.

5.2 Conclusions

This section summarizes on the study problem, objectives, research questions and research findings as a whole.

5.2.1 Conclusions on the Study Problem

Right from the beginning of this study it was realized that there is a need to assess the impact of exchange rate fluctuations on the revaluation of foreign currencies in Tanzania as there are inadequate studies so far done to elaborate on the impact of exchange rate fluctuations on business as a whole and on revaluation of foreign currencies. This gap has been narrowed by this study through a systematic approach of literature review in chapter two and through analysis of secondary data obtained from the Bank of Tanzania. The approach of data analysis used in this study has added a knowledge base for explaining the influence of exchange rate fluctuation on the revaluation of foreign currency and on the purchase of goods or services in USD, EUR and GBP foreign currencies.

There was a need of addressing the problem of this study due to the fact that there are potential threats to the world economy on the fluctuations of exchange rates of which case Tanzania is not an exception as explained in chapter two especially on the global financial crisis. Experience shows that if currency movement is not managed the country may collapse as civilians may not be able to buy most of the imported goods especially from the developed countries with dominating currencies (Kapila and Hendrickson, 2012; Zainal, 2004; Michael, 2007; Kwame and Goh, 1998).

5.2.2 Conclusions on the Study Objectives

The objective of this study has been met due to the fact that the researcher has extensively assessed the impact of exchange rate fluctuations on the revaluation of foreign currencies in Tanzania and has proposed appropriate measures for managing fluctuations of exchange rates in Tanzania. Furthermore has explained in chapter four the following have been done:

- i). Assessment of the impact of exchange rate fluctuation on the purchase of goods and services in foreign currencies using the three theories of exchange rate determination and TZS against USD, EUR and GBP exchange rates from 2001 to 2006;
- ii). Assessment of the impact of exchange rate fluctuation on revaluation of foreign currency using TZS against USD, EUR and GBP exchange rates from 2001 to 2006;
- iii). Recommendations on proper techniques for managing risks of exchange rate fluctuations.

5.2.3 Conclusion on the Research Questions

The research questions have been answered as indicated in chapter two and four respectively. The research questions would be summarized in a single research question “Is there an impact for the exchange rates fluctuation on revaluation of USD, EUR and GBP foreign currencies?” The impact has been assessed and its influence on foreign currencies has been explained accordingly basing on secondary data obtained from Bank of Tanzania.

5.2.4 Conclusion on Research Findings

As a whole, exchange rate fluctuation creates challenges to business persons as they cannot anticipate on the future value of their local money. They cannot control the movement of exchange rates for foreign currencies against the local currency nor do they have mandate to condition the purchase of goods and services to be done in local currency.

Hence, whenever they want to purchase goods or services in foreign currencies always there is a tendency that more local currency is required in order to buy goods or services in foreign currency as explained in this study. This has been demonstrated by the revaluations in foreign currencies for the years from 2001 to 2006. This has a potential threat to the economy of the Government as it decides on where and how to invest in both foreign and domestic markets.

5.3 Recommendations

Having assessed the impact of exchange rate fluctuation on the revaluation of foreign currencies, the following are recommended:

- i). Putting in place appropriate policies and conditions under the regulation of the Central Bank to control movement and availability of local currency;
- ii). Encouraging investment in local industries with quality products for improving export of products;
- iii). Encouraging payment of goods and services in local currency especially when there is a need to pay in the future as is the case in contracts / agreements;
- iv). Doing further studies in other Central Banks and do the comparative analysis with the current practice at the Bank of Tanzania.

REFERENCES

- Anastopoulos, M. (2013). Theories of Exchange Rate, International Finance, pp. 3-16.
- Atella, V. & Atzeni, G. (2003). Investment and exchange rate uncertainty, Journal of Policy Modeling, 25 (2003) 811–824, North Holland, pp. 812-820.
- Auboin, M. & Ruta, M. (2011). The Relationship Between Exchange Rates and International Trade: A Review Of Economic Literature, Staff Working Paper ERSD-2011-17, World Trade Organization, Economic Research and Statistics Division, pp. 1-22.
- Bank of Tanzania (BOT) (2006) Dar es Salaam. Act
- BOT (2013/2014). Report on Levels of Foreign Reserves, Financial
- BoT (2012/2013). Report on Levels of Foreign Reserves, Financial.
- BoT (2015). Basic Requirements of the Bank of Tanzania,
<http://www.bot.go.tz/AboutBOT/BOTFunction.asp>, retrieved on 13th July,
- Ebrahimi, S. (2012). Impact of price shocks and exchange rate volatility and resulted uncertainty on economic growth of selected oil countries; Journal of Business Research, No. 59, pp. 83-105.
- Goldberg, L. (2006). Exchange Rates and Foreign Direct Investment, Federal Reserve Bank of New York, pp. 1-8.
- Habib, A. (2001). Exchange Rate Stability: Theory and Practice from an Islamic Perspective, pp. 14-19.
- Harchaoui, T., Tarkhani, F. & Yuen, T. (2005). The Effects of the Exchange Rate on Investment: Evidence from Canadian Manufacturing Industries, pp. 34-67.

- Horobet, A. & Ilie, L. (2011). On the Exchange Rate Risk Contribution to the Performance of International Investments: The Case of Romania, International Diversification of Investment Portfolios”, Journal of International Money and Finance, Vol.13, pp. 159-170.
- Hung, J. (1993). Assessing the Exchange Rate Impact on U.S. Manufacturing Profits, pp. 44-63 Jeanne, Y. (2000). the consequence of inappropriate Fiscal– Monetary Economy, pp. 68-83.
- Jorion, P. (1985). “International Portfolio Diversification with Estimation Risk”, Journal of Business, Vol.58, No.3, pp. 259-278.
- Kapila, P., Hendrickson, C. (2012). Exchange Rate Risk Management in International Construction Ventures, pp. 186-191.
- Kechemba, P. (2012). The Factors that Influence Movement in Exchange Rates in Tanzania, Unpublished Masters Dissertation, the Open University of Tanzania,pp.1-88.
- Kothari, C. (2004). Research Methodology, New Age International Publishers, India.
- Krugman, M. (1979). The First Generation Fixed Exchange Rate Models, pp. 36-67.
- Kwame, A., Goh Li, W. (1998). Currency risk and office investment in Asia Pacific Real Estate Finance Vol: 15, Iss: 3, p. 67-85.
- Levy, H., Lim, K. (1994). “Forward Exchange Bias, Hedging and the Gains from Macdonald, R. (2006). Exchange Rate Economics: Theories and Evidence, University of Glasgow, pp. 300-360.
- Mercer, N. (2011). Responsible Investment’s Second Decade: Summary Report of the State of ESG Integration, Policy, and Reporting, pp. 12-39.

- Michael, P. (2007). Exchange Rate Risk Measurement and Management: Issues and Approaches, International Monetary Fund Journal, pp. 24-37.
- Mir, H., Jalae, S. (2014). Study of the Effect of Currency Shocks on Stock Returns in Iran Stock Exchange, Applied Mathematics in Engineering, Management and Technology 2 (6) 2014:143-152.
- Mussa, M. (2011). The Theory of Exchange Rate Determination, pp. 15-28.
- Norgren, C. (2010). the Causes of the Global Financial Crisis and their Implications for Supreme Audit Institutions, Swedish National Audit Office, Stockholm pp. 2-30.
- Petersuch, M. (2013). The Influence of Exchange Rate Fluctuation on the Revaluation of Currency, pp. 23-35.
- Pojarliev, M., Levich, R. & Kasarda, R. (2014). The Impact of Currency Exposure on Institutional Investment Performance: The Good, the Bad and the Ugly, NY 10166, USA, pp. 1-51.
- Priewe, J. (2014). An Asset Price Theory of Exchange Rates, Berlin University of Applied Sciences.
- Ranjit, K. (1999). Research Methodology, A step-by-step guide for beginners, Sage Publishers Limited, London.
- Tokunbo, S., Lloyd, A. (2009). Foreign Direct Investment and Exchange Rate Volatility in Nigeria, International Journal of Applied Econometrics and Quantitative Studies V6-2(2009).
- Twarowska, K., Kąkol, M. (2014). Analysis of Factors affecting Fluctuations in the Exchange Rate of Polish Zloty against Euro, pp. 7-23.
- White Paper (2010). Managing Foreign Exchange Risk, Canada, pp. 1-8.

Zainal, S. (2004). Managing Foreign Exchange Risk, Investment Management and Financial Innovations.

APPENDICES

APPENDIX 1: Questionnaire to Assess the Impact of Exchange Rate Fluctuation on the Investment of Foreign Reserves In Tanzania

Dear Respondent,

May you assist in responding to this enquiry that is a part of the study for pursuing Master of Business Administration. The information you provide will basically assist in the description of the impact of exchange rate fluctuation on the investment of foreign reserves in Tanzania. Due to research ethics your identity will not be disclosed.

Date.....

This enquiry consists of four sections. There are 8 Questions altogether; for each question may you provide the appropriate data for assisting in the assessment of the impact of exchange rate fluctuations on investment of foreign reserves in Tanzania.

Questions

Section 1: Calculating the average exchange rates for each year from 2001 to 2006

1. From the year 2001 to 2006, what were the daily exchange rates for Tanzanian shilling (TZS) against United States Dollar (USD)?
2. From the year 2001 to 2006, what were the daily exchange rates for Tanzanian shilling (TZS) against Great Britain Pound (GBP)?
3. From the year 2001 to 2006, what were the daily exchange rates for Tanzanian shilling (TZS) against European Union Currency (EURO)?

Section 2: Determine the equivalent of each foreign reserve for each year in TZS.

4. How do exchange rate fluctuations of TZS against foreign currencies affect value of foreign currencies when it comes to purchasing goods or services in USD, EUR or GBP foreign currencies?

Section 3: Assess the revaluation of foreign currencies

5. How do you calculate revaluation (gain or loss) of foreign currencies?

6. How did the exchange rate fluctuation affect the revaluation of foreign currencies each year from 2001 to 2006?

Section 4: Recommend proper techniques for managing risks of exchange rate fluctuations in Tanzania

7. Mention the techniques for managing risks of exchange rates fluctuations in Tanzania

8. What are the pros and cons for the listed techniques in managing exchange rate fluctuations?

End of interviews

Appendix 2: USD / TZS Exchange Rates from the Year 2001 to 2006

Exchange Date	Spot Buying	Mean	Spot Selling
02-Jan-2001	79,524.72	80,328.00	81,131.28
03-Jan-2001	79,522.74	80,326.00	81,129.26
04-Jan-2001	79,523.73	80,327.00	81,130.27
05-Jan-2001	79,524.72	80,328.00	81,131.28
08-Jan-2001	79,534.62	80,338.00	81,141.38
09-Jan-2001	79,537.59	80,341.00	81,144.41
10-Jan-2001	79,546.50	80,350.00	81,153.50
11-Jan-2001	79,555.41	80,359.00	81,162.59
15-Jan-2001	79,558.38	80,362.00	81,165.62
16-Jan-2001	79,597.98	80,402.00	81,206.02
17-Jan-2001	79,695.00	80,500.00	81,305.00
18-Jan-2001	79,744.50	80,550.00	81,355.50
19-Jan-2001	79,847.46	80,654.00	81,460.54
22-Jan-2001	79,842.51	80,649.00	81,455.49
23-Jan-2001	79,842.51	80,649.00	81,455.49
24-Jan-2001	79,842.51	80,649.00	81,455.49
25-Jan-2001	79,893.00	80,700.00	81,507.00
26-Jan-2001	79,893.00	80,700.00	81,507.00
29-Jan-2001	80,027.64	80,836.00	81,644.36
30-Jan-2001	79,524.72	80,328.00	81,131.28
31-Jan-2001	80,140.50	80,950.00	81,759.50
01-Feb-2001	80,289.00	81,100.00	81,911.00
02-Feb-2001	80,388.00	81,200.00	82,012.00
05-Feb-2001	80,525.61	81,339.00	82,152.39
06-Feb-2001	80,573.13	81,387.00	82,200.87
07-Feb-2001	80,582.04	81,396.00	82,209.96
08-Feb-2001	80,586.00	81,400.00	82,214.00
09-Feb-2001	80,595.90	81,410.00	82,224.10
12-Feb-2001	80,595.90	81,410.00	82,224.10
13-Feb-2001	80,613.72	81,428.00	82,242.28
14-Feb-2001	80,622.63	81,437.00	82,251.37
15-Feb-2001	80,740.44	81,556.00	82,371.56
16-Feb-2001	80,709.75	81,525.00	82,340.25
19-Feb-2001	80,685.00	81,500.00	82,315.00
20-Feb-2001	80,782.02	81,598.00	82,413.98
21-Feb-2001	80,878.05	81,695.00	82,511.95
22-Feb-2001	80,987.94	81,806.00	82,624.06
23-Feb-2001	81,094.86	81,914.00	82,733.14
26-Feb-2001	81,094.86	81,914.00	82,733.14
27-Feb-2001	81,321.57	82,143.00	82,964.43
28-Feb-2001	81,378.00	82,200.00	83,022.00
01-Mar-2001	81,382.95	82,205.00	83,027.05
02-Mar-2001	81,731.43	82,557.00	83,382.57
05-Mar-2001	81,724.50	82,550.00	83,375.50
07-Mar-2001	81,724.50	82,550.00	83,375.50
08-Mar-2001	81,800.73	82,627.00	83,453.27

Exchange Date	Spot Buying	Mean	Spot Selling
09-Mar-2001	81,876.96	82,704.00	83,531.04
12-Mar-2001	81,937.35	82,765.00	83,592.65
13-Mar-2001	81,974.97	82,803.00	83,631.03
14-Mar-2001	82,082.88	82,912.00	83,741.12
15-Mar-2001	82,139.31	82,969.00	83,798.69
16-Mar-2001	82,241.28	83,072.00	83,902.72
19-Mar-2001	82,352.16	83,184.00	84,015.84
20-Mar-2001	82,451.16	83,284.00	84,116.84
21-Mar-2001	82,615.50	83,450.00	84,284.50
22-Mar-2001	82,696.68	83,532.00	84,367.32
23-Mar-2001	83,037.24	83,876.00	84,714.76
26-Mar-2001	83,489.67	84,333.00	85,176.33
27-Mar-2001	84,311.37	85,163.00	86,014.63
28-Mar-2001	84,447.99	85,301.00	86,154.01
29-Mar-2001	84,756.87	85,613.00	86,469.13
30-Mar-2001	85,145.94	86,006.00	86,866.06
02-Apr-2001	85,713.21	86,579.00	87,444.79
03-Apr-2001	86,238.90	87,110.00	87,981.10
04-Apr-2001	86,724.00	87,600.00	88,476.00
05-Apr-2001	87,120.00	88,000.00	88,880.00
06-Apr-2001	87,138.81	88,019.00	88,899.19
09-Apr-2001	87,615.99	88,501.00	89,386.01
10-Apr-2001	87,775.38	88,662.00	89,548.62
11-Apr-2001	87,819.93	88,707.00	89,594.07
12-Apr-2001	87,855.57	88,743.00	89,630.43
17-Apr-2001	87,905.07	88,793.00	89,680.93
18-Apr-2001	87,912.99	88,801.00	89,689.01
19-Apr-2001	87,918.93	88,807.00	89,695.07
20-Apr-2001	87,948.63	88,837.00	89,725.37
23-Apr-2001	88,037.73	88,927.00	89,816.27
24-Apr-2001	88,058.52	88,948.00	89,837.48
25-Apr-2001	88,096.14	88,986.00	89,875.86
27-Apr-2001	88,101.09	88,991.00	89,880.91
30-Apr-2001	88,059.51	88,949.00	89,838.49
02-May-2001	88,026.84	88,916.00	89,805.16
03-May-2001	87,983.28	88,872.00	89,760.72
04-May-2001	87,941.70	88,830.00	89,718.30
07-May-2001	87,899.13	88,787.00	89,674.87
08-May-2001	87,888.24	88,776.00	89,663.76
09-May-2001	87,887.25	88,775.00	89,662.75
10-May-2001	87,885.27	88,773.00	89,660.73
11-May-2001	87,934.77	88,823.00	89,711.23
14-May-2001	87,931.80	88,820.00	89,708.20
15-May-2001	87,956.55	88,845.00	89,733.45
16-May-2001	87,956.55	88,845.00	89,733.45
17-May-2001	87,991.20	88,880.00	89,768.80
18-May-2001	87,995.16	88,884.00	89,772.84
21-May-2001	87,996.15	88,885.00	89,773.85

Exchange Date	Spot Buying	Mean	Spot Selling
22-May-2001	87,998.13	88,887.00	89,775.87
23-May-2001	88,001.10	88,890.00	89,778.90
24-May-2001	88,006.05	88,895.00	89,783.95
25-May-2001	88,024.86	88,914.00	89,803.14
28-May-2001	88,025.85	88,915.00	89,804.15
29-May-2001	88,026.84	88,916.00	89,805.16
30-May-2001	88,030.80	88,920.00	89,809.20
31-May-2001	88,030.80	88,920.00	89,809.20
01-Jun-2001	88,035.75	88,925.00	89,814.25
04-Jun-2001	88,035.75	88,925.00	89,814.25
06-Jun-2001	88,035.75	88,925.00	89,814.25
07-Jun-2001	88,038.72	88,928.00	89,817.28
08-Jun-2001	88,038.72	88,928.00	89,817.28
11-Jun-2001	88,040.70	88,930.00	89,819.30
12-Jun-2001	88,045.65	88,935.00	89,824.35
13-Jun-2001	88,051.59	88,941.00	89,830.41
14-Jun-2001	88,044.66	88,934.00	89,823.34
15-Jun-2001	88,045.65	88,935.00	89,824.35
18-Jun-2001	88,045.65	88,935.00	89,824.35
19-Jun-2001	88,020.90	88,910.00	89,799.10
20-Jun-2001	88,016.94	88,906.00	89,795.06
21-Jun-2001	88,014.96	88,904.00	89,793.04
22-Jun-2001	88,012.98	88,902.00	89,791.02
25-Jun-2001	88,011.99	88,901.00	89,790.01
26-Jun-2001	88,011.00	88,900.00	89,789.00
27-Jun-2001	88,011.00	88,900.00	89,789.00
28-Jun-2001	87,987.24	88,876.00	89,764.76
29-Jun-2001	87,914.97	88,803.00	89,691.03
02-Jul-2001	87,888.24	88,776.00	89,663.76
03-Jul-2001	87,845.67	88,733.00	89,620.33
04-Jul-2001	87,802.11	88,689.00	89,575.89
05-Jul-2001	87,788.25	88,675.00	89,561.75
09-Jul-2001	87,570.45	88,455.00	89,339.55
10-Jul-2001	87,582.33	88,467.00	89,351.67
11-Jul-2001	87,582.33	88,467.00	89,351.67
12-Jul-2001	87,614.01	88,499.00	89,383.99
13-Jul-2001	87,733.80	88,620.00	89,506.20
16-Jul-2001	87,912.00	88,800.00	89,688.00
17-Jul-2001	87,943.68	88,832.00	89,720.32
18-Jul-2001	88,005.06	88,894.00	89,782.94
19-Jul-2001	88,034.76	88,924.00	89,813.24
20-Jul-2001	88,101.09	88,991.00	89,880.91
23-Jul-2001	88,146.63	89,037.00	89,927.37
24-Jul-2001	88,234.74	89,126.00	90,017.26
25-Jul-2001	88,281.27	89,173.00	90,064.73
26-Jul-2001	88,348.59	89,241.00	90,133.41
30-Jul-2001	88,407.00	89,300.00	90,193.00
27-Jul-2001	88,401.06	89,294.00	90,186.94

Exchange Date	Spot Buying	Mean	Spot Selling
31-Jul-2001	88,364.43	89,257.00	90,149.57
01-Aug-2001	88,160.49	89,051.00	89,941.51
02-Aug-2001	88,110.00	89,000.00	89,890.00
03-Aug-2001	88,110.00	89,000.00	89,890.00
06-Aug-2001	88,110.00	89,000.00	89,890.00
07-Aug-2001	88,110.00	89,000.00	89,890.00
09-Aug-2001	88,110.00	89,000.00	89,890.00
10-Aug-2001	88,122.87	89,013.00	89,903.13
13-Aug-2001	88,134.75	89,025.00	89,915.25
14-Aug-2001	88,155.54	89,046.00	89,936.46
15-Aug-2001	88,159.50	89,050.00	89,940.50
16-Aug-2001	88,161.48	89,052.00	89,942.52
17-Aug-2001	88,194.15	89,085.00	89,975.85
20-Aug-2001	88,194.15	89,085.00	89,975.85
21-Aug-2001	88,209.00	89,100.00	89,991.00
22-Aug-2001	88,209.00	89,100.00	89,991.00
23-Aug-2001	88,226.82	89,118.00	90,009.18
24-Aug-2001	88,255.53	89,147.00	90,038.47
27-Aug-2001	88,267.41	89,159.00	90,050.59
28-Aug-2001	88,286.22	89,178.00	90,069.78
29-Aug-2001	88,308.00	89,200.00	90,092.00
30-Aug-2001	88,313.94	89,206.00	90,098.06
31-Aug-2001	88,354.53	89,247.00	90,139.47
03-Sep-2001	88,354.53	89,247.00	90,139.47
04-Sep-2001	88,354.53	89,247.00	90,139.47
05-Sep-2001	88,357.50	89,250.00	90,142.50
06-Sep-2001	88,363.44	89,256.00	90,148.56
07-Sep-2001	88,364.43	89,257.00	90,149.57
10-Sep-2001	88,367.40	89,260.00	90,152.60
11-Sep-2001	88,367.40	89,260.00	90,152.60
12-Sep-2001	88,359.48	89,252.00	90,144.52
13-Sep-2001	88,359.48	89,252.00	90,144.52
14-Sep-2001	88,357.50	89,250.00	90,142.50
17-Sep-2001	88,275.33	89,167.00	90,058.67
18-Sep-2001	88,275.33	89,167.00	90,058.67
19-Sep-2001	88,258.50	89,150.00	90,041.50
20-Sep-2001	88,254.54	89,146.00	90,037.46
21-Sep-2001	88,250.58	89,142.00	90,033.42
24-Sep-2001	88,249.59	89,141.00	90,032.41
25-Sep-2001	88,249.59	89,141.00	90,032.41
26-Sep-2001	88,253.55	89,145.00	90,036.45
27-Sep-2001	88,261.47	89,153.00	90,044.53
28-Sep-2001	88,110.00	89,000.00	89,890.00
01-Oct-2001	88,209.99	89,101.00	89,992.01
02-Oct-2001	88,209.00	89,100.00	89,991.00
04-Oct-2001	88,220.88	89,112.00	90,003.12
05-Oct-2001	88,277.31	89,169.00	90,060.69
08-Oct-2001	88,372.35	89,265.00	90,157.65

Exchange Date	Spot Buying	Mean	Spot Selling
09-Oct-2001	88,471.35	89,365.00	90,258.65
10-Oct-2001	88,515.90	89,410.00	90,304.10
11-Oct-2001	88,569.36	89,464.00	90,358.64
12-Oct-2001	88,614.90	89,510.00	90,405.10
15-Oct-2001	88,695.09	89,591.00	90,486.91
16-Oct-2001	88,835.67	89,733.00	90,630.33
17-Oct-2001	88,977.24	89,876.00	90,774.76
18-Oct-2001	89,006.94	89,906.00	90,805.06
19-Oct-2001	89,016.84	89,916.00	90,815.16
22-Oct-2001	89,100.00	90,000.00	90,900.00
23-Oct-2001	89,149.50	90,050.00	90,950.50
24-Oct-2001	89,199.00	90,100.00	91,001.00
25-Oct-2001	89,248.50	90,150.00	91,051.50
26-Oct-2001	89,298.00	90,200.00	91,102.00
29-Oct-2001	89,335.62	90,238.00	91,140.38
30-Oct-2001	89,397.00	90,300.00	91,203.00
31-Oct-2001	89,497.98	90,402.00	91,306.02
01-Nov-2001	89,545.50	90,450.00	91,354.50
02-Nov-2001	89,595.00	90,500.00	91,405.00
05-Nov-2001	89,676.18	90,582.00	91,487.82
06-Nov-2001	89,745.48	90,652.00	91,558.52
08-Nov-2001	89,951.40	90,860.00	91,768.60
07-Nov-2001	89,842.50	90,750.00	91,657.50
09-Nov-2001	90,090.00	91,000.00	91,910.00
12-Nov-2001	90,238.50	91,150.00	92,061.50
13-Nov-2001	90,238.50	91,150.00	92,061.50
14-Nov-2001	90,510.75	91,425.00	92,339.25
15-Nov-2001	90,586.98	91,502.00	92,417.02
16-Nov-2001	90,636.48	91,552.00	92,467.52
19-Nov-2001	90,783.00	91,700.00	92,617.00
20-Nov-2001	90,783.00	91,700.00	92,617.00
21-Nov-2001	90,790.92	91,708.00	92,625.08
22-Nov-2001	90,793.89	91,711.00	92,628.11
23-Nov-2001	90,801.81	91,719.00	92,636.19
26-Nov-2001	90,813.69	91,731.00	92,648.31
27-Nov-2001	90,834.48	91,752.00	92,669.52
28-Nov-2001	90,862.20	91,780.00	92,697.80
29-Nov-2001	90,904.77	91,823.00	92,741.23
30-Nov-2001	90,935.46	91,854.00	92,772.54
03-Dec-2001	90,855.27	91,773.00	92,690.73
04-Dec-2001	90,799.83	91,717.00	92,634.17
05-Dec-2001	90,783.99	91,701.00	92,618.01
06-Dec-2001	90,784.98	91,702.00	92,619.02
07-Dec-2001	90,792.90	91,710.00	92,627.10
10-Dec-2001	90,793.89	91,711.00	92,628.11
11-Dec-2001	90,795.87	91,713.00	92,630.13
12-Dec-2001	90,785.97	91,703.00	92,620.03
13-Dec-2001	90,785.97	91,703.00	92,620.03

Exchange Date	Spot Buying	Mean	Spot Selling
14-Dec-2001	90,761.22	91,678.00	92,594.78
19-Dec-2001	90,739.44	91,656.00	92,572.56
20-Dec-2001	90,739.44	91,656.00	92,572.56
21-Dec-2001	90,736.47	91,653.00	92,569.53
24-Dec-2001	90,714.69	91,631.00	92,547.31
27-Dec-2001	90,713.70	91,630.00	92,546.30
28-Dec-2001	90,713.70	91,630.00	92,546.30
31-Dec-2001	90,713.70	91,630.00	92,546.30
02-Jan-2002	90,687.96	91,604.00	92,520.04
03-Jan-2002	90,693.90	91,610.00	92,526.10
04-Jan-2002	90,702.81	91,619.00	92,535.19
07-Jan-2002	90,707.76	91,624.00	92,540.24
08-Jan-2002	90,720.63	91,637.00	92,553.37
09-Jan-2002	90,727.56	91,644.00	92,560.44
10-Jan-2002	90,778.05	91,695.00	92,611.95
11-Jan-2002	90,807.75	91,725.00	92,642.25
14-Jan-2002	90,807.75	91,725.00	92,642.25
15-Jan-2002	90,882.00	91,800.00	92,718.00
16-Jan-2002	91,012.68	91,932.00	92,851.32
17-Jan-2002	91,234.44	92,156.00	93,077.56
18-Jan-2002	91,624.50	92,550.00	93,475.50
21-Jan-2002	91,674.00	92,600.00	93,526.00
22-Jan-2002	92,169.00	93,100.00	94,031.00
23-Jan-2002	92,169.00	93,100.00	94,031.00
24-Jan-2002	92,664.00	93,600.00	94,536.00
25-Jan-2002	93,636.18	94,582.00	95,527.82
28-Jan-2002	92,532.33	93,467.00	94,401.67
29-Jan-2002	92,535.30	93,470.00	94,404.70
30-Jan-2002	92,565.00	93,500.00	94,435.00
31-Jan-2002	92,664.00	93,600.00	94,536.00
01-Feb-2002	92,664.00	93,600.00	94,536.00
04-Feb-2002	92,723.40	93,660.00	94,596.60
05-Feb-2002	92,793.69	93,731.00	94,668.31
06-Feb-2002	93,357.00	94,300.00	95,243.00
07-Feb-2002	93,654.00	94,600.00	95,546.00
08-Feb-2002	93,654.00	94,600.00	95,546.00
11-Feb-2002	93,847.05	94,795.00	95,742.95
12-Feb-2002	94,056.93	95,007.00	95,957.07
13-Feb-2002	94,329.18	95,282.00	96,234.82
14-Feb-2002	94,446.00	95,400.00	96,354.00
15-Feb-2002	94,782.60	95,740.00	96,697.40
18-Feb-2002	95,214.24	96,176.00	97,137.76
19-Feb-2002	95,350.86	96,314.00	97,277.14
20-Feb-2002	96,030.00	97,000.00	97,970.00
21-Feb-2002	96,030.00	97,000.00	97,970.00
25-Feb-2002	95,841.90	96,810.00	97,778.10
26-Feb-2002	96,077.52	97,048.00	98,018.48
27-Feb-2002	96,079.50	97,050.00	98,020.50

Exchange Date	Spot Buying	Mean	Spot Selling
28-Feb-2002	96,079.50	97,050.00	98,020.50
01-Mar-2002	96,079.50	97,050.00	98,020.50
05-Mar-2002	96,063.66	97,034.00	98,004.34
04-Mar-2002	96,076.53	97,047.00	98,017.47
06-Mar-2002	95,844.87	96,813.00	97,781.13
07-Mar-2002	95,436.00	96,400.00	97,364.00
08-Mar-2002	94,842.00	95,800.00	96,758.00
11-Mar-2002	94,842.00	95,800.00	96,758.00
12-Mar-2002	95,267.70	96,230.00	97,192.30
13-Mar-2002	95,497.38	96,462.00	97,426.62
14-Mar-2002	95,634.00	96,600.00	97,566.00
15-Mar-2002	95,688.45	96,655.00	97,621.55
18-Mar-2002	95,712.21	96,679.00	97,645.79
19-Mar-2002	95,731.02	96,698.00	97,664.98
20-Mar-2002	95,762.70	96,730.00	97,697.30
21-Mar-2002	95,927.04	96,896.00	97,864.96
22-Mar-2002	96,133.95	97,105.00	98,076.05
25-Mar-2002	96,482.43	97,457.00	98,431.57
26-Mar-2002	96,686.37	97,663.00	98,639.63
27-Mar-2002	96,897.24	97,876.00	98,854.76
28-Mar-2002	97,146.72	98,128.00	99,109.28
02-Apr-2002	97,154.64	98,136.00	99,117.36
03-Apr-2002	97,192.26	98,174.00	99,155.74
04-Apr-2002	97,192.26	98,174.00	99,155.74
05-Apr-2002	97,202.16	98,184.00	99,165.84
08-Apr-2002	97,021.98	98,002.00	98,982.02
09-Apr-2002	96,961.59	97,941.00	98,920.41
10-Apr-2002	96,939.81	97,919.00	98,898.19
11-Apr-2002	97,020.00	98,000.00	98,980.00
12-Apr-2002	97,022.97	98,003.00	98,983.03
15-Apr-2002	97,040.79	98,021.00	99,001.21
16-Apr-2002	97,044.75	98,025.00	99,005.25
17-Apr-2002	97,090.29	98,071.00	99,051.71
18-Apr-2002	97,119.00	98,100.00	99,081.00
19-Apr-2002	97,135.83	98,117.00	99,098.17
22-Apr-2002	97,147.71	98,129.00	99,110.29
23-Apr-2002	97,112.07	98,093.00	99,073.93
24-Apr-2002	96,721.02	97,698.00	98,674.98
25-Apr-2002	96,030.00	97,000.00	97,970.00
29-Apr-2002	95,654.79	96,621.00	97,587.21
30-Apr-2002	95,673.60	96,640.00	97,606.40
02-May-2002	95,633.01	96,599.00	97,564.99
03-May-2002	95,746.86	96,714.00	97,681.14
06-May-2002	96,039.90	97,010.00	97,980.10
07-May-2002	96,366.60	97,340.00	98,313.40
08-May-2002	96,536.88	97,512.00	98,487.12
09-May-2002	96,929.91	97,909.00	98,888.09
10-May-2002	97,573.41	98,559.00	99,544.59

Exchange Date	Spot Buying	Mean	Spot Selling
13-May-2002	97,827.84	98,816.00	99,804.16
14-May-2002	98,309.97	99,303.00	100,296.03
15-May-2002	98,667.36	99,664.00	100,660.64
16-May-2002	98,703.00	99,700.00	100,697.00
17-May-2002	98,879.22	99,878.00	100,876.78
20-May-2002	99,014.85	100,015.00	101,015.15
21-May-2002	98,950.50	99,950.00	100,949.50
22-May-2002	98,849.52	99,848.00	100,846.48
23-May-2002	98,272.35	99,265.00	100,257.65
24-May-2002	97,298.19	98,281.00	99,263.81
27-May-2002	97,020.00	98,000.00	98,980.00
28-May-2002	96,648.75	97,625.00	98,601.25
29-May-2002	96,021.09	96,991.00	97,960.91
30-May-2002	95,535.00	96,500.00	97,465.00
31-May-2002	95,000.40	95,960.00	96,919.60
03-Jun-2002	94,714.29	95,671.00	96,627.71
04-Jun-2002	94,669.74	95,626.00	96,582.26
05-Jun-2002	95,262.75	96,225.00	97,187.25
06-Jun-2002	95,164.74	96,126.00	97,087.26
07-Jun-2002	95,718.15	96,685.00	97,651.85
10-Jun-2002	96,030.00	97,000.00	97,970.00
11-Jun-2002	96,359.67	97,333.00	98,306.33
12-Jun-2002	96,427.98	97,402.00	98,376.02
13-Jun-2002	96,091.38	97,062.00	98,032.62
14-Jun-2002	96,129.00	97,100.00	98,071.00
17-Jun-2002	96,079.50	97,050.00	98,020.50
18-Jun-2002	95,607.27	96,573.00	97,538.73
19-Jun-2002	94,792.50	95,750.00	96,707.50
20-Jun-2002	94,156.92	95,108.00	96,059.08
21-Jun-2002	93,392.64	94,336.00	95,279.36
24-Jun-2002	93,252.06	94,194.00	95,135.94
25-Jun-2002	92,814.48	93,752.00	94,689.52
26-Jun-2002	93,323.34	94,266.00	95,208.66
27-Jun-2002	93,684.69	94,631.00	95,577.31
28-Jun-2002	93,746.07	94,693.00	95,639.93
01-Jul-2002	93,743.10	94,690.00	95,636.90
02-Jul-2002	93,657.96	94,604.00	95,550.04
03-Jul-2002	93,458.97	94,403.00	95,347.03
04-Jul-2002	92,932.29	93,871.00	94,809.71
05-Jul-2002	92,671.92	93,608.00	94,544.08
08-Jul-2002	92,549.16	93,484.00	94,418.84
09-Jul-2002	92,656.08	93,592.00	94,527.92
10-Jul-2002	92,735.28	93,672.00	94,608.72
11-Jul-2002	93,038.22	93,978.00	94,917.78
12-Jul-2002	93,491.64	94,436.00	95,380.36
15-Jul-2002	94,025.25	94,975.00	95,924.75
16-Jul-2002	94,343.04	95,296.00	96,248.96
17-Jul-2002	94,504.41	95,459.00	96,413.59

Exchange Date	Spot Buying	Mean	Spot Selling
18-Jul-2002	94,541.04	95,496.00	96,450.96
19-Jul-2002	94,571.73	95,527.00	96,482.27
22-Jul-2002	94,587.57	95,543.00	96,498.43
23-Jul-2002	94,591.53	95,547.00	96,502.47
24-Jul-2002	94,575.69	95,531.00	96,486.31
25-Jul-2002	94,545.00	95,500.00	96,455.00
26-Jul-2002	94,545.00	95,500.00	96,455.00
29-Jul-2002	94,441.05	95,395.00	96,348.95
30-Jul-2002	94,196.52	95,148.00	96,099.48
31-Jul-2002	94,230.18	95,182.00	96,133.82
01-Aug-2002	94,423.23	95,377.00	96,330.77
02-Aug-2002	94,676.67	95,633.00	96,589.33
05-Aug-2002	95,036.04	95,996.00	96,955.96
06-Aug-2002	95,149.89	96,111.00	97,072.11
07-Aug-2002	95,383.53	96,347.00	97,310.47
09-Aug-2002	95,680.53	96,647.00	97,613.47
12-Aug-2002	95,680.53	96,647.00	97,613.47
13-Aug-2002	96,386.40	97,360.00	98,333.60
14-Aug-2002	96,464.61	97,439.00	98,413.39
15-Aug-2002	96,537.87	97,513.00	98,488.13
16-Aug-2002	96,599.25	97,575.00	98,550.75
19-Aug-2002	96,574.50	97,550.00	98,525.50
20-Aug-2002	96,591.33	97,567.00	98,542.67
21-Aug-2002	96,562.62	97,538.00	98,513.38
22-Aug-2002	96,036.93	97,007.00	97,977.07
23-Aug-2002	95,671.62	96,638.00	97,604.38
26-Aug-2002	95,411.25	96,375.00	97,338.75
27-Aug-2002	95,446.89	96,411.00	97,375.11
28-Aug-2002	95,387.49	96,351.00	97,314.51
29-Aug-2002	95,211.27	96,173.00	97,134.73
30-Aug-2002	95,564.70	96,530.00	97,495.30
02-Sep-2002	95,633.01	96,599.00	97,564.99
03-Sep-2002	95,850.81	96,819.00	97,787.19
04-Sep-2002	96,030.00	97,000.00	97,970.00
05-Sep-2002	96,236.91	97,209.00	98,181.09
06-Sep-2002	96,482.43	97,457.00	98,431.57
09-Sep-2002	96,625.98	97,602.00	98,578.02
10-Sep-2002	96,627.96	97,604.00	98,580.04
11-Sep-2002	96,619.05	97,595.00	98,570.95
12-Sep-2002	96,338.88	97,312.00	98,285.12
17-Sep-2002	96,331.95	97,305.00	98,278.05
16-Sep-2002	96,240.87	97,213.00	98,185.13
18-Sep-2002	96,461.64	97,436.00	98,410.36
19-Sep-2002	96,578.46	97,554.00	98,529.54
20-Sep-2002	96,789.33	97,767.00	98,744.67
23-Sep-2002	96,781.41	97,759.00	98,736.59
24-Sep-2002	96,766.56	97,744.00	98,721.44
25-Sep-2002	96,618.06	97,594.00	98,569.94

Exchange Date	Spot Buying	Mean	Spot Selling
26-Sep-2002	96,566.58	97,542.00	98,517.42
27-Sep-2002	96,346.80	97,320.00	98,293.20
30-Sep-2002	95,975.55	96,945.00	97,914.45
01-Oct-2002	95,990.40	96,960.00	97,929.60
02-Oct-2002	96,212.16	97,184.00	98,155.84
03-Oct-2002	96,554.70	97,530.00	98,505.30
04-Oct-2002	96,710.13	97,687.00	98,663.87
07-Oct-2002	96,643.80	97,620.00	98,596.20
08-Oct-2002	96,655.68	97,632.00	98,608.32
09-Oct-2002	96,631.92	97,608.00	98,584.08
10-Oct-2002	96,625.98	97,602.00	98,578.02
11-Oct-2002	96,625.98	97,602.00	98,578.02
15-Oct-2002	96,540.84	97,516.00	98,491.16
16-Oct-2002	96,662.61	97,639.00	98,615.39
17-Oct-2002	96,747.75	97,725.00	98,702.25
18-Oct-2002	96,857.64	97,836.00	98,814.36
21-Oct-2002	97,003.17	97,983.00	98,962.83
22-Oct-2002	97,062.57	98,043.00	99,023.43
23-Oct-2002	97,138.80	98,120.00	99,101.20
24-Oct-2002	97,004.16	97,984.00	98,963.84
25-Oct-2002	96,913.08	97,892.00	98,870.92
28-Oct-2002	97,049.70	98,030.00	99,010.30
29-Oct-2002	97,110.09	98,091.00	99,071.91
30-Oct-2002	97,178.40	98,160.00	99,141.60
31-Oct-2002	97,068.51	98,049.00	99,029.49
04-Nov-2002	97,020.99	98,001.00	98,981.01
01-Nov-2002	96,933.87	97,913.00	98,892.13
05-Nov-2002	97,137.81	98,119.00	99,100.19
06-Nov-2002	97,287.30	98,270.00	99,252.70
07-Nov-2002	97,429.86	98,414.00	99,398.14
08-Nov-2002	97,472.43	98,457.00	99,441.57
11-Nov-2002	97,589.25	98,575.00	99,560.75
12-Nov-2002	97,720.92	98,708.00	99,695.08
13-Nov-2002	97,735.77	98,723.00	99,710.23
14-Nov-2002	97,807.05	98,795.00	99,782.95
15-Nov-2002	97,855.56	98,844.00	99,832.44
18-Nov-2002	97,846.65	98,835.00	99,823.35
19-Nov-2002	97,856.55	98,845.00	99,833.45
20-Nov-2002	97,849.62	98,838.00	99,826.38
21-Nov-2002	97,808.04	98,796.00	99,783.96
22-Nov-2002	97,772.40	98,760.00	99,747.60
25-Nov-2002	97,710.03	98,697.00	99,683.97
26-Nov-2002	97,568.46	98,554.00	99,539.54
27-Nov-2002	97,569.45	98,555.00	99,540.55
28-Nov-2002	97,535.79	98,521.00	99,506.21
29-Nov-2002	97,469.46	98,454.00	99,438.54
02-Dec-2002	97,437.78	98,422.00	99,406.22
03-Dec-2002	97,548.66	98,534.00	99,519.34

Exchange Date	Spot Buying	Mean	Spot Selling
04-Dec-2002	97,651.62	98,638.00	99,624.38
10-Dec-2002	97,332.84	98,316.00	99,299.16
11-Dec-2002	97,104.15	98,085.00	99,065.85
12-Dec-2002	97,106.13	98,087.00	99,067.87
13-Dec-2002	97,038.81	98,019.00	98,999.19
16-Dec-2002	96,970.50	97,950.00	98,929.50
17-Dec-2002	96,665.58	97,642.00	98,618.42
18-Dec-2002	96,826.95	97,805.00	98,783.05
19-Dec-2002	96,647.76	97,624.00	98,600.24
20-Dec-2002	96,678.45	97,655.00	98,631.55
23-Dec-2002	96,529.95	97,505.00	98,480.05
24-Dec-2002	96,503.22	97,478.00	98,452.78
27-Dec-2002	96,292.35	97,265.00	98,237.65
30-Dec-2002	95,897.34	96,866.00	97,834.66
31-Dec-2002	96,653.70	97,630.00	98,606.30
02-Jan-2003	96,688.35	97,665.00	98,641.65
03-Jan-2003	96,995.25	97,975.00	98,954.75
06-Jan-2003	97,020.00	98,000.00	98,980.00
07-Jan-2003	97,270.47	98,253.00	99,235.53
08-Jan-2003	97,497.18	98,482.00	99,466.82
09-Jan-2003	97,684.29	98,671.00	99,657.71
10-Jan-2003	97,906.05	98,895.00	99,883.95
13-Jan-2003	97,991.19	98,981.00	99,970.81
14-Jan-2003	98,213.94	99,206.00	100,198.06
15-Jan-2003	98,630.73	99,627.00	100,623.27
16-Jan-2003	98,796.06	99,794.00	100,791.94
17-Jan-2003	98,804.97	99,803.00	100,801.03
20-Jan-2003	98,840.61	99,839.00	100,837.39
21-Jan-2003	99,054.45	100,055.00	101,055.55
22-Jan-2003	99,145.53	100,147.00	101,148.47
23-Jan-2003	99,789.03	100,797.00	101,804.97
24-Jan-2003	99,990.00	101,000.00	102,010.00
27-Jan-2003	100,021.68	101,032.00	102,042.32
28-Jan-2003	100,119.69	101,131.00	102,142.31
29-Jan-2003	100,467.18	101,482.00	102,496.82
30-Jan-2003	100,836.45	101,855.00	102,873.55
31-Jan-2003	101,015.64	102,036.00	103,056.36
03-Feb-2003	100,801.80	101,820.00	102,838.20
04-Feb-2003	100,700.82	101,718.00	102,735.18
06-Feb-2003	100,485.00	101,500.00	102,515.00
07-Feb-2003	100,584.99	101,601.00	102,617.01
10-Feb-2003	100,527.57	101,543.00	102,558.43
11-Feb-2003	100,514.70	101,530.00	102,545.30
13-Feb-2003	100,441.44	101,456.00	102,470.56
14-Feb-2003	100,666.17	101,683.00	102,699.83
17-Feb-2003	100,777.05	101,795.00	102,812.95
18-Feb-2003	100,846.35	101,865.00	102,883.65
19-Feb-2003	101,001.78	102,022.00	103,042.22

Exchange Date	Spot Buying	Mean	Spot Selling
20-Feb-2003	101,130.48	102,152.00	103,173.52
21-Feb-2003	101,275.02	102,298.00	103,320.98
24-Feb-2003	101,314.62	102,338.00	103,361.38
26-Feb-2003	101,532.42	102,558.00	103,583.58
25-Feb-2003	101,396.79	102,421.00	103,445.21
27-Feb-2003	101,650.23	102,677.00	103,703.77
28-Feb-2003	101,720.52	102,748.00	103,775.48
03-Mar-2003	101,970.99	103,001.00	104,031.01
02-May-2003	102,847.14	103,886.00	104,924.86
04-Mar-2003	102,272.94	103,306.00	104,339.06
05-Mar-2003	102,267.00	103,300.00	104,333.00
06-Mar-2003	102,366.00	103,400.00	104,434.00
07-Mar-2003	102,552.12	103,588.00	104,623.88
10-Mar-2003	102,775.86	103,814.00	104,852.14
11-Mar-2003	102,787.74	103,826.00	104,864.26
12-Mar-2003	102,946.14	103,986.00	105,025.86
13-Mar-2003	103,038.21	104,079.00	105,119.79
14-Mar-2003	102,977.82	104,018.00	105,058.18
17-Mar-2003	102,861.00	103,900.00	104,939.00
18-Mar-2003	103,031.28	104,072.00	105,112.72
19-Mar-2003	103,158.00	104,200.00	105,242.00
20-Mar-2003	102,987.72	104,028.00	105,068.28
21-Mar-2003	103,020.39	104,061.00	105,101.61
24-Mar-2003	102,872.88	103,912.00	104,951.12
25-Mar-2003	102,663.00	103,700.00	104,737.00
26-Mar-2003	102,579.84	103,616.00	104,652.16
27-Mar-2003	102,487.77	103,523.00	104,558.23
28-Mar-2003	102,202.65	103,235.00	104,267.35
31-Mar-2003	101,984.85	103,015.00	104,045.15
01-Apr-2003	101,783.88	102,812.00	103,840.12
02-Apr-2003	101,721.51	102,749.00	103,776.49
03-Apr-2003	101,617.56	102,644.00	103,670.44
04-Apr-2003	101,689.83	102,717.00	103,744.17
07-Apr-2003	101,777.94	102,806.00	103,834.06
08-Apr-2003	101,887.83	102,917.00	103,946.17
09-Apr-2003	102,125.43	103,157.00	104,188.57
10-Apr-2003	102,556.08	103,592.00	104,627.92
11-Apr-2003	102,844.17	103,883.00	104,921.83
14-Apr-2003	103,192.65	104,235.00	105,277.35
15-Apr-2003	103,494.60	104,540.00	105,585.40
16-Apr-2003	103,845.06	104,894.00	105,942.94
17-Apr-2003	103,959.90	105,010.00	106,060.10
22-Apr-2003	104,087.61	105,139.00	106,190.39
23-Apr-2003	104,107.41	105,159.00	106,210.59
24-Apr-2003	104,135.13	105,187.00	106,238.87
25-Apr-2003	104,054.94	105,106.00	106,157.06
28-Apr-2003	103,083.75	104,125.00	105,166.25
29-Apr-2003	103,079.79	104,121.00	105,162.21

Exchange Date	Spot Buying	Mean	Spot Selling
30-Apr-2003	102,988.71	104,029.00	105,069.29
05-May-2003	102,786.75	103,825.00	104,863.25
06-May-2003	102,261.06	103,294.00	104,326.94
07-May-2003	101,560.14	102,586.00	103,611.86
08-May-2003	101,801.70	102,830.00	103,858.30
09-May-2003	101,746.26	102,774.00	103,801.74
12-May-2003	101,475.00	102,500.00	103,525.00
13-May-2003	102,168.00	103,200.00	104,232.00
15-May-2003	102,456.09	103,491.00	104,525.91
16-May-2003	102,866.94	103,906.00	104,945.06
19-May-2003	103,306.50	104,350.00	105,393.50
20-May-2003	103,747.05	104,795.00	105,842.95
21-May-2003	103,898.52	104,948.00	105,997.48
22-May-2003	103,631.22	104,678.00	105,724.78
23-May-2003	103,674.78	104,722.00	105,769.22
26-May-2003	103,886.64	104,936.00	105,985.36
27-May-2003	103,777.74	104,826.00	105,874.26
28-May-2003	103,711.41	104,759.00	105,806.59
29-May-2003	103,246.11	104,289.00	105,331.89
30-May-2003	103,669.83	104,717.00	105,764.17
02-Jun-2003	103,421.34	104,466.00	105,510.66
03-Jun-2003	103,013.46	104,054.00	105,094.54
04-Jun-2003	102,684.78	103,722.00	104,759.22
05-Jun-2003	102,527.37	103,563.00	104,598.63
06-Jun-2003	102,298.68	103,332.00	104,365.32
09-Jun-2003	102,162.06	103,194.00	104,225.94
10-Jun-2003	101,836.35	102,865.00	103,893.65
11-Jun-2003	101,650.23	102,677.00	103,703.77
12-Jun-2003	101,682.90	102,710.00	103,737.10
13-Jun-2003	101,798.73	102,827.00	103,855.27
16-Jun-2003	102,410.55	103,445.00	104,479.45
17-Jun-2003	103,116.42	104,158.00	105,199.58
18-Jun-2003	103,554.00	104,600.00	105,646.00
19-Jun-2003	103,843.08	104,892.00	105,940.92
20-Jun-2003	103,851.00	104,900.00	105,949.00
23-Jun-2003	103,514.40	104,560.00	105,605.60
24-Jun-2003	103,556.97	104,603.00	105,649.03
25-Jun-2003	103,481.73	104,527.00	105,572.27
26-Jun-2003	103,440.15	104,485.00	105,529.85
27-Jun-2003	103,314.42	104,358.00	105,401.58
30-Jun-2003	103,691.61	104,739.00	105,786.39
01-Jul-2003	103,605.48	104,652.00	105,698.52
02-Jul-2003	103,161.96	104,204.00	105,246.04
03-Jul-2003	102,784.77	103,823.00	104,861.23
04-Jul-2003	102,275.91	103,309.00	104,342.09
08-Jul-2003	102,198.69	103,231.00	104,263.31
09-Jul-2003	102,401.64	103,436.00	104,470.36
10-Jul-2003	102,931.29	103,971.00	105,010.71

Exchange Date	Spot Buying	Mean	Spot Selling
11-Jul-2003	103,257.00	104,300.00	105,343.00
14-Jul-2003	103,455.00	104,500.00	105,545.00
15-Jul-2003	103,158.99	104,201.00	105,243.01
16-Jul-2003	103,237.20	104,280.00	105,322.80
17-Jul-2003	103,417.38	104,462.00	105,506.62
18-Jul-2003	103,558.95	104,605.00	105,651.05
21-Jul-2003	103,319.37	104,363.00	105,406.63
22-Jul-2003	103,057.02	104,098.00	105,138.98
23-Jul-2003	102,799.62	103,838.00	104,876.38
24-Jul-2003	102,656.07	103,693.00	104,729.93
25-Jul-2003	102,910.50	103,950.00	104,989.50
28-Jul-2003	103,301.55	104,345.00	105,388.45
29-Jul-2003	103,491.63	104,537.00	105,582.37
30-Jul-2003	103,567.86	104,614.00	105,660.14
31-Jul-2003	103,460.94	104,506.00	105,551.06
01-Aug-2003	103,279.77	104,323.00	105,366.23
04-Aug-2003	103,269.87	104,313.00	105,356.13
05-Aug-2003	103,635.18	104,682.00	105,728.82
06-Aug-2003	103,844.07	104,893.00	105,941.93
07-Aug-2003	103,851.00	104,900.00	105,949.00
11-Aug-2003	103,840.11	104,889.00	105,937.89
12-Aug-2003	103,784.67	104,833.00	105,881.33
13-Aug-2003	103,595.58	104,642.00	105,688.42
14-Aug-2003	103,437.18	104,482.00	105,526.82
15-Aug-2003	103,056.03	104,097.00	105,137.97
18-Aug-2003	103,114.44	104,156.00	105,197.56
19-Aug-2003	103,095.63	104,137.00	105,178.37
20-Aug-2003	103,311.45	104,355.00	105,398.55
21-Aug-2003	103,391.64	104,436.00	105,480.36
22-Aug-2003	103,462.92	104,508.00	105,553.08
25-Aug-2003	103,352.04	104,396.00	105,439.96
26-Aug-2003	103,235.22	104,278.00	105,320.78
27-Aug-2003	103,525.29	104,571.00	105,616.71
28-Aug-2003	103,582.71	104,629.00	105,675.29
29-Aug-2003	103,674.78	104,722.00	105,769.22
01-Sep-2003	103,696.56	104,744.00	105,791.44
02-Sep-2003	103,460.94	104,506.00	105,551.06
03-Sep-2003	103,304.52	104,348.00	105,391.48
04-Sep-2003	103,434.21	104,479.00	105,523.79
05-Sep-2003	103,539.15	104,585.00	105,630.85
08-Sep-2003	103,613.40	104,660.00	105,706.60
09-Sep-2003	103,767.84	104,816.00	105,864.16
10-Sep-2003	103,617.36	104,664.00	105,710.64
11-Sep-2003	103,744.08	104,792.00	105,839.92
12-Sep-2003	103,692.60	104,740.00	105,787.40
15-Sep-2003	103,741.11	104,789.00	105,836.89
16-Sep-2003	103,862.88	104,912.00	105,961.12
17-Sep-2003	104,094.54	105,146.00	106,197.46

Exchange Date	Spot Buying	Mean	Spot Selling
18-Sep-2003	104,244.03	105,297.00	106,349.97
19-Sep-2003	104,432.13	105,487.00	106,541.87
22-Sep-2003	104,572.71	105,629.00	106,685.29
23-Sep-2003	103,989.60	105,040.00	106,090.40
24-Sep-2003	103,640.13	104,687.00	105,733.87
25-Sep-2003	103,621.32	104,668.00	105,714.68
26-Sep-2003	103,482.72	104,528.00	105,573.28
29-Sep-2003	103,315.41	104,359.00	105,402.59
30-Sep-2003	103,420.35	104,465.00	105,509.65
01-Oct-2003	103,438.17	104,483.00	105,527.83
02-Oct-2003	103,300.56	104,344.00	105,387.44
03-Oct-2003	103,287.69	104,331.00	105,374.31
06-Oct-2003	103,315.41	104,359.00	105,402.59
07-Oct-2003	103,469.85	104,515.00	105,560.15
08-Oct-2003	103,110.48	104,152.00	105,193.52
09-Oct-2003	103,082.76	104,124.00	105,165.24
10-Oct-2003	102,875.85	103,915.00	104,954.15
13-Oct-2003	103,639.14	104,686.00	105,732.86
15-Oct-2003	103,445.10	104,490.00	105,534.90
16-Oct-2003	103,310.46	104,354.00	105,397.54
17-Oct-2003	103,524.30	104,570.00	105,615.70
20-Oct-2003	103,652.01	104,699.00	105,745.99
21-Oct-2003	103,579.74	104,626.00	105,672.26
22-Oct-2003	103,702.50	104,750.00	105,797.50
23-Oct-2003	103,534.20	104,580.00	105,625.80
24-Oct-2003	103,274.82	104,318.00	105,361.18
27-Oct-2003	103,635.18	104,682.00	105,728.82
28-Oct-2003	103,793.58	104,842.00	105,890.42
29-Oct-2003	103,625.28	104,672.00	105,718.72
30-Oct-2003	103,732.20	104,780.00	105,827.80
31-Oct-2003	103,931.19	104,981.00	106,030.81
03-Nov-2003	103,935.15	104,985.00	106,034.85
04-Nov-2003	104,030.19	105,081.00	106,131.81
05-Nov-2003	104,042.07	105,093.00	106,143.93
06-Nov-2003	103,991.58	105,042.00	106,092.42
07-Nov-2003	104,037.12	105,088.00	106,138.88
10-Nov-2003	103,075.83	104,117.00	105,158.17
11-Nov-2003	103,370.85	104,415.00	105,459.15
12-Nov-2003	103,600.53	104,647.00	105,693.47
13-Nov-2003	103,776.75	104,825.00	105,873.25
14-Nov-2003	104,182.65	105,235.00	106,287.35
17-Nov-2003	104,247.00	105,300.00	106,353.00
18-Nov-2003	104,253.93	105,307.00	106,360.07
19-Nov-2003	104,136.12	105,188.00	106,239.88
20-Nov-2003	103,928.22	104,978.00	106,027.78
21-Nov-2003	103,756.95	104,805.00	105,853.05
24-Nov-2003	103,690.62	104,738.00	105,785.38
25-Nov-2003	103,583.70	104,630.00	105,676.30

Exchange Date	Spot Buying	Mean	Spot Selling
28-Nov-2003	103,721.31	104,769.00	105,816.69
01-Dec-2003	103,918.32	104,968.00	106,017.68
02-Dec-2003	104,120.28	105,172.00	106,223.72
03-Dec-2003	104,290.56	105,344.00	106,397.44
04-Dec-2003	104,310.36	105,364.00	106,417.64
05-Dec-2003	104,242.05	105,295.00	106,347.95
08-Dec-2003	104,429.16	105,484.00	106,538.84
10-Dec-2003	104,556.87	105,613.00	106,669.13
11-Dec-2003	104,663.79	105,721.00	106,778.21
12-Dec-2003	104,846.94	105,906.00	106,965.06
15-Dec-2003	105,144.93	106,207.00	107,269.07
16-Dec-2003	105,348.87	106,413.00	107,477.13
17-Dec-2003	105,532.02	106,598.00	107,663.98
18-Dec-2003	105,732.99	106,801.00	107,869.01
19-Dec-2003	105,559.74	106,626.00	107,692.26
22-Dec-2003	105,206.31	106,269.00	107,331.69
23-Dec-2003	105,347.88	106,412.00	107,476.12
24-Dec-2003	105,269.67	106,333.00	107,396.33
29-Dec-2003	105,326.10	106,390.00	107,453.90
30-Dec-2003	105,375.60	106,440.00	107,504.40
31-Dec-2003	105,298.38	106,362.00	107,425.62
02-Jan-2004	105,126.12	106,188.00	107,249.88
05-Jan-2004	105,036.03	106,097.00	107,157.97
06-Jan-2004	105,028.11	106,089.00	107,149.89
07-Jan-2004	105,194.43	106,257.00	107,319.57
08-Jan-2004	105,481.53	106,547.00	107,612.47
09-Jan-2004	105,630.03	106,697.00	107,763.97
13-Jan-2004	105,702.30	106,770.00	107,837.70
14-Jan-2004	105,874.56	106,944.00	108,013.44
15-Jan-2004	106,221.06	107,294.00	108,366.94
16-Jan-2004	106,400.25	107,475.00	108,549.75
19-Jan-2004	106,443.81	107,519.00	108,594.19
20-Jan-2004	106,970.49	108,051.00	109,131.51
21-Jan-2004	107,569.44	108,656.00	109,742.56
22-Jan-2004	108,471.33	109,567.00	110,662.67
23-Jan-2004	109,589.04	110,696.00	111,802.96
26-Jan-2004	109,588.05	110,695.00	111,801.95
27-Jan-2004	109,876.14	110,986.00	112,095.86
28-Jan-2004	109,897.92	111,008.00	112,118.08
29-Jan-2004	109,828.62	110,938.00	112,047.38
30-Jan-2004	109,791.00	110,900.00	112,009.00
02-Feb-2004	109,771.20	110,880.00	111,988.80
03-Feb-2004	109,754.37	110,863.00	111,971.63
04-Feb-2004	109,582.11	110,689.00	111,795.89
05-Feb-2004	109,367.28	110,472.00	111,576.72
06-Feb-2004	109,648.44	110,756.00	111,863.56
09-Feb-2004	109,579.14	110,686.00	111,792.86
10-Feb-2004	109,695.96	110,804.00	111,912.04

Exchange Date	Spot Buying	Mean	Spot Selling
11-Feb-2004	109,586.07	110,693.00	111,799.93
12-Feb-2004	109,672.20	110,780.00	111,887.80
13-Feb-2004	109,490.04	110,596.00	111,701.96
16-Feb-2004	109,540.53	110,647.00	111,753.47
17-Feb-2004	109,911.78	111,022.00	112,132.22
18-Feb-2004	109,903.86	111,014.00	112,124.14
19-Feb-2004	110,016.72	111,128.00	112,239.28
20-Feb-2004	109,872.18	110,982.00	112,091.82
23-Feb-2004	109,975.14	111,086.00	112,196.86
24-Feb-2004	110,022.66	111,134.00	112,245.34
25-Feb-2004	109,863.27	110,973.00	112,082.73
26-Feb-2004	109,813.77	110,923.00	112,032.23
27-Feb-2004	109,886.04	110,996.00	112,105.96
01-Mar-2004	109,879.11	110,989.00	112,098.89
02-Mar-2004	109,936.53	111,047.00	112,157.47
03-Mar-2004	109,949.40	111,060.00	112,170.60
04-Mar-2004	109,951.38	111,062.00	112,172.62
05-Mar-2004	109,956.33	111,067.00	112,177.67
08-Mar-2004	109,927.62	111,038.00	112,148.38
09-Mar-2004	109,910.79	111,021.00	112,131.21
10-Mar-2004	109,800.90	110,910.00	112,019.10
11-Mar-2004	109,886.04	110,996.00	112,105.96
12-Mar-2004	109,579.14	110,686.00	111,792.86
15-Mar-2004	109,313.82	110,418.00	111,522.18
16-Mar-2004	109,214.82	110,318.00	111,421.18
17-Mar-2004	109,441.53	110,547.00	111,652.47
18-Mar-2004	109,444.50	110,550.00	111,655.50
19-Mar-2004	109,692.00	110,800.00	111,908.00
22-Mar-2004	109,749.42	110,858.00	111,966.58
23-Mar-2004	109,794.96	110,904.00	112,013.04
24-Mar-2004	109,751.40	110,860.00	111,968.60
25-Mar-2004	109,596.96	110,704.00	111,811.04
26-Mar-2004	109,596.96	110,704.00	111,811.04
29-Mar-2004	109,684.08	110,792.00	111,899.92
30-Mar-2004	109,690.02	110,798.00	111,905.98
31-Mar-2004	109,732.59	110,841.00	111,949.41
01-Apr-2004	109,552.41	110,659.00	111,765.59
02-Apr-2004	109,706.85	110,815.00	111,923.15
05-Apr-2004	109,613.79	110,721.00	111,828.21
06-Apr-2004	109,467.27	110,573.00	111,678.73
07-Apr-2004	109,437.57	110,543.00	111,648.43
08-Apr-2004	109,420.74	110,526.00	111,631.26
13-Apr-2004	109,621.71	110,729.00	111,836.29
14-Apr-2004	109,423.71	110,529.00	111,634.29
15-Apr-2004	109,559.34	110,666.00	111,772.66
16-Apr-2004	109,677.15	110,785.00	111,892.85
19-Apr-2004	109,881.09	110,991.00	112,100.91
20-Apr-2004	110,257.29	111,371.00	112,484.71

Exchange Date	Spot Buying	Mean	Spot Selling
21-Apr-2004	110,383.02	111,498.00	112,612.98
22-Apr-2004	110,488.95	111,605.00	112,721.05
23-Apr-2004	110,484.00	111,600.00	112,716.00
27-Apr-2004	110,481.03	111,597.00	112,712.97
28-Apr-2004	110,649.33	111,767.00	112,884.67
29-Apr-2004	110,868.12	111,988.00	113,107.88
30-Apr-2004	110,830.50	111,950.00	113,069.50
03-May-2004	110,406.78	111,522.00	112,637.22
04-May-2004	110,545.38	111,662.00	112,778.62
05-May-2004	110,623.59	111,741.00	112,858.41
06-May-2004	110,557.26	111,674.00	112,790.74
07-May-2004	110,563.20	111,680.00	112,796.80
10-May-2004	110,640.42	111,758.00	112,875.58
11-May-2004	110,527.56	111,644.00	112,760.44
12-May-2004	110,267.19	111,381.00	112,494.81
13-May-2004	110,330.55	111,445.00	112,559.45
14-May-2004	110,318.67	111,433.00	112,547.33
17-May-2004	110,105.82	111,218.00	112,330.18
18-May-2004	109,883.07	110,993.00	112,102.93
19-May-2004	109,815.75	110,925.00	112,034.25
20-May-2004	110,208.78	111,322.00	112,435.22
21-May-2004	110,405.79	111,521.00	112,636.21
24-May-2004	110,508.75	111,625.00	112,741.25
25-May-2004	110,478.06	111,594.00	112,709.94
26-May-2004	110,479.05	111,595.00	112,710.95
27-May-2004	110,415.69	111,531.00	112,646.31
28-May-2004	110,639.43	111,757.00	112,874.57
31-May-2004	110,533.50	111,650.00	112,766.50
01-Jun-2004	110,569.14	111,686.00	112,802.86
02-Jun-2004	110,697.84	111,816.00	112,934.16
03-Jun-2004	110,791.89	111,911.00	113,030.11
04-Jun-2004	110,541.42	111,658.00	112,774.58
07-Jun-2004	110,649.33	111,767.00	112,884.67
08-Jun-2004	110,578.05	111,695.00	112,811.95
09-Jun-2004	110,546.37	111,663.00	112,779.63
10-Jun-2004	110,578.05	111,695.00	112,811.95
11-Jun-2004	110,522.61	111,639.00	112,755.39
14-Jun-2004	110,519.64	111,636.00	112,752.36
15-Jun-2004	110,472.12	111,588.00	112,703.88
16-Jun-2004	110,378.07	111,493.00	112,607.93
17-Jun-2004	110,286.00	111,400.00	112,514.00
18-Jun-2004	110,233.53	111,347.00	112,460.47
21-Jun-2004	110,187.00	111,300.00	112,413.00
22-Jun-2004	110,126.61	111,239.00	112,351.39
23-Jun-2004	110,000.88	111,112.00	112,223.12
24-Jun-2004	109,888.02	110,998.00	112,107.98
25-Jun-2004	109,830.60	110,940.00	112,049.40
28-Jun-2004	109,819.71	110,929.00	112,038.29

Exchange Date	Spot Buying	Mean	Spot Selling
29-Jun-2004	109,777.14	110,886.00	111,994.86
30-Jun-2004	109,624.68	110,732.00	111,839.32
01-Jul-2004	109,554.39	110,661.00	111,767.61
02-Jul-2004	109,610.82	110,718.00	111,825.18
05-Jul-2004	109,569.24	110,676.00	111,782.76
06-Jul-2004	109,498.95	110,605.00	111,711.05
08-Jul-2004	109,408.86	110,514.00	111,619.14
09-Jul-2004	109,329.66	110,434.00	111,538.34
12-Jul-2004	108,700.02	109,798.00	110,895.98
13-Jul-2004	108,027.81	109,119.00	110,210.19
14-Jul-2004	108,021.87	109,113.00	110,204.13
15-Jul-2004	108,050.58	109,142.00	110,233.42
16-Jul-2004	108,814.86	109,914.00	111,013.14
19-Jul-2004	108,913.86	110,014.00	111,114.14
20-Jul-2004	109,213.83	110,317.00	111,420.17
21-Jul-2004	109,303.92	110,408.00	111,512.08
22-Jul-2004	109,474.20	110,580.00	111,685.80
23-Jul-2004	109,436.58	110,542.00	111,647.42
26-Jul-2004	109,485.09	110,591.00	111,696.91
27-Jul-2004	109,324.71	110,429.00	111,533.29
28-Jul-2004	108,997.02	110,098.00	111,198.98
29-Jul-2004	108,940.59	110,041.00	111,141.41
30-Jul-2004	108,643.59	109,741.00	110,838.41
02-Aug-2004	108,450.54	109,546.00	110,641.46
03-Aug-2004	108,480.24	109,576.00	110,671.76
04-Aug-2004	108,393.12	109,488.00	110,582.88
05-Aug-2004	108,055.53	109,147.00	110,238.47
06-Aug-2004	107,819.91	108,909.00	109,998.09
09-Aug-2004	107,923.86	109,014.00	110,104.14
10-Aug-2004	107,928.81	109,019.00	110,109.19
11-Aug-2004	107,886.24	108,976.00	110,065.76
12-Aug-2004	107,607.06	108,694.00	109,780.94
13-Aug-2004	107,491.23	108,577.00	109,662.77
16-Aug-2004	107,389.26	108,474.00	109,558.74
17-Aug-2004	107,246.70	108,330.00	109,413.30
18-Aug-2004	107,102.16	108,184.00	109,265.84
19-Aug-2004	106,955.64	108,036.00	109,116.36
20-Aug-2004	107,043.75	108,125.00	109,206.25
23-Aug-2004	107,105.13	108,187.00	109,268.87
24-Aug-2004	107,312.04	108,396.00	109,479.96
25-Aug-2004	107,447.67	108,533.00	109,618.33
26-Aug-2004	107,524.89	108,611.00	109,697.11
27-Aug-2004	107,394.21	108,479.00	109,563.79
30-Aug-2004	107,360.55	108,445.00	109,529.45
31-Aug-2004	107,239.77	108,323.00	109,406.23
01-Sep-2004	106,828.92	107,908.00	108,987.08
02-Sep-2004	106,771.50	107,850.00	108,928.50
03-Sep-2004	106,965.54	108,046.00	109,126.46

Exchange Date	Spot Buying	Mean	Spot Selling
06-Sep-2004	107,074.44	108,156.00	109,237.56
07-Sep-2004	106,962.57	108,043.00	109,123.43
08-Sep-2004	106,912.08	107,992.00	109,071.92
09-Sep-2004	106,598.25	107,675.00	108,751.75
10-Sep-2004	106,291.35	107,365.00	108,438.65
13-Sep-2004	106,210.17	107,283.00	108,355.83
14-Sep-2004	105,975.54	107,046.00	108,116.46
15-Sep-2004	105,981.48	107,052.00	108,122.52
16-Sep-2004	106,089.39	107,161.00	108,232.61
17-Sep-2004	106,286.40	107,360.00	108,433.60
20-Sep-2004	106,500.24	107,576.00	108,651.76
21-Sep-2004	106,416.09	107,491.00	108,565.91
22-Sep-2004	106,150.77	107,223.00	108,295.23
23-Sep-2004	105,931.98	107,002.00	108,072.02
24-Sep-2004	105,823.08	106,892.00	107,960.92
27-Sep-2004	105,459.75	106,525.00	107,590.25
28-Sep-2004	105,162.75	106,225.00	107,287.25
29-Sep-2004	105,137.01	106,199.00	107,260.99
30-Sep-2004	104,984.55	106,045.00	107,105.45
01-Oct-2004	104,796.45	105,855.00	106,913.55
04-Oct-2004	104,856.84	105,916.00	106,975.16
05-Oct-2004	104,843.97	105,903.00	106,962.03
06-Oct-2004	104,819.22	105,878.00	106,936.78
07-Oct-2004	104,729.13	105,787.00	106,844.87
08-Oct-2004	104,761.80	105,820.00	106,878.20
11-Oct-2004	104,599.44	105,656.00	106,712.56
12-Oct-2004	104,574.69	105,631.00	106,687.31
13-Oct-2004	104,596.47	105,653.00	106,709.53
15-Oct-2004	104,809.32	105,868.00	106,926.68
18-Oct-2004	105,362.73	106,427.00	107,491.27
19-Oct-2004	105,562.71	106,629.00	107,695.29
20-Oct-2004	105,543.90	106,610.00	107,676.10
21-Oct-2004	105,710.22	106,778.00	107,845.78
22-Oct-2004	105,847.83	106,917.00	107,986.17
25-Oct-2004	105,827.04	106,896.00	107,964.96
26-Oct-2004	105,760.71	106,829.00	107,897.29
27-Oct-2004	105,750.81	106,819.00	107,887.19
28-Oct-2004	105,438.96	106,504.00	107,569.04
29-Oct-2004	104,991.48	106,052.00	107,112.52
01-Nov-2004	105,024.15	106,085.00	107,145.85
02-Nov-2004	104,990.49	106,051.00	107,111.51
05-Nov-2004	104,759.82	105,818.00	106,876.18
03-Nov-2004	104,916.24	105,976.00	107,035.76
04-Nov-2004	104,823.18	105,882.00	106,940.82
08-Nov-2004	104,823.18	105,882.00	106,940.82
09-Nov-2004	104,850.90	105,910.00	106,969.10
10-Nov-2004	104,832.09	105,891.00	106,949.91
11-Nov-2004	104,667.75	105,725.00	106,782.25

Exchange Date	Spot Buying	Mean	Spot Selling
12-Nov-2004	104,486.58	105,542.00	106,597.42
16-Nov-2004	104,452.92	105,508.00	106,563.08
17-Nov-2004	104,512.32	105,568.00	106,623.68
18-Nov-2004	104,629.14	105,686.00	106,742.86
19-Nov-2004	104,572.71	105,629.00	106,685.29
22-Nov-2004	104,810.31	105,869.00	106,927.69
23-Nov-2004	104,936.04	105,996.00	107,055.96
24-Nov-2004	104,793.48	105,852.00	106,910.52
25-Nov-2004	105,125.13	106,187.00	107,248.87
26-Nov-2004	105,116.22	106,178.00	107,239.78
29-Nov-2004	105,195.42	106,258.00	107,320.58
30-Nov-2004	105,037.02	106,098.00	107,158.98
01-Dec-2004	104,895.45	105,955.00	107,014.55
02-Dec-2004	104,909.31	105,969.00	107,028.69
03-Dec-2004	104,713.29	105,771.00	106,828.71
06-Dec-2004	104,750.91	105,809.00	106,867.09
07-Dec-2004	104,666.76	105,724.00	106,781.24
08-Dec-2004	104,643.00	105,700.00	106,757.00
10-Dec-2004	104,621.22	105,678.00	106,734.78
13-Dec-2004	104,139.09	105,191.00	106,242.91
14-Dec-2004	103,886.64	104,936.00	105,985.36
15-Dec-2004	103,531.23	104,577.00	105,622.77
16-Dec-2004	104,099.49	105,151.00	106,202.51
17-Dec-2004	103,818.33	104,867.00	105,915.67
20-Dec-2004	103,682.70	104,730.00	105,777.30
21-Dec-2004	103,539.15	104,585.00	105,630.85
22-Dec-2004	103,577.76	104,624.00	105,670.24
23-Dec-2004	103,495.59	104,541.00	105,586.41
24-Dec-2004	103,259.97	104,303.00	105,346.03
27-Dec-2004	103,274.82	104,318.00	105,361.18
28-Dec-2004	103,256.01	104,299.00	105,341.99
29-Dec-2004	103,213.44	104,256.00	105,298.56
30-Dec-2004	103,257.00	104,300.00	105,343.00
31-Dec-2004	103,253.04	104,296.00	105,338.96
03-Jan-2005	103,234.23	104,277.00	105,319.77
04-Jan-2005	104,180.67	105,233.00	106,285.33
05-Jan-2005	103,838.13	104,887.00	105,935.87
06-Jan-2005	104,128.20	105,180.00	106,231.80
10-Jan-2005	105,332.04	106,396.00	107,459.96
11-Jan-2005	105,707.25	106,775.00	107,842.75
13-Jan-2005	106,073.55	107,145.00	108,216.45
14-Jan-2005	106,584.39	107,661.00	108,737.61
17-Jan-2005	107,140.77	108,223.00	109,305.23
18-Jan-2005	107,428.86	108,514.00	109,599.14
19-Jan-2005	109,296.99	110,401.00	111,505.01
20-Jan-2005	109,827.63	110,937.00	112,046.37
24-Jan-2005	111,329.46	112,454.00	113,578.54
25-Jan-2005	111,957.12	113,088.00	114,218.88

Exchange Date	Spot Buying	Mean	Spot Selling
26-Jan-2005	112,015.53	113,147.00	114,278.47
27-Jan-2005	111,753.18	112,882.00	114,010.82
28-Jan-2005	110,830.50	111,950.00	113,069.50
31-Jan-2005	109,100.97	110,203.00	111,305.03
01-Feb-2005	109,359.36	110,464.00	111,568.64
02-Feb-2005	109,741.50	110,850.00	111,958.50
03-Feb-2005	109,786.05	110,895.00	112,003.95
04-Feb-2005	109,787.04	110,896.00	112,004.96
07-Feb-2005	110,044.44	111,156.00	112,267.56
08-Feb-2005	110,088.00	111,200.00	112,312.00
09-Feb-2005	109,870.20	110,980.00	112,089.80
10-Feb-2005	109,206.90	110,310.00	111,413.10
11-Feb-2005	109,397.97	110,503.00	111,608.03
14-Feb-2005	109,613.79	110,721.00	111,828.21
15-Feb-2005	109,494.00	110,600.00	111,706.00
16-Feb-2005	109,518.75	110,625.00	111,731.25
17-Feb-2005	109,840.50	110,950.00	112,059.50
18-Feb-2005	109,927.62	111,038.00	112,148.38
21-Feb-2005	110,030.58	111,142.00	112,253.42
22-Feb-2005	110,205.81	111,319.00	112,432.19
23-Feb-2005	110,188.98	111,302.00	112,415.02
24-Feb-2005	110,298.87	111,413.00	112,527.13
25-Feb-2005	110,684.97	111,803.00	112,921.03
28-Feb-2005	110,639.43	111,757.00	112,874.57
01-Mar-2005	110,554.29	111,671.00	112,787.71
02-Mar-2005	110,435.49	111,551.00	112,666.51
03-Mar-2005	110,024.64	111,136.00	112,247.36
04-Mar-2005	110,037.51	111,149.00	112,260.49
07-Mar-2005	109,692.00	110,800.00	111,908.00
08-Mar-2005	109,637.55	110,745.00	111,852.45
09-Mar-2005	109,418.76	110,524.00	111,629.24
10-Mar-2005	109,362.33	110,467.00	111,571.67
11-Mar-2005	109,651.41	110,759.00	111,866.59
14-Mar-2005	109,972.17	111,083.00	112,193.83
15-Mar-2005	109,553.40	110,660.00	111,766.60
16-Mar-2005	109,553.40	110,660.00	111,766.60
17-Mar-2005	109,667.25	110,775.00	111,882.75
18-Mar-2005	109,650.42	110,758.00	111,865.58
21-Mar-2005	109,749.42	110,858.00	111,966.58
22-Mar-2005	109,642.50	110,750.00	111,857.50
23-Mar-2005	109,592.01	110,699.00	111,805.99
24-Mar-2005	109,592.01	110,699.00	111,805.99
29-Mar-2005	109,130.67	110,233.00	111,335.33
30-Mar-2005	109,296.00	110,400.00	111,504.00
31-Mar-2005	109,324.71	110,429.00	111,533.29
01-Apr-2005	108,174.33	109,267.00	110,359.67
04-Apr-2005	108,801.00	109,900.00	110,999.00
05-Apr-2005	108,974.25	110,075.00	111,175.75

Exchange Date	Spot Buying	Mean	Spot Selling
06-Apr-2005	109,118.79	110,221.00	111,323.21
08-Apr-2005	109,246.50	110,350.00	111,453.50
11-Apr-2005	109,098.00	110,200.00	111,302.00
12-Apr-2005	109,284.12	110,388.00	111,491.88
13-Apr-2005	109,568.25	110,675.00	111,781.75
14-Apr-2005	109,566.27	110,673.00	111,779.73
15-Apr-2005	109,758.33	110,867.00	111,975.67
18-Apr-2005	110,055.33	111,167.00	112,278.67
19-Apr-2005	109,890.00	111,000.00	112,110.00
20-Apr-2005	109,870.20	110,980.00	112,089.80
21-Apr-2005	109,791.00	110,900.00	112,009.00
25-Apr-2005	109,665.27	110,773.00	111,880.73
27-Apr-2005	109,566.27	110,673.00	111,779.73
28-Apr-2005	109,447.47	110,553.00	111,658.53
29-Apr-2005	109,395.00	110,500.00	111,605.00
02-May-2005	109,335.60	110,440.00	111,544.40
03-May-2005	109,527.66	110,634.00	111,740.34
04-May-2005	109,918.71	111,029.00	112,139.29
05-May-2005	110,231.55	111,345.00	112,458.45
06-May-2005	110,126.61	111,239.00	112,351.39
10-May-2005	109,996.92	111,108.00	112,219.08
11-May-2005	110,058.30	111,170.00	112,281.70
16-May-2005	110,350.35	111,465.00	112,579.65
17-May-2005	110,542.41	111,659.00	112,775.59
19-May-2005	110,844.36	111,964.00	113,083.64
18-May-2005	110,584.98	111,702.00	112,819.02
20-May-2005	110,977.02	112,098.00	113,218.98
23-May-2005	111,321.54	112,446.00	113,570.46
24-May-2005	111,693.78	112,822.00	113,950.22
25-May-2005	111,274.02	112,398.00	113,521.98
26-May-2005	110,144.43	111,257.00	112,369.57
27-May-2005	110,153.34	111,266.00	112,378.66
30-May-2005	110,406.78	111,522.00	112,637.22
31-May-2005	111,256.20	112,380.00	113,503.80
01-Jun-2005	111,534.39	112,661.00	113,787.61
02-Jun-2005	111,721.50	112,850.00	113,978.50
03-Jun-2005	111,849.21	112,979.00	114,108.79
09-May-2005	110,152.35	111,265.00	112,377.65
12-May-2005	110,459.25	111,575.00	112,690.75
13-May-2005	110,569.14	111,686.00	112,802.86
06-Jun-2005	111,672.00	112,800.00	113,928.00
07-Jun-2005	111,474.00	112,600.00	113,726.00
08-Jun-2005	111,325.50	112,450.00	113,574.50
09-Jun-2005	111,220.56	112,344.00	113,467.44
10-Jun-2005	111,567.06	112,694.00	113,820.94
13-Jun-2005	111,823.47	112,953.00	114,082.53
14-Jun-2005	111,843.27	112,973.00	114,102.73
15-Jun-2005	111,835.35	112,965.00	114,094.65

Exchange Date	Spot Buying	Mean	Spot Selling
16-Jun-2005	111,829.41	112,959.00	114,088.59
17-Jun-2005	111,870.00	113,000.00	114,130.00
20-Jun-2005	111,898.71	113,029.00	114,159.29
21-Jun-2005	112,085.82	113,218.00	114,350.18
22-Jun-2005	112,108.59	113,241.00	114,373.41
23-Jun-2005	112,063.05	113,195.00	114,326.95
24-Jun-2005	112,018.50	113,150.00	114,281.50
27-Jun-2005	112,065.03	113,197.00	114,328.97
28-Jun-2005	112,038.30	113,170.00	114,301.70
29-Jun-2005	111,996.72	113,128.00	114,259.28
30-Jun-2005	111,503.70	112,630.00	113,756.30
04-Jul-2005	111,716.55	112,845.00	113,973.45
05-Jul-2005	111,905.64	113,036.00	114,166.36
06-Jul-2005	112,028.40	113,160.00	114,291.60
08-Jul-2005	112,084.83	113,217.00	114,349.17
01-Jul-2005	111,573.00	112,700.00	113,827.00
11-Jul-2005	112,156.11	113,289.00	114,421.89
12-Jul-2005	112,266.00	113,400.00	114,534.00
13-Jul-2005	112,550.13	113,687.00	114,823.87
14-Jul-2005	112,892.67	114,033.00	115,173.33
15-Jul-2005	113,336.19	114,481.00	115,625.81
18-Jul-2005	113,352.03	114,497.00	115,641.97
19-Jul-2005	113,345.10	114,490.00	115,634.90
20-Jul-2005	113,173.83	114,317.00	115,460.17
21-Jul-2005	113,134.23	114,277.00	115,419.77
22-Jul-2005	113,117.40	114,260.00	115,402.60
25-Jul-2005	112,851.09	113,991.00	115,130.91
26-Jul-2005	112,652.10	113,790.00	114,927.90
27-Jul-2005	112,594.68	113,732.00	114,869.32
28-Jul-2005	112,513.50	113,650.00	114,786.50
29-Jul-2005	112,431.33	113,567.00	114,702.67
01-Aug-2005	112,402.62	113,538.00	114,673.38
02-Aug-2005	112,503.60	113,640.00	114,776.40
03-Aug-2005	112,548.15	113,685.00	114,821.85
04-Aug-2005	112,505.58	113,642.00	114,778.42
05-Aug-2005	112,452.12	113,588.00	114,723.88
09-Aug-2005	111,830.40	112,960.00	114,089.60
10-Aug-2005	110,838.42	111,958.00	113,077.58
15-Aug-2005	111,370.05	112,495.00	113,619.95
11-Aug-2005	110,724.57	111,843.00	112,961.43
16-Aug-2005	111,471.03	112,597.00	113,722.97
17-Aug-2005	112,010.58	113,142.00	114,273.42
12-Aug-2005	110,724.57	111,843.00	112,961.43
18-Aug-2005	112,436.28	113,572.00	114,707.72
19-Aug-2005	112,539.24	113,676.00	114,812.76
22-Aug-2005	112,674.87	113,813.00	114,951.13
23-Aug-2005	112,704.57	113,843.00	114,981.43
24-Aug-2005	112,542.21	113,679.00	114,815.79

Exchange Date	Spot Buying	Mean	Spot Selling
25-Aug-2005	112,345.20	113,480.00	114,614.80
26-Aug-2005	112,454.10	113,590.00	114,725.90
29-Aug-2005	112,259.07	113,393.00	114,526.93
30-Aug-2005	112,149.18	113,282.00	114,414.82
31-Aug-2005	112,229.37	113,363.00	114,496.63
01-Sep-2005	112,398.66	113,534.00	114,669.34
02-Sep-2005	112,648.14	113,786.00	114,923.86
05-Sep-2005	112,727.34	113,866.00	115,004.66
06-Sep-2005	112,747.14	113,886.00	115,024.86
07-Sep-2005	112,530.33	113,667.00	114,803.67
08-Sep-2005	112,601.61	113,739.00	114,876.39
09-Sep-2005	112,501.62	113,638.00	114,774.38
12-Sep-2005	112,780.80	113,920.00	115,059.20
13-Sep-2005	112,216.50	113,350.00	114,483.50
14-Sep-2005	112,243.23	113,377.00	114,510.77
15-Sep-2005	112,266.00	113,400.00	114,534.00
16-Sep-2005	112,504.59	113,641.00	114,777.41
19-Sep-2005	112,761.00	113,900.00	115,039.00
20-Sep-2005	112,956.03	114,097.00	115,237.97
21-Sep-2005	113,097.60	114,240.00	115,382.40
22-Sep-2005	113,037.21	114,179.00	115,320.79
23-Sep-2005	113,025.33	114,167.00	115,308.67
26-Sep-2005	112,961.97	114,103.00	115,244.03
27-Sep-2005	112,788.72	113,928.00	115,067.28
28-Sep-2005	112,622.40	113,760.00	114,897.60
29-Sep-2005	112,620.42	113,758.00	114,895.58
30-Sep-2005	112,488.75	113,625.00	114,761.25
03-Oct-2005	112,412.52	113,548.00	114,683.48
04-Oct-2005	112,607.55	113,745.00	114,882.45
05-Oct-2005	112,703.58	113,842.00	114,980.42
06-Oct-2005	112,747.14	113,886.00	115,024.86
07-Oct-2005	112,916.43	114,057.00	115,197.57
10-Oct-2005	113,074.83	114,217.00	115,359.17
30-Jan-2006	116,875.44	118,056.00	119,236.56
31-Jan-2006	117,286.29	118,471.00	119,655.71
01-Feb-2006	117,159.57	118,343.00	119,526.43
02-Feb-2006	117,369.45	118,555.00	119,740.55
03-Feb-2006	117,272.43	118,457.00	119,641.57
06-Feb-2006	117,772.38	118,962.00	120,151.62
07-Feb-2006	118,197.09	119,391.00	120,584.91
08-Feb-2006	118,384.20	119,580.00	120,775.80
09-Feb-2006	118,334.70	119,530.00	120,725.30
10-Feb-2006	117,755.55	118,945.00	120,134.45
13-Feb-2006	117,554.58	118,742.00	119,929.42
14-Feb-2006	116,987.31	118,169.00	119,350.69
15-Feb-2006	117,097.20	118,280.00	119,462.80
16-Feb-2006	117,587.25	118,775.00	119,962.75
17-Feb-2006	117,648.63	118,837.00	120,025.37

Exchange Date	Spot Buying	Mean	Spot Selling
20-Feb-2006	117,873.36	119,064.00	120,254.64
21-Feb-2006	118,198.08	119,392.00	120,585.92
22-Feb-2006	118,133.73	119,327.00	120,520.27
23-Feb-2006	118,206.00	119,400.00	120,594.00
24-Feb-2006	117,739.71	118,929.00	120,118.29
27-Feb-2006	117,389.25	118,575.00	119,760.75
28-Feb-2006	117,414.00	118,600.00	119,786.00
01-Mar-2006	117,842.67	119,033.00	120,223.33
02-Mar-2006	118,206.00	119,400.00	120,594.00
03-Mar-2006	118,347.57	119,543.00	120,738.43
06-Mar-2006	118,519.83	119,717.00	120,914.17
07-Mar-2006	119,097.00	120,300.00	121,503.00
08-Mar-2006	119,609.82	120,818.00	122,026.18
09-Mar-2006	119,748.42	120,958.00	122,167.58
10-Mar-2006	119,756.34	120,966.00	122,175.66
13-Mar-2006	120,285.00	121,500.00	122,715.00
14-Mar-2006	120,402.81	121,619.00	122,835.19
15-Mar-2006	120,091.95	121,305.00	122,518.05
16-Mar-2006	119,979.09	121,191.00	122,402.91
17-Mar-2006	120,131.55	121,345.00	122,558.45
20-Mar-2006	120,331.53	121,547.00	122,762.47
21-Mar-2006	120,518.64	121,736.00	122,953.36
22-Mar-2006	120,425.58	121,642.00	122,858.42
23-Mar-2006	120,409.74	121,626.00	122,842.26
24-Mar-2006	120,417.66	121,634.00	122,850.34
27-Mar-2006	120,711.69	121,931.00	123,150.31
28-Mar-2006	120,711.69	121,931.00	123,150.31
29-Mar-2006	121,047.30	122,270.00	123,492.70
30-Mar-2006	121,065.12	122,288.00	123,510.88
31-Mar-2006	121,158.18	122,382.00	123,605.82
03-Apr-2006	121,200.75	122,425.00	123,649.25
04-Apr-2006	121,211.64	122,436.00	123,660.36
05-Apr-2006	121,247.28	122,472.00	123,696.72
10-Apr-2006	121,275.00	122,500.00	123,725.00
12-Apr-2006	120,967.11	122,189.00	123,410.89
13-Apr-2006	121,097.79	122,321.00	123,544.21
18-Apr-2006	121,153.23	122,377.00	123,600.77
19-Apr-2006	121,354.20	122,580.00	123,805.80
20-Apr-2006	121,565.07	122,793.00	124,020.93
21-Apr-2006	121,555.17	122,783.00	124,010.83
24-Apr-2006	121,527.45	122,755.00	123,982.55
25-Apr-2006	121,386.87	122,613.00	123,839.13
28-Apr-2006	121,344.30	122,570.00	123,795.70
02-May-2006	121,582.89	122,811.00	124,039.11
03-May-2006	121,667.04	122,896.00	124,124.96
04-May-2006	122,068.98	123,302.00	124,535.02
05-May-2006	122,118.48	123,352.00	124,585.52
08-May-2006	122,170.95	123,405.00	124,639.05

Exchange Date	Spot Buying	Mean	Spot Selling
09-May-2006	122,208.57	123,443.00	124,677.43
10-May-2006	122,518.44	123,756.00	124,993.56
11-May-2006	122,562.00	123,800.00	125,038.00
12-May-2006	122,376.87	123,613.00	124,849.13
15-May-2006	122,403.60	123,640.00	124,876.40
16-May-2006	122,537.25	123,775.00	125,012.75
17-May-2006	122,637.24	123,876.00	125,114.76
18-May-2006	122,941.17	124,183.00	125,424.83
19-May-2006	123,229.26	124,474.00	125,718.74
11-Oct-2005	113,140.17	114,283.00	115,425.83
12-Oct-2005	113,088.69	114,231.00	115,373.31
13-Oct-2005	113,107.50	114,250.00	115,392.50
17-Oct-2005	113,157.00	114,300.00	115,443.00
19-Oct-2005	113,177.79	114,321.00	115,464.21
18-Oct-2005	113,172.84	114,316.00	115,459.16
20-Oct-2005	113,211.45	114,355.00	115,498.55
21-Oct-2005	113,296.59	114,441.00	115,585.41
24-Oct-2005	113,305.50	114,450.00	115,594.50
25-Oct-2005	113,290.65	114,435.00	115,579.35
26-Oct-2005	113,105.52	114,248.00	115,390.48
27-Oct-2005	113,105.52	114,248.00	115,390.48
28-Oct-2005	113,065.92	114,208.00	115,350.08
31-Oct-2005	113,013.45	114,155.00	115,296.55
01-Nov-2005	113,071.86	114,214.00	115,356.14
02-Nov-2005	113,299.56	114,444.00	115,588.44
03-Nov-2005	113,428.26	114,574.00	115,719.74
07-Nov-2005	113,454.99	114,601.00	115,747.01
09-Nov-2005	114,022.26	115,174.00	116,325.74
08-Nov-2005	113,809.41	114,959.00	116,108.59
10-Nov-2005	114,022.26	115,174.00	116,325.74
11-Nov-2005	114,022.26	115,174.00	116,325.74
14-Nov-2005	115,323.12	116,488.00	117,652.88
15-Nov-2005	115,540.92	116,708.00	117,875.08
16-Nov-2005	115,827.03	116,997.00	118,166.97
12-Jun-2005	117,166.50	118,350.00	119,533.50
06-Dec-2005	117,166.50	118,350.00	119,533.50
02-Dec-2005	117,943.65	119,135.00	120,326.35
24-Nov-2005	118,407.96	119,604.00	120,800.04
25-Nov-2005	118,617.84	119,816.00	121,014.16
28-Nov-2005	118,639.62	119,838.00	121,036.38
30-Nov-2005	118,316.88	119,512.00	120,707.12
17-Nov-2005	116,410.14	117,586.00	118,761.86
18-Nov-2005	116,908.11	118,089.00	119,269.89
21-Nov-2005	116,908.11	118,089.00	119,269.89
22-Nov-2005	118,196.10	119,390.00	120,583.90
23-Nov-2005	118,329.75	119,525.00	120,720.25
07-Dec-2005	116,697.24	117,876.00	119,054.76
05-Dec-2005	117,492.21	118,679.00	119,865.79

Exchange Date	Spot Buying	Mean	Spot Selling
08-Dec-2005	116,142.84	117,316.00	118,489.16
12-Dec-2005	116,186.40	117,360.00	118,533.60
13-Dec-2005	116,252.73	117,427.00	118,601.27
15-Dec-2005	116,477.46	117,654.00	118,830.54
16-Dec-2005	115,865.64	117,036.00	118,206.36
20-Dec-2005	115,384.50	116,550.00	117,715.50
19-Dec-2005	115,434.00	116,600.00	117,766.00
21-Dec-2005	115,231.05	116,395.00	117,558.95
22-Dec-2005	115,087.50	116,250.00	117,412.50
23-Dec-2005	115,087.50	116,250.00	117,412.50
27-Dec-2005	115,330.05	116,495.00	117,659.95
28-Dec-2005	115,327.08	116,492.00	117,656.92
29-Dec-2005	115,319.16	116,484.00	117,648.84
30-Dec-2005	115,385.49	116,551.00	117,716.51
02-Jan-2006	115,443.90	116,610.00	117,776.10
03-Jan-2006	115,424.10	116,590.00	117,755.90
04-Jan-2006	115,712.19	116,881.00	118,049.81
05-Jan-2006	115,865.64	117,036.00	118,206.36
06-Jan-2006	116,066.61	117,239.00	118,411.39
09-Jan-2006	116,336.88	117,512.00	118,687.12
10-Jan-2006	116,790.30	117,970.00	119,149.70
13-Jan-2006	117,562.50	118,750.00	119,937.50
16-Jan-2006	117,785.25	118,975.00	120,164.75
17-Jan-2006	117,968.40	119,160.00	120,351.60
18-Jan-2006	117,016.02	118,198.00	119,379.98
19-Jan-2006	116,976.42	118,158.00	119,339.58
20-Jan-2006	116,275.50	117,450.00	118,624.50
23-Jan-2006	116,238.87	117,413.00	118,587.13
24-Jan-2006	116,016.12	117,188.00	118,359.88
25-Jan-2006	116,052.75	117,225.00	118,397.25
26-Jan-2006	115,995.33	117,167.00	118,338.67
27-Jan-2006	116,275.50	117,450.00	118,624.50
22-May-2006	123,611.40	124,860.00	126,108.60
23-May-2006	123,675.75	124,925.00	126,174.25
24-May-2006	124,033.14	125,286.00	126,538.86
25-May-2006	124,014.33	125,267.00	126,519.67
26-May-2006	124,617.24	125,876.00	127,134.76
29-May-2006	123,865.83	125,117.00	126,368.17
30-May-2006	123,791.58	125,042.00	126,292.42
31-May-2006	124,443.00	125,700.00	126,957.00
01-Jun-2006	123,776.73	125,027.00	126,277.27
02-Jun-2006	123,750.00	125,000.00	126,250.00
05-Jun-2006	123,621.30	124,870.00	126,118.70
07-Jun-2006	123,403.50	124,650.00	125,896.50
08-Jun-2006	123,552.00	124,800.00	126,048.00
09-Jun-2006	123,748.02	124,998.00	126,247.98
12-Jun-2006	124,047.00	125,300.00	126,553.00
13-Jun-2006	124,289.55	125,545.00	126,800.45

Exchange Date	Spot Buying	Mean	Spot Selling
14-Jun-2006	124,248.96	125,504.00	126,759.04
15-Jun-2006	124,566.75	125,825.00	127,083.25
16-Jun-2006	124,633.08	125,892.00	127,150.92
19-Jun-2006	124,524.18	125,782.00	127,039.82
06-Jun-2006	123,502.50	124,750.00	125,997.50
20-Jun-2006	124,452.90	125,710.00	126,967.10
21-Jun-2006	124,535.07	125,793.00	127,050.93
22-Jun-2006	124,376.67	125,633.00	126,889.33
23-Jun-2006	124,222.23	125,477.00	126,731.77
26-Jun-2006	124,195.50	125,450.00	126,704.50
27-Jun-2006	124,129.17	125,383.00	126,636.83
28-Jun-2006	124,235.10	125,490.00	126,744.90
29-Jun-2006	124,185.60	125,440.00	126,694.40
30-Jun-2006	124,054.92	125,308.00	126,561.08
03-Jul-2006	124,170.75	125,425.00	126,679.25
04-Jul-2006	123,999.48	125,252.00	126,504.52
05-Jul-2006	123,971.76	125,224.00	126,476.24
06-Jul-2006	124,237.08	125,492.00	126,746.92
10-Jul-2006	124,146.00	125,400.00	126,654.00
11-Jul-2006	124,247.97	125,503.00	126,758.03
12-Jul-2006	124,414.29	125,671.00	126,927.71
13-Jul-2006	124,542.00	125,800.00	127,058.00
14-Jul-2006	124,747.92	126,008.00	127,268.08
17-Jul-2006	125,092.44	126,356.00	127,619.56
18-Jul-2006	125,243.91	126,509.00	127,774.09
19-Jul-2006	125,474.58	126,742.00	128,009.42
20-Jul-2006	125,647.83	126,917.00	128,186.17
21-Jul-2006	125,764.65	127,035.00	128,305.35
24-Jul-2006	126,160.65	127,435.00	128,709.35
25-Jul-2006	126,569.52	127,848.00	129,126.48
26-Jul-2006	127,376.37	128,663.00	129,949.63
27-Jul-2006	127,759.50	129,050.00	130,340.50
28-Jul-2006	127,463.49	128,751.00	130,038.51
31-Jul-2006	127,499.13	128,787.00	130,074.87
01-Aug-2006	127,611.00	128,900.00	130,189.00
02-Aug-2006	127,318.95	128,605.00	129,891.05
03-Aug-2006	127,326.87	128,613.00	129,899.13
04-Aug-2006	127,391.22	128,678.00	129,964.78
07-Aug-2006	127,391.22	128,678.00	129,964.78
09-Aug-2006	127,332.81	128,619.00	129,905.19
10-Aug-2006	127,340.73	128,627.00	129,913.27
11-Aug-2006	127,387.26	128,674.00	129,960.74
14-Aug-2006	127,738.71	129,029.00	130,319.29
15-Aug-2006	128,018.88	129,312.00	130,605.12
16-Aug-2006	128,056.50	129,350.00	130,643.50
17-Aug-2006	128,264.40	129,560.00	130,855.60
18-Aug-2006	128,892.06	130,194.00	131,495.94
21-Aug-2006	128,964.33	130,267.00	131,569.67

Exchange Date	Spot Buying	Mean	Spot Selling
22-Aug-2006	129,554.37	130,863.00	132,171.63
23-Aug-2006	130,010.76	131,324.00	132,637.24
24-Aug-2006	129,693.96	131,004.00	132,314.04
25-Aug-2006	129,992.94	131,306.00	132,619.06
28-Aug-2006	129,992.94	131,306.00	132,619.06
29-Aug-2006	130,523.58	131,842.00	133,160.42
30-Aug-2006	131,020.56	132,344.00	133,667.44
31-Aug-2006	130,680.00	132,000.00	133,320.00
01-Sep-2006	130,704.75	132,025.00	133,345.25
04-Sep-2006	131,695.74	133,026.00	134,356.26
05-Sep-2006	132,093.72	133,428.00	134,762.28
06-Sep-2006	131,630.40	132,960.00	134,289.60
07-Sep-2006	132,184.80	133,520.00	134,855.20
08-Sep-2006	132,208.56	133,544.00	134,879.44
11-Sep-2006	132,498.63	133,837.00	135,175.37
12-Sep-2006	132,213.51	133,549.00	134,884.49
13-Sep-2006	132,764.94	134,106.00	135,447.06
14-Sep-2006	132,301.62	133,638.00	134,974.38
15-Sep-2006	132,238.26	133,574.00	134,909.74
18-Sep-2006	132,165.00	133,500.00	134,835.00
19-Sep-2006	132,048.18	133,382.00	134,715.82
20-Sep-2006	131,273.01	132,599.00	133,924.99
21-Sep-2006	130,393.89	131,711.00	133,028.11
22-Sep-2006	128,875.23	130,177.00	131,478.77
25-Sep-2006	127,484.28	128,772.00	130,059.72
26-Sep-2006	125,190.45	126,455.00	127,719.55
27-Sep-2006	122,306.58	123,542.00	124,777.42
28-Sep-2006	121,583.88	122,812.00	124,040.12
29-Sep-2006	125,997.30	127,270.00	128,542.70
02-Oct-2006	126,011.16	127,284.00	128,556.84
03-Oct-2006	128,196.09	129,491.00	130,785.91
04-Oct-2006	126,225.00	127,500.00	128,775.00
05-Oct-2006	126,602.19	127,881.00	129,159.81
06-Oct-2006	125,704.26	126,974.00	128,243.74
09-Oct-2006	123,920.28	125,172.00	126,423.72
10-Oct-2006	123,778.71	125,029.00	126,279.29
11-Oct-2006	123,553.98	124,802.00	126,050.02
12-Oct-2006	123,905.43	125,157.00	126,408.57
13-Oct-2006	124,414.29	125,671.00	126,927.71
16-Oct-2006	124,380.63	125,637.00	126,893.37
17-Oct-2006	125,089.47	126,353.00	127,616.53
18-Oct-2006	125,042.94	126,306.00	127,569.06
19-Oct-2006	125,051.85	126,315.00	127,578.15
20-Oct-2006	125,185.50	126,450.00	127,714.50
23-Oct-2006	126,299.25	127,575.00	128,850.75
26-Oct-2006	126,230.94	127,506.00	128,781.06
27-Oct-2006	126,570.51	127,849.00	129,127.49
30-Oct-2006	127,422.90	128,710.00	129,997.10

Exchange Date	Spot Buying	Mean	Spot Selling
31-Oct-2006	127,426.86	128,714.00	130,001.14
01-Nov-2006	128,210.94	129,506.00	130,801.06
02-Nov-2006	128,091.15	129,385.00	130,678.85
03-Nov-2006	128,458.44	129,756.00	131,053.56
06-Nov-2006	128,033.73	129,327.00	130,620.27
07-Nov-2006	128,254.50	129,550.00	130,845.50
08-Nov-2006	128,322.81	129,619.00	130,915.19
09-Nov-2006	128,960.37	130,263.00	131,565.63
10-Nov-2006	128,568.33	129,867.00	131,165.67
13-Nov-2006	128,997.00	130,300.00	131,603.00
14-Nov-2006	129,276.18	130,582.00	131,887.82
15-Nov-2006	129,858.30	131,170.00	132,481.70
16-Nov-2006	129,888.00	131,200.00	132,512.00
17-Nov-2006	130,030.56	131,344.00	132,657.44
20-Nov-2006	129,597.93	130,907.00	132,216.07
21-Nov-2006	129,676.14	130,986.00	132,295.86
22-Nov-2006	129,619.71	130,929.00	132,238.29
23-Nov-2006	129,224.70	130,530.00	131,835.30
24-Nov-2006	128,725.74	130,026.00	131,326.26
27-Nov-2006	128,829.69	130,131.00	131,432.31
28-Nov-2006	128,590.11	129,889.00	131,187.89
29-Nov-2006	128,403.00	129,700.00	130,997.00
30-Nov-2006	127,743.66	129,034.00	130,324.34
01-Dec-2006	126,906.12	128,188.00	129,469.88
04-Dec-2006	126,921.96	128,204.00	129,486.04
05-Dec-2006	126,822.96	128,104.00	129,385.04
06-Dec-2006	126,754.65	128,035.00	129,315.35
07-Dec-2006	126,589.32	127,868.00	129,146.68
08-Dec-2006	126,453.69	127,731.00	129,008.31
11-Dec-2006	126,489.33	127,767.00	129,044.67
12-Dec-2006	126,687.33	127,967.00	129,246.67
13-Dec-2006	126,871.47	128,153.00	129,434.53
14-Dec-2006	127,225.89	128,511.00	129,796.11
15-Dec-2006	127,236.78	128,522.00	129,807.22
18-Dec-2006	127,250.64	128,536.00	129,821.36
19-Dec-2006	126,257.67	127,533.00	128,808.33
20-Dec-2006	125,543.88	126,812.00	128,080.12
21-Dec-2006	125,518.14	126,786.00	128,053.86
22-Dec-2006	124,805.34	126,066.00	127,326.66
27-Dec-2006	124,573.68	125,832.00	127,090.32
28-Dec-2006	124,859.79	126,121.00	127,382.21
29-Dec-2006	124,902.36	126,164.00	127,425.64

Source: Bank of Tanzania, Exchange Rates Report

Appendix 3: EUR / TZS Exchange Rates from the Year 2001 to 2006

Exchange Date	Spot Buying	Mean	Spot Selling
02-Jan-2001	74,681.66	75,456.31	76,230.95
03-Jan-2001	75,602.27	76,386.21	77,170.15
04-Jan-2001	74,004.78	74,768.53	75,532.28
05-Jan-2001	76,113.11	76,902.21	77,691.31
08-Jan-2001	76,019.19	76,803.29	77,587.39
09-Jan-2001	75,107.35	75,882.24	76,657.12
10-Jan-2001	74,908.94	75,685.88	76,462.83
11-Jan-2001	74,758.22	75,533.64	76,309.07
15-Jan-2001	75,381.57	76,163.29	76,945.01
16-Jan-2001	74,869.86	75,654.54	76,439.23
17-Jan-2001	74,992.99	75,770.83	76,548.66
18-Jan-2001	74,744.52	75,519.85	76,295.19
19-Jan-2001	75,607.56	76,391.64	77,175.72
22-Jan-2001	74,652.75	75,435.32	76,217.90
23-Jan-2001	75,339.39	76,120.76	76,902.13
24-Jan-2001	74,732.59	75,515.97	76,299.36
25-Jan-2001	73,589.44	74,373.52	75,157.60
26-Jan-2001	73,765.21	74,538.84	75,312.47
29-Jan-2001	73,913.53	74,688.71	75,463.88
30-Jan-2001	74,681.66	75,456.31	76,230.95
31-Jan-2001	74,242.16	75,012.52	75,782.88
01-Feb-2001	75,479.69	76,283.07	77,086.44
02-Feb-2001	75,307.48	76,096.86	76,886.25
05-Feb-2001	75,605.50	76,389.73	77,173.96
06-Feb-2001	75,480.91	76,272.11	77,063.32
07-Feb-2001	75,489.26	76,280.55	77,071.84
08-Feb-2001	74,775.75	75,551.61	76,327.48
09-Feb-2001	74,019.27	74,795.72	75,572.17
12-Feb-2001	74,801.05	75,577.18	76,353.30
13-Feb-2001	74,946.58	75,724.17	76,501.77
14-Feb-2001	74,188.94	74,967.12	75,745.29
15-Feb-2001	74,119.72	74,889.00	75,658.28
16-Feb-2001	73,147.25	73,906.69	74,666.14
19-Feb-2001	73,721.88	74,487.13	75,252.37
20-Feb-2001	74,545.65	75,327.48	76,109.31
21-Feb-2001	73,477.71	74,240.54	75,003.36
22-Feb-2001	73,496.56	74,259.60	75,022.65
23-Feb-2001	73,309.75	74,091.62	74,873.49
26-Feb-2001	74,526.18	75,307.92	76,089.67
27-Feb-2001	74,165.27	74,935.16	75,705.04
28-Feb-2001	74,566.66	75,340.62	76,114.57
01-Mar-2001	75,197.85	75,986.48	76,775.11
02-Mar-2001	76,002.06	76,786.43	77,570.80
05-Mar-2001	76,191.75	76,982.21	77,772.67
07-Mar-2001	76,477.79	77,271.13	78,064.48
08-Mar-2001	76,115.58	76,901.11	77,686.65

Exchange Date	Spot Buying	Mean	Spot Selling
09-Mar-2001	76,374.83	77,163.00	77,951.17
12-Mar-2001	76,455.74	77,248.92	78,042.10
13-Mar-2001	76,072.77	76,857.91	77,643.05
14-Mar-2001	75,040.17	75,827.46	76,614.75
15-Mar-2001	74,804.27	75,601.77	76,399.27
16-Mar-2001	73,753.98	74,519.95	75,285.91
19-Mar-2001	73,853.42	74,620.42	75,387.41
20-Mar-2001	74,197.80	74,968.30	75,738.80
21-Mar-2001	75,147.06	75,927.19	76,707.32
22-Mar-2001	74,096.23	74,874.20	75,652.18
23-Mar-2001	73,620.82	74,385.64	75,150.46
26-Mar-2001	74,447.74	75,221.03	75,994.32
27-Mar-2001	75,475.54	76,268.02	77,060.51
28-Mar-2001	75,437.39	76,220.92	77,004.45
29-Mar-2001	75,145.44	75,926.10	76,706.77
30-Mar-2001	74,834.77	75,612.39	76,390.01
02-Apr-2001	75,110.49	75,891.04	76,671.59
03-Apr-2001	76,071.33	76,861.73	77,652.12
04-Apr-2001	77,687.36	78,503.05	79,318.73
05-Apr-2001	78,982.99	79,811.91	80,640.82
06-Apr-2001	78,041.52	78,852.04	79,662.56
09-Apr-2001	79,090.95	79,912.20	80,733.44
10-Apr-2001	78,681.85	79,494.53	80,307.20
11-Apr-2001	78,115.83	78,927.28	79,738.72
12-Apr-2001	78,077.25	78,883.83	79,690.42
17-Apr-2001	77,883.89	78,688.53	79,493.18
18-Apr-2001	77,433.76	78,247.31	79,060.86
19-Apr-2001	77,913.76	78,732.16	79,550.56
20-Apr-2001	78,819.56	79,633.66	80,447.77
23-Apr-2001	79,770.99	80,599.21	81,427.43
24-Apr-2001	78,979.69	79,799.92	80,620.15
25-Apr-2001	78,617.00	79,429.08	80,241.17
27-Apr-2001	79,555.28	80,381.34	81,207.40
30-Apr-2001	78,461.02	79,276.02	80,091.01
02-May-2001	78,678.39	79,491.08	80,303.77
03-May-2001	78,753.83	79,571.77	80,389.70
04-May-2001	78,259.32	79,072.25	79,885.17
07-May-2001	78,476.34	79,282.48	80,088.63
08-May-2001	78,273.27	79,095.29	79,917.31
09-May-2001	77,674.75	78,490.73	79,306.70
10-May-2001	77,875.14	78,684.17	79,493.20
11-May-2001	77,461.74	78,266.61	79,071.48
14-May-2001	76,949.12	77,748.81	78,548.50
15-May-2001	76,847.64	77,646.31	78,444.98
16-May-2001	76,988.37	77,788.46	78,588.56
17-May-2001	77,889.81	78,708.00	79,526.18
18-May-2001	77,638.13	78,444.80	79,251.46
21-May-2001	77,524.61	78,330.13	79,135.65

Exchange Date	Spot Buying	Mean	Spot Selling
22-May-2001	76,901.57	77,700.79	78,500.02
23-May-2001	76,129.75	76,921.18	77,712.62
24-May-2001	75,333.18	76,116.57	76,899.95
25-May-2001	75,472.51	76,257.31	77,042.11
28-May-2001	75,605.40	76,391.54	77,177.69
29-May-2001	75,571.04	76,356.84	77,142.63
30-May-2001	75,442.40	76,226.89	77,011.39
31-May-2001	75,125.48	75,906.78	76,688.08
01-Jun-2001	74,504.66	75,270.70	76,036.74
04-Jun-2001	74,971.24	75,746.49	76,521.74
06-Jun-2001	74,997.66	75,777.66	76,557.67
07-Jun-2001	74,515.97	75,286.62	76,057.27
08-Jun-2001	74,639.23	75,415.61	76,192.00
11-Jun-2001	74,922.64	75,692.90	76,463.17
12-Jun-2001	74,240.09	75,012.45	75,784.80
13-Jun-2001	75,019.95	75,800.19	76,580.42
14-Jun-2001	75,278.18	76,083.48	76,888.78
15-Jun-2001	75,912.96	76,702.21	77,491.47
18-Jun-2001	75,983.40	76,773.36	77,563.33
19-Jun-2001	75,618.76	76,405.03	77,191.31
20-Jun-2001	75,096.05	75,863.58	76,631.10
21-Jun-2001	75,252.79	76,035.37	76,817.95
22-Jun-2001	75,136.68	75,918.09	76,699.49
25-Jun-2001	75,628.70	76,415.08	77,201.45
26-Jun-2001	75,803.87	76,592.02	77,380.16
27-Jun-2001	75,891.89	76,676.43	77,460.97
28-Jun-2001	75,757.01	76,544.68	77,332.34
29-Jun-2001	74,296.94	75,069.84	75,842.73
02-Jul-2001	74,643.48	75,419.87	76,196.26
03-Jul-2001	74,475.56	75,250.24	76,024.93
04-Jul-2001	74,342.05	75,137.76	75,933.48
05-Jul-2001	74,128.40	74,921.95	75,715.50
09-Jul-2001	74,198.44	74,970.26	75,742.07
10-Jul-2001	74,409.95	75,170.50	75,931.05
11-Jul-2001	74,786.55	75,564.31	76,342.07
12-Jul-2001	75,041.40	75,821.74	76,602.08
13-Jul-2001	74,705.33	75,482.31	76,259.28
16-Jul-2001	75,164.76	75,946.42	76,728.08
17-Jul-2001	74,892.84	75,671.76	76,450.68
18-Jul-2001	75,666.75	76,453.51	77,240.26
19-Jul-2001	76,739.90	77,528.52	78,317.15
20-Jul-2001	76,815.34	77,631.70	78,448.06
23-Jul-2001	76,740.46	77,538.09	78,335.73
24-Jul-2001	76,728.93	77,512.97	78,297.01
25-Jul-2001	77,131.35	77,932.97	78,734.59
26-Jul-2001	77,773.26	78,603.92	79,434.57
30-Jul-2001	77,303.08	78,106.47	78,909.86
27-Jul-2001	77,678.01	78,480.68	79,283.34

Exchange Date	Spot Buying	Mean	Spot Selling
31-Jul-2001	77,363.06	78,167.04	78,971.02
01-Aug-2001	77,581.23	78,378.37	79,175.51
02-Aug-2001	77,730.64	78,560.74	79,390.85
03-Aug-2001	77,607.29	78,436.15	79,265.00
06-Aug-2001	77,554.42	78,360.27	79,166.12
07-Aug-2001	77,554.42	78,342.29	79,130.17
09-Aug-2001	77,616.10	78,422.57	79,229.05
10-Aug-2001	78,561.54	79,377.57	80,193.59
13-Aug-2001	78,766.03	79,584.12	80,402.22
14-Aug-2001	79,075.52	79,896.75	80,717.97
15-Aug-2001	79,660.92	80,488.07	81,315.21
16-Aug-2001	80,650.12	81,487.26	82,324.39
17-Aug-2001	80,406.61	81,241.29	82,075.97
20-Aug-2001	80,821.12	81,686.98	82,552.84
21-Aug-2001	80,490.71	81,308.25	82,125.79
22-Aug-2001	80,808.26	81,647.01	82,485.75
23-Aug-2001	80,586.38	81,422.88	82,259.39
24-Aug-2001	80,806.76	81,645.50	82,484.24
27-Aug-2001	80,411.61	81,246.36	82,081.11
28-Aug-2001	80,199.20	81,054.33	81,909.46
29-Aug-2001	80,581.05	81,440.05	82,299.04
30-Aug-2001	80,144.90	80,976.97	81,809.04
31-Aug-2001	81,135.96	81,960.03	82,784.09
03-Sep-2001	80,278.93	81,112.36	81,945.79
04-Sep-2001	79,757.63	80,585.80	81,413.97
05-Sep-2001	78,346.60	79,160.51	79,974.43
06-Sep-2001	78,502.08	79,317.57	80,133.05
07-Sep-2001	79,077.33	79,903.13	80,728.94
10-Sep-2001	80,175.74	81,008.14	81,840.53
11-Sep-2001	79,362.76	80,186.94	81,011.13
12-Sep-2001	80,477.81	81,313.26	82,148.70
13-Sep-2001	80,062.52	80,893.77	81,725.02
14-Sep-2001	80,263.95	81,097.24	81,930.52
17-Sep-2001	81,742.96	82,591.16	83,439.36
18-Sep-2001	81,283.92	82,113.98	82,944.04
19-Sep-2001	81,692.07	82,526.24	83,360.42
20-Sep-2001	81,785.48	82,629.61	83,473.73
21-Sep-2001	81,261.13	82,104.46	82,947.79
24-Sep-2001	80,624.83	81,461.73	82,298.63
25-Sep-2001	80,845.45	81,684.58	82,523.71
26-Sep-2001	81,528.63	82,374.66	83,220.69
27-Sep-2001	81,279.99	82,123.51	82,967.03
28-Sep-2001	80,541.35	81,377.37	82,213.39
01-Oct-2001	80,244.63	81,077.68	81,910.73
02-Oct-2001	80,905.29	81,745.02	82,584.74
04-Oct-2001	81,313.19	82,157.03	83,000.88
05-Oct-2001	81,091.54	81,933.16	82,774.78
08-Oct-2001	81,205.35	82,048.15	82,890.94

Exchange Date	Spot Buying	Mean	Spot Selling
09-Oct-2001	81,411.34	82,256.24	83,101.14
10-Oct-2001	80,885.83	81,707.37	82,528.92
11-Oct-2001	80,660.12	81,520.04	82,379.97
12-Oct-2001	79,868.61	80,697.96	81,527.32
15-Oct-2001	80,960.88	81,801.29	82,641.69
16-Oct-2001	80,556.19	81,374.42	82,192.65
17-Oct-2001	80,755.74	81,594.15	82,432.56
18-Oct-2001	80,355.47	81,189.84	82,024.21
19-Oct-2001	80,337.70	81,171.89	82,006.09
22-Oct-2001	79,985.07	80,815.73	81,646.38
23-Oct-2001	79,458.95	80,284.30	81,109.66
24-Oct-2001	79,440.63	80,265.81	81,090.99
25-Oct-2001	79,725.69	80,553.76	81,381.83
26-Oct-2001	79,805.62	80,634.52	81,463.41
29-Oct-2001	79,866.04	80,700.11	81,534.18
30-Oct-2001	80,886.41	81,726.24	82,566.08
31-Oct-2001	81,147.82	81,990.32	82,832.82
01-Nov-2001	80,617.81	81,454.97	82,292.13
02-Nov-2001	80,958.04	81,798.65	82,639.26
05-Nov-2001	80,538.18	81,356.27	82,174.36
06-Nov-2001	80,501.70	81,337.73	82,173.77
08-Nov-2001	80,641.43	81,478.93	82,316.43
07-Nov-2001	80,525.83	81,362.14	82,198.45
09-Nov-2001	80,261.18	81,094.88	81,928.57
12-Nov-2001	80,601.03	81,438.20	82,275.36
13-Nov-2001	80,456.65	81,306.16	82,155.68
14-Nov-2001	79,776.18	80,600.46	81,424.75
15-Nov-2001	79,943.01	80,773.62	81,604.23
16-Nov-2001	80,059.20	80,891.00	81,722.79
19-Nov-2001	80,052.45	80,884.21	81,715.98
20-Nov-2001	79,798.26	80,627.45	81,456.65
21-Nov-2001	80,014.04	80,845.42	81,676.80
22-Nov-2001	79,626.24	80,453.70	81,281.17
23-Nov-2001	79,805.71	80,634.99	81,464.27
26-Nov-2001	79,725.34	80,553.81	81,382.28
27-Nov-2001	80,106.93	80,939.26	81,771.58
28-Nov-2001	80,294.93	81,143.07	81,991.20
29-Nov-2001	80,587.08	81,438.19	82,289.29
30-Nov-2001	80,614.29	81,451.76	82,289.24
03-Dec-2001	81,342.72	82,187.54	83,032.36
04-Dec-2001	80,830.01	81,669.63	82,509.26
05-Dec-2001	80,770.52	81,609.53	82,448.55
06-Dec-2001	80,508.12	81,344.49	82,180.86
07-Dec-2001	81,105.30	81,956.96	82,808.63
10-Dec-2001	80,752.09	81,590.92	82,429.76
11-Dec-2001	80,880.96	81,721.10	82,561.23
12-Dec-2001	81,389.62	82,234.89	83,080.17
13-Dec-2001	81,562.12	82,418.39	83,274.67

Exchange Date	Spot Buying	Mean	Spot Selling
14-Dec-2001	81,213.14	82,070.51	82,927.88
19-Dec-2001	81,729.01	82,600.85	83,472.68
20-Dec-2001	81,556.61	82,403.56	83,250.50
21-Dec-2001	81,717.26	82,565.83	83,414.40
24-Dec-2001	80,545.57	81,363.79	82,182.01
27-Dec-2001	79,764.56	80,574.89	81,385.22
28-Dec-2001	80,100.20	80,932.43	81,764.66
31-Dec-2001	80,381.41	81,202.60	82,023.79
02-Jan-2002	80,993.42	81,843.91	82,694.41
03-Jan-2002	82,105.19	82,943.79	83,782.38
04-Jan-2002	81,523.69	82,370.29	83,216.90
07-Jan-2002	81,364.86	82,191.36	83,017.85
08-Jan-2002	80,813.94	81,653.38	82,492.82
09-Jan-2002	80,992.49	81,833.74	82,674.99
10-Jan-2002	80,919.55	81,760.08	82,600.60
11-Jan-2002	80,964.19	81,805.17	82,646.15
14-Jan-2002	81,236.61	82,080.35	82,924.08
15-Jan-2002	81,203.07	82,046.48	82,889.89
16-Jan-2002	80,273.18	81,097.95	81,922.72
17-Jan-2002	80,414.04	81,272.84	82,131.64
18-Jan-2002	80,675.37	81,504.30	82,333.22
21-Jan-2002	81,158.99	82,002.16	82,845.33
22-Jan-2002	81,329.93	82,156.14	82,982.36
23-Jan-2002	81,827.64	82,677.69	83,527.74
24-Jan-2002	81,275.59	82,115.47	82,955.34
25-Jan-2002	82,118.93	82,996.18	83,873.43
28-Jan-2002	80,095.98	80,919.20	81,742.41
29-Jan-2002	79,839.46	80,669.52	81,499.58
30-Jan-2002	80,124.26	80,957.21	81,790.15
31-Jan-2002	79,922.70	80,739.45	81,556.21
01-Feb-2002	79,635.44	80,472.93	81,310.41
04-Feb-2002	79,927.57	80,758.57	81,589.57
05-Feb-2002	80,665.55	81,494.56	82,323.56
06-Feb-2002	80,912.51	81,753.62	82,594.73
07-Feb-2002	81,169.92	81,994.60	82,819.27
08-Feb-2002	81,544.54	82,392.11	83,239.68
11-Feb-2002	81,928.47	82,803.91	83,679.34
12-Feb-2002	82,440.90	83,321.61	84,202.33
13-Feb-2002	82,500.30	83,362.51	84,224.71
14-Feb-2002	82,328.58	83,198.72	84,068.87
15-Feb-2002	82,688.34	83,542.92	84,397.49
18-Feb-2002	83,131.55	83,995.55	84,859.55
19-Feb-2002	82,936.18	83,812.83	84,689.48
20-Feb-2002	84,189.50	85,064.39	85,939.28
21-Feb-2002	83,613.32	84,462.80	85,312.28
25-Feb-2002	83,784.99	84,655.75	85,526.50
26-Feb-2002	83,577.83	84,446.56	85,315.28
27-Feb-2002	83,079.94	83,943.64	84,807.34

Exchange Date	Spot Buying	Mean	Spot Selling
28-Feb-2002	83,051.12	83,914.53	84,777.93
01-Mar-2002	83,368.18	84,234.79	85,101.40
05-Mar-2002	83,546.57	84,414.97	85,283.38
04-Mar-2002	83,135.02	83,999.27	84,863.53
06-Mar-2002	83,413.79	84,280.80	85,147.81
07-Mar-2002	83,716.46	84,586.42	85,456.38
08-Mar-2002	83,479.93	84,347.35	85,214.77
11-Mar-2002	82,977.27	83,820.26	84,663.25
12-Mar-2002	83,311.60	84,177.43	85,043.26
13-Mar-2002	83,455.16	84,346.86	85,238.55
14-Mar-2002	83,851.89	84,737.91	85,623.92
15-Mar-2002	84,492.90	85,395.18	86,297.45
18-Mar-2002	84,198.03	85,072.93	85,947.82
19-Mar-2002	84,482.63	85,360.40	86,238.18
20-Mar-2002	84,433.97	85,311.27	86,188.56
21-Mar-2002	84,895.43	85,777.43	86,659.42
22-Mar-2002	84,780.53	85,661.42	86,542.31
25-Mar-2002	84,518.61	85,396.94	86,275.27
26-Mar-2002	84,813.28	85,684.78	86,556.28
27-Mar-2002	84,843.22	85,724.94	86,606.66
28-Mar-2002	84,828.52	85,710.15	86,591.78
02-Apr-2002	85,447.51	86,335.39	87,223.28
03-Apr-2002	85,363.96	86,246.06	87,128.15
04-Apr-2002	85,587.50	86,476.81	87,366.12
05-Apr-2002	85,343.50	86,255.13	87,166.77
08-Apr-2002	85,156.19	86,041.10	86,926.01
09-Apr-2002	84,725.04	85,605.58	86,486.11
10-Apr-2002	85,442.75	86,315.70	87,188.64
11-Apr-2002	85,309.69	86,196.15	87,082.60
12-Apr-2002	85,351.11	86,262.73	87,174.35
15-Apr-2002	85,531.75	86,420.46	87,309.17
16-Apr-2002	85,447.90	86,335.76	87,223.63
17-Apr-2002	85,740.44	86,631.26	87,522.09
18-Apr-2002	86,503.89	87,382.62	88,261.35
19-Apr-2002	86,616.02	87,515.70	88,415.39
22-Apr-2002	86,432.32	87,330.15	88,227.98
23-Apr-2002	86,235.52	87,156.12	88,076.72
24-Apr-2002	85,888.27	86,780.49	87,672.72
25-Apr-2002	85,658.76	86,548.49	87,438.23
29-Apr-2002	86,204.10	87,099.24	87,994.39
30-Apr-2002	86,441.10	87,328.88	88,216.66
02-May-2002	86,691.32	87,615.78	88,540.23
03-May-2002	86,478.56	87,376.51	88,274.45
06-May-2002	87,924.53	88,837.15	89,749.77
07-May-2002	88,425.99	89,343.76	90,261.53
08-May-2002	88,186.44	89,101.83	90,017.23
09-May-2002	87,740.95	88,651.95	89,562.94
10-May-2002	88,996.71	89,920.55	90,844.39

Exchange Date	Spot Buying	Mean	Spot Selling
13-May-2002	89,443.99	90,352.46	91,260.92
14-May-2002	89,393.26	90,321.29	91,249.33
15-May-2002	88,820.36	89,757.80	90,695.24
16-May-2002	89,918.43	90,851.87	91,785.32
17-May-2002	90,326.17	91,248.64	92,171.11
20-May-2002	91,143.17	92,089.06	93,034.95
21-May-2002	90,787.08	91,754.60	92,722.12
22-May-2002	91,327.07	92,274.78	93,222.49
23-May-2002	90,862.61	91,830.55	92,798.48
24-May-2002	89,485.15	90,413.85	91,342.56
27-May-2002	89,336.02	90,263.15	91,190.27
28-May-2002	88,955.51	89,903.35	90,851.19
29-May-2002	89,145.98	90,070.93	90,995.89
30-May-2002	89,458.97	90,386.97	91,314.96
31-May-2002	89,186.38	90,135.71	91,085.04
03-Jun-2002	88,188.48	89,103.43	90,018.37
04-Jun-2002	89,188.36	90,137.55	91,086.73
05-Jun-2002	89,651.77	90,605.94	91,560.11
06-Jun-2002	89,207.43	90,157.06	91,106.68
07-Jun-2002	90,625.94	91,590.18	92,554.42
10-Jun-2002	90,297.01	91,214.00	92,130.99
11-Jun-2002	91,011.71	91,980.17	92,948.64
12-Jun-2002	91,317.30	92,254.45	93,191.60
13-Jun-2002	90,594.95	91,519.86	92,444.76
14-Jun-2002	90,640.03	91,604.63	92,569.22
17-Jun-2002	90,795.13	91,761.26	92,727.39
18-Jun-2002	90,473.16	91,435.80	92,398.44
19-Jun-2002	90,394.13	91,331.38	92,268.63
20-Jun-2002	90,098.76	91,047.27	91,995.78
21-Jun-2002	90,161.25	91,119.61	92,077.97
24-Jun-2002	90,501.12	91,439.06	92,377.00
25-Jun-2002	90,076.45	91,033.66	91,990.87
26-Jun-2002	92,054.14	93,007.78	93,961.43
27-Jun-2002	92,298.16	93,278.25	94,258.34
28-Jun-2002	92,658.62	93,618.47	94,578.33
01-Jul-2002	93,133.77	94,122.33	95,110.90
02-Jul-2002	92,187.53	93,156.94	94,126.34
03-Jul-2002	91,898.21	92,850.31	93,802.41
04-Jul-2002	90,655.45	91,585.38	92,515.32
05-Jul-2002	90,355.12	91,315.07	92,275.02
08-Jul-2002	91,216.45	92,161.44	93,106.42
09-Jul-2002	91,544.21	92,492.53	93,440.85
10-Jul-2002	91,835.75	92,810.69	93,785.62
11-Jul-2002	91,940.37	92,883.30	93,826.23
12-Jul-2002	92,201.46	93,156.63	94,111.80
15-Jul-2002	93,470.50	94,438.63	95,406.76
16-Jul-2002	95,107.22	96,082.33	97,057.45
17-Jul-2002	95,695.17	96,676.25	97,657.33

Exchange Date	Spot Buying	Mean	Spot Selling
18-Jul-2002	95,344.64	96,331.83	97,319.02
19-Jul-2002	96,113.25	97,108.21	98,103.17
22-Jul-2002	95,438.86	96,427.01	97,415.17
23-Jul-2002	94,279.38	95,246.17	96,212.96
24-Jul-2002	93,752.88	94,724.00	95,695.12
25-Jul-2002	94,478.82	95,447.62	96,416.42
26-Jul-2002	94,686.82	95,657.72	96,628.62
29-Jul-2002	93,156.65	94,121.72	95,086.78
30-Jul-2002	92,359.69	93,307.03	94,254.37
31-Jul-2002	92,694.23	93,654.57	94,614.91
01-Aug-2002	92,412.02	93,384.00	94,355.99
02-Aug-2002	93,398.53	94,366.10	95,333.67
05-Aug-2002	93,429.93	94,388.21	95,346.49
06-Aug-2002	93,009.02	93,972.77	94,936.52
07-Aug-2002	92,293.10	93,274.01	94,254.92
09-Aug-2002	92,618.75	93,593.34	94,567.93
12-Aug-2002	92,618.75	93,593.34	94,567.93
13-Aug-2002	94,275.54	95,252.40	96,229.26
14-Aug-2002	95,307.03	96,284.49	97,261.95
15-Aug-2002	94,269.23	95,270.69	96,272.15
16-Aug-2002	94,705.90	95,687.17	96,668.43
19-Aug-2002	95,193.48	96,179.67	97,165.85
20-Aug-2002	94,205.52	95,181.73	96,157.94
21-Aug-2002	94,921.06	95,894.63	96,868.21
22-Aug-2002	93,866.50	94,853.83	95,841.17
23-Aug-2002	92,514.46	93,473.35	94,432.24
26-Aug-2002	92,634.78	93,619.16	94,603.53
27-Aug-2002	93,156.16	94,111.74	95,067.32
28-Aug-2002	93,660.98	94,621.64	95,582.31
29-Aug-2002	93,497.47	94,466.17	95,434.87
30-Aug-2002	94,169.46	95,135.29	96,101.12
02-Sep-2002	93,768.17	94,739.71	95,711.26
03-Sep-2002	94,374.71	95,376.88	96,379.05
04-Sep-2002	95,607.47	96,622.19	97,636.90
05-Sep-2002	95,611.37	96,601.69	97,592.00
06-Sep-2002	95,836.00	96,828.65	97,821.29
09-Sep-2002	94,809.41	95,816.37	96,823.33
10-Sep-2002	94,956.30	95,930.24	96,904.18
11-Sep-2002	94,135.94	95,136.09	96,136.25
12-Sep-2002	94,094.18	95,069.20	96,044.22
17-Sep-2002	92,979.60	93,943.36	94,907.11
16-Sep-2002	93,353.64	94,311.34	95,269.03
18-Sep-2002	93,934.35	94,897.94	95,861.53
19-Sep-2002	94,395.79	95,373.91	96,352.04
20-Sep-2002	95,356.85	96,334.86	97,312.87
23-Sep-2002	94,990.95	95,975.14	96,959.33
24-Sep-2002	94,637.70	95,608.44	96,579.18
25-Sep-2002	94,927.24	95,900.89	96,874.54

Exchange Date	Spot Buying	Mean	Spot Selling
26-Sep-2002	94,403.49	95,406.32	96,409.15
27-Sep-2002	94,179.00	95,145.04	96,111.09
30-Sep-2002	94,439.94	95,408.57	96,377.19
01-Oct-2002	94,848.11	95,820.87	96,793.62
02-Oct-2002	94,499.58	95,503.20	96,506.82
03-Oct-2002	95,241.56	96,218.37	97,195.18
04-Oct-2002	95,327.18	96,329.54	97,331.91
07-Oct-2002	94,517.64	95,521.66	96,525.68
08-Oct-2002	95,060.86	96,045.72	97,030.59
09-Oct-2002	94,612.31	95,582.78	96,553.25
10-Oct-2002	95,524.44	96,513.98	97,503.52
11-Oct-2002	95,302.20	96,289.50	97,276.79
15-Oct-2002	95,392.00	96,380.18	97,368.36
16-Oct-2002	94,874.35	95,857.33	96,840.31
17-Oct-2002	95,015.97	96,000.40	96,984.83
18-Oct-2002	94,097.20	95,072.38	96,047.56
21-Oct-2002	94,335.58	95,313.21	96,290.83
22-Oct-2002	94,451.59	95,430.40	96,409.21
23-Oct-2002	94,904.61	95,902.88	96,901.15
24-Oct-2002	94,646.96	95,627.73	96,608.50
25-Oct-2002	94,868.21	95,841.31	96,814.40
28-Oct-2002	94,584.64	95,579.64	96,574.65
29-Oct-2002	95,459.22	96,472.99	97,486.76
30-Oct-2002	95,516.65	96,496.34	97,476.02
31-Oct-2002	95,855.15	96,848.14	97,841.14
04-Nov-2002	96,623.20	97,623.94	98,624.68
01-Nov-2002	95,993.61	96,978.08	97,962.54
05-Nov-2002	96,953.25	97,972.21	98,991.18
06-Nov-2002	97,112.18	98,117.93	99,123.67
07-Nov-2002	97,848.81	98,876.94	99,905.07
08-Nov-2002	98,271.70	99,289.21	100,306.71
11-Nov-2002	98,848.15	99,871.51	100,894.86
12-Nov-2002	98,541.78	99,562.07	100,582.37
13-Nov-2002	98,810.86	99,833.88	100,856.90
14-Nov-2002	98,344.99	99,363.32	100,381.65
15-Nov-2002	98,158.91	99,175.37	100,191.84
18-Nov-2002	98,776.19	99,798.89	100,821.58
19-Nov-2002	98,727.47	99,754.67	100,781.87
20-Nov-2002	98,123.60	99,139.70	100,155.81
21-Nov-2002	97,837.38	98,875.53	99,913.68
22-Nov-2002	98,036.39	99,051.59	100,066.79
25-Nov-2002	97,143.31	98,149.48	99,155.64
26-Nov-2002	96,739.13	97,741.18	98,743.22
27-Nov-2002	96,886.46	97,890.00	98,893.54
28-Nov-2002	96,589.69	97,590.22	98,590.75
29-Nov-2002	96,826.16	97,819.12	98,812.08
02-Dec-2002	96,668.02	97,669.32	98,670.61
03-Dec-2002	97,216.99	98,228.84	99,240.69

Exchange Date	Spot Buying	Mean	Spot Selling
04-Dec-2002	97,534.44	98,569.45	99,604.46
10-Dec-2002	98,257.50	99,274.83	100,292.15
11-Dec-2002	97,842.14	98,855.21	99,868.28
12-Dec-2002	97,931.53	98,950.46	99,969.39
13-Dec-2002	98,795.21	99,817.89	100,840.57
16-Dec-2002	98,968.09	99,992.50	101,016.91
17-Dec-2002	99,391.55	100,410.30	101,429.04
18-Dec-2002	99,392.86	100,421.53	101,450.19
19-Dec-2002	99,179.93	100,196.54	101,213.15
20-Dec-2002	99,201.76	100,218.59	101,235.42
23-Dec-2002	99,097.65	100,123.25	101,148.86
24-Dec-2002	99,079.86	100,105.28	101,130.70
27-Dec-2002	99,961.09	100,995.36	102,029.62
30-Dec-2002	100,059.28	101,094.44	102,129.60
31-Dec-2002	101,293.08	102,331.03	103,368.98
02-Jan-2003	101,232.70	102,279.92	103,327.13
03-Jan-2003	100,661.67	101,698.25	102,734.82
06-Jan-2003	101,376.20	102,415.05	103,453.90
07-Jan-2003	101,521.19	102,561.54	103,601.89
08-Jan-2003	101,611.56	102,662.81	103,714.05
09-Jan-2003	102,734.57	103,787.24	104,839.91
10-Jan-2003	102,732.82	103,785.51	104,838.19
13-Jan-2003	103,527.69	104,598.42	105,669.15
14-Jan-2003	103,645.17	104,707.12	105,769.07
15-Jan-2003	104,025.83	105,101.75	106,177.67
16-Jan-2003	104,239.72	105,307.77	106,375.81
17-Jan-2003	104,832.07	105,916.18	107,000.29
20-Jan-2003	105,225.71	106,303.73	107,381.74
21-Jan-2003	105,522.71	106,603.75	107,684.79
22-Jan-2003	106,402.98	107,492.93	108,582.88
23-Jan-2003	106,854.09	107,948.70	109,043.30
24-Jan-2003	107,719.23	108,832.80	109,946.38
27-Jan-2003	108,423.50	109,544.20	110,664.90
28-Jan-2003	108,429.62	109,545.30	110,660.98
29-Jan-2003	109,026.98	110,138.52	111,250.05
30-Jan-2003	109,115.12	110,232.73	111,350.33
31-Jan-2003	109,309.02	110,428.61	111,548.20
03-Feb-2003	108,361.94	109,482.21	110,602.48
04-Feb-2003	108,505.13	109,626.83	110,748.52
06-Feb-2003	108,393.17	109,508.55	110,623.94
07-Feb-2003	108,853.08	109,973.13	111,093.18
10-Feb-2003	108,630.09	109,753.01	110,875.92
11-Feb-2003	107,802.02	108,916.56	110,031.11
13-Feb-2003	107,954.46	109,070.53	110,186.59
14-Feb-2003	109,061.73	110,178.77	111,295.81
17-Feb-2003	108,043.08	109,149.84	110,256.61
18-Feb-2003	108,359.40	109,479.66	110,599.92
19-Feb-2003	108,152.71	109,265.77	110,378.83

Exchange Date	Spot Buying	Mean	Spot Selling
20-Feb-2003	108,897.30	110,023.07	111,148.83
21-Feb-2003	109,620.08	110,748.02	111,875.96
24-Feb-2003	108,761.24	109,885.68	111,010.12
26-Feb-2003	109,137.20	110,265.49	111,393.78
25-Feb-2003	109,407.14	110,538.12	111,669.10
27-Feb-2003	109,690.76	110,824.68	111,958.59
28-Feb-2003	109,380.08	110,510.87	111,641.66
03-Mar-2003	109,853.35	110,988.99	112,124.62
02-May-2003	115,548.76	116,742.15	117,935.54
04-Mar-2003	111,590.00	112,732.83	113,875.65
05-Mar-2003	112,268.71	113,428.82	114,588.93
06-Mar-2003	112,223.85	113,373.09	114,522.32
07-Mar-2003	112,622.74	113,776.04	114,929.33
10-Mar-2003	113,279.55	114,439.52	115,599.48
11-Mar-2003	113,642.13	114,805.76	115,969.39
12-Mar-2003	113,508.41	114,681.22	115,854.03
13-Mar-2003	111,961.32	113,118.52	114,275.72
14-Mar-2003	111,298.43	112,438.41	113,578.40
17-Mar-2003	111,223.60	112,373.30	113,523.01
18-Mar-2003	109,625.28	110,785.16	111,945.05
19-Mar-2003	109,687.90	110,822.17	111,956.44
20-Mar-2003	108,991.90	110,113.85	111,235.79
21-Mar-2003	109,253.12	110,372.46	111,491.79
24-Mar-2003	109,014.39	110,131.29	111,248.19
25-Mar-2003	109,654.35	110,788.15	111,921.96
26-Mar-2003	109,268.05	110,387.46	111,506.88
27-Mar-2003	109,723.41	110,857.86	111,992.32
28-Mar-2003	109,193.31	110,322.34	111,451.37
31-Mar-2003	110,378.20	111,519.15	112,660.09
01-Apr-2003	111,036.03	112,183.57	113,331.11
02-Apr-2003	110,622.14	111,791.43	112,960.71
03-Apr-2003	109,523.41	110,645.25	111,767.10
04-Apr-2003	109,062.34	110,179.54	111,296.75
07-Apr-2003	108,322.26	109,442.38	110,562.51
08-Apr-2003	108,581.86	109,694.24	110,806.62
09-Apr-2003	109,713.35	110,847.61	111,981.88
10-Apr-2003	110,493.92	111,620.48	112,747.05
11-Apr-2003	110,886.58	112,032.88	113,179.18
14-Apr-2003	110,932.10	112,078.94	113,225.79
15-Apr-2003	111,370.54	112,521.89	113,673.24
16-Apr-2003	112,163.05	113,317.20	114,471.35
17-Apr-2003	113,773.71	114,949.46	116,125.20
22-Apr-2003	113,007.92	114,165.34	115,322.76
23-Apr-2003	114,091.31	115,270.30	116,449.29
24-Apr-2003	114,246.65	115,427.22	116,607.78
25-Apr-2003	114,574.89	115,758.76	116,942.62
28-Apr-2003	113,928.16	115,105.24	116,282.32
29-Apr-2003	113,315.61	114,486.51	115,657.40

Exchange Date	Spot Buying	Mean	Spot Selling
30-Apr-2003	114,420.46	115,602.49	116,784.52
05-May-2003	115,244.50	116,434.81	117,625.11
06-May-2003	115,370.93	116,562.37	117,753.82
07-May-2003	116,012.15	117,209.89	118,407.63
08-May-2003	115,168.26	116,357.54	117,546.82
09-May-2003	117,170.99	118,380.49	119,589.98
12-May-2003	117,305.10	118,515.88	119,726.66
13-May-2003	117,881.44	119,098.22	120,315.00
15-May-2003	117,230.26	118,440.53	119,650.81
16-May-2003	117,371.18	118,582.98	119,794.79
19-May-2003	120,765.30	122,011.50	123,257.70
20-May-2003	121,259.55	122,505.56	123,751.58
21-May-2003	120,948.27	122,196.47	123,444.67
22-May-2003	120,678.56	121,923.96	123,169.37
23-May-2003	121,040.31	122,289.38	123,538.45
26-May-2003	122,856.34	124,123.81	125,391.28
27-May-2003	122,903.98	124,171.90	125,439.82
28-May-2003	122,742.45	124,008.73	125,275.00
29-May-2003	121,252.23	122,503.33	123,754.44
30-May-2003	123,066.46	124,335.99	125,605.53
02-Jun-2003	120,754.76	122,000.88	123,247.00
03-Jun-2003	121,071.72	122,320.94	123,570.16
04-Jun-2003	120,408.17	121,650.61	122,893.04
05-Jun-2003	119,475.14	120,708.11	121,941.08
06-Jun-2003	121,193.25	122,443.51	123,693.78
09-Jun-2003	119,570.48	120,804.31	122,038.15
10-Jun-2003	119,342.02	120,573.47	121,804.92
11-Jun-2003	118,879.94	120,132.60	121,385.26
12-Jun-2003	119,629.93	120,864.25	122,098.57
13-Jun-2003	119,766.21	121,001.93	122,237.65
16-Jun-2003	121,479.39	122,727.35	123,975.32
17-Jun-2003	122,089.84	123,349.37	124,608.90
18-Jun-2003	122,121.23	123,381.19	124,641.15
19-Jun-2003	120,862.96	122,110.28	123,357.61
20-Jun-2003	121,453.74	122,733.52	124,013.30
23-Jun-2003	119,890.38	121,106.67	122,322.97
24-Jun-2003	119,639.37	120,874.26	122,109.15
25-Jun-2003	119,179.91	120,410.14	121,640.37
26-Jun-2003	119,307.87	120,539.38	121,770.89
27-Jun-2003	118,284.68	119,505.82	120,726.97
30-Jun-2003	118,550.62	119,774.55	120,998.47
01-Jul-2003	119,312.07	120,543.67	121,775.26
02-Jul-2003	119,100.48	120,319.30	121,538.13
03-Jul-2003	118,366.94	119,578.30	120,789.65
04-Jul-2003	117,310.47	118,526.73	119,742.98
08-Jul-2003	115,729.80	116,924.85	118,119.90
09-Jul-2003	115,928.90	117,126.01	118,323.13
10-Jul-2003	116,652.03	117,856.59	119,061.14

Exchange Date	Spot Buying	Mean	Spot Selling
11-Jul-2003	116,835.30	118,041.79	119,248.28
14-Jul-2003	116,542.06	117,745.64	118,949.22
15-Jul-2003	116,146.71	117,346.22	118,545.73
16-Jul-2003	115,078.51	116,267.25	117,455.99
17-Jul-2003	116,054.98	117,248.36	118,441.73
18-Jul-2003	116,338.12	117,529.10	118,720.08
21-Jul-2003	116,575.25	117,773.85	118,972.46
22-Jul-2003	116,712.08	117,917.27	119,122.46
23-Jul-2003	116,718.69	117,913.40	119,108.10
24-Jul-2003	116,555.70	117,748.74	118,941.78
25-Jul-2003	117,997.18	119,215.32	120,433.46
28-Jul-2003	118,517.87	119,741.37	120,964.86
29-Jul-2003	119,056.77	120,285.76	121,514.75
30-Jul-2003	118,574.84	119,788.42	121,001.99
31-Jul-2003	117,293.67	118,499.56	119,705.46
01-Aug-2003	116,065.81	117,253.99	118,442.18
04-Aug-2003	116,364.49	117,566.23	118,767.97
05-Aug-2003	117,636.29	118,840.40	120,044.50
06-Aug-2003	118,403.01	119,625.48	120,847.96
07-Aug-2003	117,704.72	118,909.55	120,114.38
11-Aug-2003	117,692.38	118,897.08	120,101.79
12-Aug-2003	117,857.87	119,074.83	120,291.78
13-Aug-2003	116,679.70	117,874.14	119,068.57
14-Aug-2003	117,215.01	118,425.38	119,635.76
15-Aug-2003	115,958.64	117,156.23	118,353.81
18-Aug-2003	116,024.37	117,222.63	118,420.89
19-Aug-2003	114,776.36	115,962.02	117,147.67
20-Aug-2003	114,686.04	115,860.30	117,034.55
21-Aug-2003	114,619.97	115,793.57	116,967.17
22-Aug-2003	113,084.97	114,243.08	115,401.18
25-Aug-2003	112,302.33	113,463.05	114,623.78
26-Aug-2003	111,855.36	113,011.54	114,167.73
27-Aug-2003	112,428.46	113,579.95	114,731.43
28-Aug-2003	112,439.03	113,601.20	114,763.36
29-Aug-2003	112,715.22	113,880.20	115,045.18
01-Sep-2003	113,941.78	115,108.58	116,275.37
02-Sep-2003	113,175.92	114,345.50	115,515.08
03-Sep-2003	111,486.24	112,638.71	113,791.18
04-Sep-2003	112,133.03	113,292.06	114,451.10
05-Sep-2003	113,375.37	114,546.98	115,718.60
08-Sep-2003	114,803.65	115,989.71	117,175.77
09-Sep-2003	115,120.04	116,309.34	117,498.63
10-Sep-2003	116,237.95	117,427.93	118,617.91
11-Sep-2003	116,286.74	117,487.81	118,688.89
12-Sep-2003	115,980.17	117,178.14	118,376.10
15-Sep-2003	116,968.10	118,176.06	119,384.01
16-Sep-2003	117,344.28	118,556.07	119,767.85
17-Sep-2003	116,096.64	117,295.88	118,495.13

Exchange Date	Spot Buying	Mean	Spot Selling
18-Sep-2003	117,535.14	118,727.68	119,920.23
19-Sep-2003	117,517.48	118,720.50	119,923.53
22-Sep-2003	119,829.87	121,066.94	122,304.02
23-Sep-2003	119,348.86	120,575.63	121,802.39
24-Sep-2003	118,688.68	119,929.85	121,171.02
25-Sep-2003	118,978.00	120,206.23	121,434.45
26-Sep-2003	118,736.07	119,961.82	121,187.57
29-Sep-2003	118,192.83	119,413.05	120,633.26
30-Sep-2003	120,133.08	121,372.92	122,612.76
01-Oct-2003	120,753.72	121,999.84	123,245.95
02-Oct-2003	121,409.15	122,661.85	123,914.55
03-Oct-2003	120,763.97	122,010.15	123,256.33
06-Oct-2003	119,515.27	120,743.57	121,971.88
07-Oct-2003	121,183.89	122,423.80	123,663.72
08-Oct-2003	121,505.39	122,748.50	123,991.60
09-Oct-2003	121,977.83	123,225.70	124,473.58
10-Oct-2003	120,735.10	121,970.39	123,205.68
13-Oct-2003	121,630.89	122,875.35	124,119.80
15-Oct-2003	121,185.93	122,436.42	123,686.90
16-Oct-2003	120,305.03	121,536.04	122,767.05
17-Oct-2003	120,139.95	121,379.89	122,619.83
20-Oct-2003	115,820.76	117,001.24	118,181.72
21-Oct-2003	120,504.67	121,748.31	122,991.94
22-Oct-2003	121,000.08	122,248.75	123,497.42
23-Oct-2003	122,346.36	123,608.59	124,870.82
24-Oct-2003	122,070.84	123,330.22	124,589.60
27-Oct-2003	121,626.25	122,870.65	124,115.06
28-Oct-2003	121,583.80	122,827.80	124,071.81
29-Oct-2003	121,169.04	122,408.83	123,648.61
30-Oct-2003	121,086.60	122,336.15	123,585.70
31-Oct-2003	120,799.22	122,045.92	123,292.63
03-Nov-2003	120,336.12	121,578.14	122,820.17
04-Nov-2003	119,000.13	120,244.61	121,489.08
05-Nov-2003	119,481.91	120,715.34	121,948.76
06-Nov-2003	118,903.97	120,131.55	121,359.12
07-Nov-2003	118,799.99	120,026.52	121,253.06
10-Nov-2003	120,320.42	121,562.06	122,803.71
11-Nov-2003	118,597.38	119,811.15	121,024.92
12-Nov-2003	119,772.57	121,008.82	122,245.07
13-Nov-2003	120,899.91	122,147.59	123,395.27
14-Nov-2003	122,789.67	124,056.54	125,323.41
17-Nov-2003	123,011.46	124,275.27	125,539.08
18-Nov-2003	122,779.85	124,036.01	125,292.16
19-Nov-2003	124,359.35	125,636.76	126,914.16
20-Nov-2003	123,674.58	124,939.72	126,204.87
21-Nov-2003	123,263.26	124,534.80	125,806.35
24-Nov-2003	123,464.42	124,737.98	126,011.54
25-Nov-2003	122,270.20	123,521.10	124,772.01

Exchange Date	Spot Buying	Mean	Spot Selling
28-Nov-2003	123,604.69	124,879.67	126,154.66
01-Dec-2003	124,951.39	126,240.03	127,528.67
02-Dec-2003	124,798.57	126,085.72	127,372.86
03-Dec-2003	125,983.00	127,282.15	128,581.31
04-Dec-2003	125,860.88	127,158.81	128,456.73
05-Dec-2003	125,924.40	127,217.63	128,510.86
08-Dec-2003	126,923.20	128,226.56	129,529.92
10-Dec-2003	127,716.22	129,032.95	130,349.68
11-Dec-2003	127,595.63	128,916.50	130,237.38
12-Dec-2003	128,091.51	129,406.75	130,722.00
15-Dec-2003	128,329.39	129,652.46	130,975.53
16-Dec-2003	130,011.04	131,340.40	132,669.77
17-Dec-2003	130,036.56	131,366.21	132,695.86
18-Dec-2003	131,214.64	132,561.61	133,908.59
19-Dec-2003	130,989.08	132,339.13	133,689.17
22-Dec-2003	130,298.01	131,640.99	132,983.96
23-Dec-2003	130,641.91	131,977.64	133,313.38
24-Dec-2003	130,555.44	131,895.67	133,235.89
29-Dec-2003	131,088.86	132,439.86	133,790.85
30-Dec-2003	131,624.66	132,986.46	134,348.25
31-Dec-2003	132,360.06	133,718.52	135,076.97
02-Jan-2004	131,996.36	133,356.47	134,716.57
05-Jan-2004	132,986.12	134,356.20	135,726.28
06-Jan-2004	133,144.14	134,515.81	135,887.49
07-Jan-2004	133,849.39	135,228.24	136,607.08
08-Jan-2004	132,843.44	134,212.19	135,580.95
09-Jan-2004	134,794.48	136,182.98	137,571.48
13-Jan-2004	134,918.42	136,308.19	137,697.96
14-Jan-2004	134,778.31	136,166.72	137,555.12
15-Jan-2004	134,390.89	135,770.04	137,149.20
16-Jan-2004	133,957.91	135,338.16	136,718.41
19-Jan-2004	131,692.28	133,049.66	134,407.03
20-Jan-2004	132,386.68	133,751.20	135,115.72
21-Jan-2004	135,214.79	136,597.05	137,979.32
22-Jan-2004	137,454.87	138,870.97	140,287.07
23-Jan-2004	139,298.63	140,722.46	142,146.28
26-Jan-2004	137,785.06	139,199.18	140,613.31
27-Jan-2004	136,938.63	138,338.67	139,738.70
28-Jan-2004	138,328.51	139,753.80	141,179.09
29-Jan-2004	136,780.56	138,190.20	139,599.83
30-Jan-2004	136,151.82	137,555.09	138,958.37
02-Feb-2004	136,774.92	138,167.68	139,560.44
03-Feb-2004	136,808.82	138,213.12	139,617.43
04-Feb-2004	137,339.26	138,754.47	140,169.69
05-Feb-2004	136,938.77	138,349.89	139,761.00
06-Feb-2004	137,652.65	139,065.46	140,478.26
09-Feb-2004	139,417.54	140,853.75	142,289.95
10-Feb-2004	139,708.77	141,147.95	142,587.13

Exchange Date	Spot Buying	Mean	Spot Selling
11-Feb-2004	139,240.06	140,668.89	142,097.71
12-Feb-2004	140,753.30	142,203.02	143,652.75
13-Feb-2004	140,245.79	141,690.34	143,134.89
16-Feb-2004	139,368.42	140,815.29	142,262.17
17-Feb-2004	140,324.37	141,769.82	143,215.27
18-Feb-2004	141,325.37	142,769.72	144,214.07
19-Feb-2004	139,930.27	141,360.54	142,790.81
20-Feb-2004	139,570.63	141,019.67	142,468.70
23-Feb-2004	137,523.91	138,929.87	140,335.83
24-Feb-2004	137,935.41	139,356.76	140,778.11
25-Feb-2004	139,328.60	140,763.98	142,199.36
26-Feb-2004	137,311.14	138,726.13	140,141.12
27-Feb-2004	136,709.22	138,118.15	139,527.08
01-Mar-2004	137,458.77	138,875.26	140,291.76
02-Mar-2004	136,728.06	138,125.98	139,523.89
03-Mar-2004	133,830.41	135,210.27	136,590.14
04-Mar-2004	133,766.85	135,146.07	136,525.30
05-Mar-2004	134,080.75	135,463.14	136,845.54
08-Mar-2004	136,002.45	137,398.64	138,794.84
09-Mar-2004	136,740.01	138,149.26	139,558.50
10-Mar-2004	135,142.95	136,536.03	137,929.12
11-Mar-2004	134,017.01	135,393.14	136,769.27
12-Mar-2004	134,541.27	135,917.04	137,292.81
15-Mar-2004	133,570.56	134,947.63	136,324.71
16-Mar-2004	133,951.98	135,321.74	136,691.50
17-Mar-2004	134,383.25	135,768.57	137,153.89
18-Mar-2004	134,266.51	135,650.65	137,034.80
19-Mar-2004	135,831.60	137,226.02	138,620.44
22-Mar-2004	134,366.21	135,745.84	137,125.47
23-Mar-2004	135,618.73	137,011.02	138,403.31
24-Mar-2004	135,180.80	136,568.66	137,956.51
25-Mar-2004	132,941.11	134,300.72	135,660.33
26-Mar-2004	132,941.11	134,300.72	135,660.33
29-Mar-2004	132,553.21	133,920.11	135,287.00
30-Mar-2004	133,777.95	135,179.60	136,581.25
31-Mar-2004	134,290.74	135,669.61	137,048.47
01-Apr-2004	134,464.63	135,845.21	137,225.79
02-Apr-2004	135,652.52	137,045.13	138,437.74
05-Apr-2004	132,676.53	134,039.06	135,401.60
06-Apr-2004	131,393.56	132,748.69	134,103.82
07-Apr-2004	132,299.08	133,657.76	135,016.45
08-Apr-2004	133,351.06	134,720.36	136,089.67
13-Apr-2004	132,247.63	133,611.42	134,975.22
14-Apr-2004	130,498.72	131,839.21	133,179.71
15-Apr-2004	130,748.12	132,096.75	133,445.38
16-Apr-2004	131,470.00	132,825.95	134,181.91
19-Apr-2004	132,022.13	133,372.50	134,722.87
20-Apr-2004	131,889.77	133,250.11	134,610.45

Exchange Date	Spot Buying	Mean	Spot Selling
21-Apr-2004	130,627.27	131,974.89	133,322.51
22-Apr-2004	130,686.33	132,040.21	133,394.09
23-Apr-2004	131,652.73	132,999.47	134,346.20
27-Apr-2004	130,765.35	132,114.39	133,463.43
28-Apr-2004	132,015.72	133,366.14	134,716.57
29-Apr-2004	131,145.90	132,498.88	133,851.87
30-Apr-2004	132,608.69	133,976.44	135,344.19
03-May-2004	132,145.87	133,497.58	134,849.28
04-May-2004	132,068.57	133,430.79	134,793.01
05-May-2004	133,931.98	135,313.04	136,694.11
06-May-2004	134,260.74	135,633.82	137,006.91
07-May-2004	133,283.94	134,652.80	136,021.66
10-May-2004	130,987.19	132,327.23	133,667.26
11-May-2004	131,063.58	132,415.65	133,767.71
12-May-2004	130,898.18	132,254.13	133,610.09
13-May-2004	131,436.78	132,792.57	134,148.35
14-May-2004	130,341.51	131,686.23	133,030.94
17-May-2004	131,686.56	133,039.19	134,391.83
18-May-2004	131,837.71	133,197.43	134,557.15
19-May-2004	131,416.51	132,760.75	134,105.00
20-May-2004	131,732.55	133,091.30	134,450.04
21-May-2004	132,409.66	133,775.29	135,140.92
24-May-2004	132,212.67	133,576.34	134,940.00
25-May-2004	132,728.34	134,097.21	135,466.08
26-May-2004	133,513.93	134,918.91	136,323.89
27-May-2004	134,000.48	135,370.92	136,741.36
28-May-2004	135,732.45	137,131.71	138,530.96
31-May-2004	134,961.40	136,352.84	137,744.28
01-Jun-2004	134,750.61	136,128.65	137,506.69
02-Jun-2004	135,748.76	137,136.90	138,525.04
03-Jun-2004	134,955.60	136,347.05	137,738.49
04-Jun-2004	134,982.13	136,373.78	137,765.43
07-Jun-2004	136,386.36	137,775.29	139,164.22
08-Jun-2004	136,254.27	137,647.50	139,040.73
09-Jun-2004	135,275.59	136,664.57	138,053.55
10-Jun-2004	133,279.72	134,654.19	136,028.65
11-Jun-2004	133,135.54	134,502.89	135,870.24
14-Jun-2004	132,236.75	133,600.66	134,964.57
15-Jun-2004	133,328.80	134,703.73	136,078.66
16-Jun-2004	134,032.09	135,414.10	136,796.11
17-Jun-2004	132,442.46	133,802.76	135,163.07
18-Jun-2004	132,136.93	133,488.52	134,840.10
21-Jun-2004	133,645.81	135,012.63	136,379.45
22-Jun-2004	133,429.40	134,805.26	136,181.12
23-Jun-2004	133,497.07	134,884.80	136,272.53
24-Jun-2004	132,535.94	133,902.71	135,269.49
25-Jun-2004	133,444.18	134,820.11	136,196.05
28-Jun-2004	133,507.82	134,878.79	136,249.76

Exchange Date	Spot Buying	Mean	Spot Selling
29-Jun-2004	133,642.69	135,020.62	136,398.54
30-Jun-2004	132,459.50	133,814.25	135,169.00
01-Jul-2004	133,185.27	134,558.52	135,931.77
02-Jul-2004	133,396.37	134,754.99	136,113.61
05-Jul-2004	134,912.61	136,325.66	137,738.72
06-Jul-2004	134,793.21	136,210.61	137,628.01
08-Jul-2004	135,185.59	136,567.84	137,950.10
09-Jul-2004	135,710.91	137,104.03	138,497.16
12-Jul-2004	134,766.28	136,155.28	137,544.28
13-Jul-2004	133,619.60	134,996.84	136,374.09
14-Jul-2004	133,288.19	134,656.57	136,024.96
15-Jul-2004	133,647.76	135,025.30	136,402.83
16-Jul-2004	134,527.81	135,914.43	137,301.05
19-Jul-2004	135,586.86	136,984.21	138,381.55
20-Jul-2004	135,796.48	137,184.87	138,573.27
21-Jul-2004	134,553.13	135,934.55	137,315.98
22-Jul-2004	134,259.16	135,632.06	137,004.97
23-Jul-2004	133,961.32	135,342.37	136,723.43
26-Jul-2004	132,805.41	134,174.81	135,544.20
27-Jul-2004	132,676.47	134,033.36	135,390.26
28-Jul-2004	131,526.70	132,888.62	134,250.53
29-Jul-2004	131,349.67	132,693.10	134,036.54
30-Jul-2004	130,861.20	132,210.74	133,560.28
02-Aug-2004	130,769.66	132,112.70	133,455.73
03-Aug-2004	130,436.64	131,787.38	133,138.13
04-Aug-2004	130,342.73	131,681.44	133,020.15
05-Aug-2004	130,228.52	131,566.01	132,903.50
06-Aug-2004	130,127.85	131,464.27	132,800.69
09-Aug-2004	132,573.67	133,940.32	135,306.98
10-Aug-2004	132,450.24	133,804.63	135,159.03
11-Aug-2004	131,934.08	133,327.29	134,720.49
12-Aug-2004	131,614.20	132,965.59	134,316.98
13-Aug-2004	131,418.78	132,762.69	134,106.60
16-Aug-2004	132,829.78	134,198.88	135,567.98
17-Aug-2004	132,535.47	133,896.10	135,256.72
18-Aug-2004	132,228.33	133,580.36	134,932.39
19-Aug-2004	131,993.96	133,354.51	134,715.06
20-Aug-2004	132,477.35	133,831.88	135,186.42
23-Aug-2004	131,696.47	133,054.05	134,411.64
24-Aug-2004	130,244.62	131,576.65	132,908.67
25-Aug-2004	129,635.61	130,977.95	132,320.29
26-Aug-2004	129,782.54	131,109.93	132,437.32
27-Aug-2004	130,086.61	131,428.00	132,769.40
30-Aug-2004	128,789.72	130,107.05	131,424.39
31-Aug-2004	129,545.64	130,876.07	132,206.49
01-Sep-2004	130,128.31	131,469.98	132,811.66
02-Sep-2004	130,058.36	131,399.32	132,740.27
03-Sep-2004	130,177.06	131,508.35	132,839.64

Exchange Date	Spot Buying	Mean	Spot Selling
06-Sep-2004	129,121.07	130,452.63	131,784.19
07-Sep-2004	128,975.47	130,305.53	131,635.59
08-Sep-2004	129,395.69	130,719.08	132,042.47
09-Sep-2004	129,932.61	131,261.37	132,590.13
10-Sep-2004	130,185.65	131,527.76	132,869.88
13-Sep-2004	130,309.26	131,658.02	133,006.78
14-Sep-2004	130,000.19	131,334.95	132,669.71
15-Sep-2004	129,689.54	131,015.75	132,341.96
16-Sep-2004	128,898.61	130,216.85	131,535.09
17-Sep-2004	129,541.86	130,888.32	132,234.78
20-Sep-2004	129,578.84	130,909.45	132,240.06
21-Sep-2004	129,550.95	130,881.26	132,211.57
22-Sep-2004	130,798.98	132,136.42	133,473.87
23-Sep-2004	129,989.13	131,329.17	132,669.21
24-Sep-2004	129,982.49	131,311.64	132,640.79
27-Sep-2004	129,504.57	130,839.60	132,174.62
28-Sep-2004	129,266.05	130,598.59	131,931.13
29-Sep-2004	129,560.34	130,901.21	132,242.07
30-Sep-2004	129,393.46	130,732.59	132,071.73
01-Oct-2004	130,178.15	131,519.81	132,861.47
04-Oct-2004	129,582.08	130,912.39	132,242.69
05-Oct-2004	128,654.04	129,969.62	131,285.20
06-Oct-2004	129,042.94	130,373.14	131,703.34
07-Oct-2004	128,701.63	130,017.67	131,333.71
08-Oct-2004	128,888.44	130,217.07	131,545.69
11-Oct-2004	129,671.93	130,997.75	132,323.57
12-Oct-2004	129,275.23	130,607.71	131,940.20
13-Oct-2004	128,747.79	130,074.96	131,402.12
15-Oct-2004	129,879.71	131,218.36	132,557.01
18-Oct-2004	131,545.37	132,895.61	134,245.85
19-Oct-2004	131,510.02	132,854.56	134,199.10
20-Oct-2004	131,950.98	133,299.97	134,648.96
21-Oct-2004	132,972.89	134,348.40	135,723.91
22-Oct-2004	133,474.11	134,849.33	136,224.55
25-Oct-2004	134,961.22	136,340.66	137,720.10
26-Oct-2004	135,659.26	137,045.74	138,432.22
27-Oct-2004	134,885.16	136,253.03	137,620.90
28-Oct-2004	134,160.53	135,531.82	136,903.12
29-Oct-2004	133,832.64	135,205.91	136,579.17
01-Nov-2004	134,189.36	135,571.59	136,953.83
02-Nov-2004	133,768.38	135,135.65	136,502.91
05-Nov-2004	134,972.55	136,362.63	137,752.71
03-Nov-2004	133,212.15	134,573.78	135,935.42
04-Nov-2004	134,393.80	135,778.05	137,162.30
08-Nov-2004	136,050.01	137,445.64	138,841.27
09-Nov-2004	135,456.88	136,841.17	138,225.47
10-Nov-2004	135,180.98	136,573.18	137,965.38
11-Nov-2004	134,822.53	136,200.39	137,578.25

Exchange Date	Spot Buying	Mean	Spot Selling
12-Nov-2004	134,944.42	136,323.48	137,702.55
16-Nov-2004	135,015.84	136,395.63	137,775.41
17-Nov-2004	135,458.42	136,848.01	138,237.60
18-Nov-2004	136,384.08	137,783.05	139,182.02
19-Nov-2004	135,432.12	136,826.79	138,221.46
22-Nov-2004	136,599.28	137,989.76	139,380.24
23-Nov-2004	136,311.92	137,715.57	139,119.22
24-Nov-2004	137,174.67	138,576.30	139,977.94
25-Nov-2004	137,608.80	139,014.87	140,420.95
26-Nov-2004	139,646.90	141,068.20	142,489.50
29-Nov-2004	139,468.09	140,903.69	142,339.29
30-Nov-2004	139,394.63	140,829.45	142,264.26
01-Dec-2004	139,468.99	140,893.82	142,318.65
02-Dec-2004	140,253.26	141,696.71	143,140.17
03-Dec-2004	139,111.61	140,538.14	141,964.67
06-Dec-2004	140,879.50	142,307.87	143,736.24
07-Dec-2004	140,441.86	141,881.82	143,321.78
08-Dec-2004	139,970.48	141,405.67	142,840.87
10-Dec-2004	138,487.11	139,891.31	141,295.50
13-Dec-2004	138,265.47	139,683.34	141,101.21
14-Dec-2004	138,117.29	139,523.01	140,928.73
15-Dec-2004	137,737.95	139,139.80	140,541.66
16-Dec-2004	139,566.19	140,986.57	142,406.95
17-Dec-2004	137,694.25	139,111.58	140,528.91
20-Dec-2004	138,115.72	139,537.28	140,958.83
21-Dec-2004	138,628.57	140,049.98	141,471.40
22-Dec-2004	138,297.03	139,715.10	141,133.17
23-Dec-2004	139,015.28	140,435.31	141,855.34
24-Dec-2004	139,390.63	140,824.96	142,259.28
27-Dec-2004	139,813.45	141,246.78	142,680.11
28-Dec-2004	140,376.55	141,820.83	143,265.11
29-Dec-2004	140,463.17	141,903.05	143,342.93
30-Dec-2004	140,687.66	142,129.82	143,571.97
31-Dec-2004	140,620.32	142,056.52	143,492.73
03-Jan-2005	138,767.45	140,206.01	141,644.56
04-Jan-2005	140,508.47	141,954.32	143,400.17
05-Jan-2005	137,845.12	139,258.68	140,672.24
06-Jan-2005	138,042.75	139,463.68	140,884.61
10-Jan-2005	137,721.64	139,139.63	140,557.63
11-Jan-2005	138,761.91	140,190.50	141,619.10
13-Jan-2005	140,558.06	142,021.13	143,484.19
14-Jan-2005	139,742.79	141,181.52	142,620.25
17-Jan-2005	140,547.26	141,977.86	143,408.46
18-Jan-2005	139,915.35	141,345.07	142,774.80
19-Jan-2005	142,348.40	143,814.14	145,279.88
20-Jan-2005	142,907.71	144,368.03	145,828.35
24-Jan-2005	145,184.75	146,679.66	148,174.56
25-Jan-2005	145,790.56	147,280.33	148,770.09

Exchange Date	Spot Buying	Mean	Spot Selling
26-Jan-2005	145,440.96	146,932.92	148,424.88
27-Jan-2005	146,094.93	147,593.44	149,091.95
28-Jan-2005	144,345.64	145,826.29	147,306.94
31-Jan-2005	142,104.01	143,561.67	145,019.32
01-Feb-2005	142,746.77	144,227.71	145,708.64
02-Feb-2005	143,519.93	145,003.22	146,486.50
03-Feb-2005	142,985.35	144,440.85	145,896.35
04-Feb-2005	142,349.88	143,815.75	145,281.63
07-Feb-2005	141,165.01	142,607.76	144,050.51
08-Feb-2005	140,439.26	141,874.69	143,310.11
09-Feb-2005	140,139.44	141,571.80	143,004.17
10-Feb-2005	139,937.72	141,373.52	142,809.31
11-Feb-2005	140,860.83	142,305.98	143,751.14
14-Feb-2005	141,763.51	143,217.83	144,672.16
15-Feb-2005	141,871.38	143,343.52	144,815.66
16-Feb-2005	142,593.41	144,056.10	145,518.78
17-Feb-2005	143,264.96	144,728.89	146,192.82
18-Feb-2005	143,653.41	145,138.10	146,622.79
21-Feb-2005	143,534.89	145,001.58	146,468.26
22-Feb-2005	144,799.41	146,284.52	147,769.63
23-Feb-2005	145,813.08	147,330.90	148,848.73
24-Feb-2005	145,969.52	147,472.10	148,974.67
25-Feb-2005	146,148.43	147,647.27	149,146.10
28-Feb-2005	146,696.82	148,201.18	149,705.54
01-Mar-2005	145,854.27	147,344.47	148,834.66
02-Mar-2005	145,399.37	146,884.95	148,370.53
03-Mar-2005	144,462.35	145,932.79	147,403.23
04-Mar-2005	144,171.15	145,649.87	147,128.60
07-Mar-2005	145,111.55	146,610.89	148,110.24
08-Mar-2005	145,017.59	146,510.37	148,003.16
09-Mar-2005	145,975.57	147,466.81	148,958.06
10-Mar-2005	146,917.35	148,423.68	149,930.01
11-Mar-2005	147,185.09	148,688.59	150,192.08
14-Mar-2005	147,890.57	149,406.86	150,923.14
15-Mar-2005	146,363.34	147,869.70	149,376.06
16-Mar-2005	145,738.89	147,233.35	148,727.81
17-Mar-2005	146,833.48	148,333.43	149,833.38
18-Mar-2005	146,591.65	148,094.74	149,597.84
21-Mar-2005	145,450.91	146,948.10	148,445.29
22-Mar-2005	144,377.24	145,857.97	147,338.70
23-Mar-2005	143,313.47	144,783.44	146,253.42
24-Mar-2005	142,283.31	143,748.46	145,213.62
29-Mar-2005	141,149.61	142,603.20	144,056.78
30-Mar-2005	141,450.88	142,901.98	144,353.08
31-Mar-2005	141,225.66	142,657.76	144,089.86
01-Apr-2005	140,161.48	141,593.81	143,026.13
04-Apr-2005	140,288.01	141,727.26	143,166.51
05-Apr-2005	139,824.86	141,253.91	142,682.96

Exchange Date	Spot Buying	Mean	Spot Selling
06-Apr-2005	140,468.62	141,915.32	143,362.03
08-Apr-2005	140,075.86	141,496.34	142,916.82
11-Apr-2005	141,009.17	142,450.20	143,891.23
12-Apr-2005	141,807.07	143,256.19	144,705.31
13-Apr-2005	141,562.18	143,020.05	144,477.91
14-Apr-2005	141,022.75	142,463.99	143,905.22
15-Apr-2005	140,326.02	141,760.26	143,194.49
18-Apr-2005	141,850.31	143,299.99	144,749.66
19-Apr-2005	143,131.73	144,594.32	146,056.91
20-Apr-2005	143,556.40	145,017.68	146,478.95
21-Apr-2005	143,694.46	145,168.32	146,642.18
25-Apr-2005	142,828.05	144,287.54	145,747.03
27-Apr-2005	142,052.67	143,493.13	144,933.60
28-Apr-2005	141,898.64	143,337.55	144,776.45
29-Apr-2005	141,338.34	142,782.74	144,227.14
02-May-2005	140,539.98	141,987.46	143,434.94
03-May-2005	140,534.94	141,971.25	143,407.55
04-May-2005	142,498.62	143,943.60	145,388.59
05-May-2005	142,782.93	144,253.29	145,723.66
06-May-2005	142,514.85	143,971.24	145,427.64
10-May-2005	141,346.04	142,801.83	144,257.63
11-May-2005	141,556.99	143,009.31	144,461.64
16-May-2005	139,162.83	140,591.03	142,019.23
17-May-2005	139,570.85	140,997.57	142,424.29
19-May-2005	140,461.97	141,920.36	143,378.75
18-May-2005	139,624.60	141,046.23	142,467.86
20-May-2005	140,286.05	141,742.71	143,199.37
23-May-2005	139,786.46	141,215.48	142,644.50
24-May-2005	140,309.73	141,755.48	143,201.24
25-May-2005	140,194.14	141,632.94	143,071.75
26-May-2005	138,451.55	139,866.90	141,282.26
27-May-2005	137,889.95	139,299.64	140,709.32
30-May-2005	138,383.86	139,798.57	141,213.28
31-May-2005	137,879.81	139,278.21	140,676.61
01-Jun-2005	137,432.68	138,837.95	140,243.23
02-Jun-2005	136,277.89	137,677.23	139,076.57
03-Jun-2005	137,440.31	138,845.71	140,251.11
09-May-2005	140,983.99	142,424.93	143,865.87
12-May-2005	141,255.29	142,699.01	144,142.74
13-May-2005	140,124.27	141,556.59	142,988.91
06-Jun-2005	137,222.55	138,625.73	140,028.90
07-Jun-2005	136,689.42	138,087.18	139,484.94
08-Jun-2005	137,219.81	138,611.55	140,003.29
09-Jun-2005	135,944.89	137,340.76	138,736.64
10-Jun-2005	136,468.83	137,887.14	139,305.45
13-Jun-2005	135,317.58	136,701.54	138,085.49
14-Jun-2005	135,721.81	137,121.26	138,520.71
15-Jun-2005	134,672.13	136,049.57	137,427.01

Exchange Date	Spot Buying	Mean	Spot Selling
16-Jun-2005	134,989.28	136,369.92	137,750.56
17-Jun-2005	135,418.64	136,797.91	138,177.19
20-Jun-2005	136,807.36	138,206.38	139,605.40
21-Jun-2005	136,128.23	137,520.41	138,912.60
22-Jun-2005	136,424.94	137,825.85	139,226.75
23-Jun-2005	135,865.24	137,260.48	138,655.72
24-Jun-2005	134,713.45	136,102.76	137,492.07
27-Jun-2005	135,901.26	137,285.43	138,669.61
28-Jun-2005	136,193.76	137,598.03	139,002.30
29-Jun-2005	135,101.64	136,472.02	137,842.40
30-Jun-2005	134,718.77	136,102.32	137,485.86
04-Jul-2005	133,233.16	134,601.74	135,970.33
05-Jul-2005	133,302.00	134,665.61	136,029.22
06-Jul-2005	133,481.84	134,853.00	136,224.16
08-Jul-2005	135,174.30	136,574.01	137,973.71
01-Jul-2005	134,557.04	135,950.35	137,343.66
11-Jul-2005	134,520.04	135,895.99	137,271.94
12-Jul-2005	136,515.46	137,911.58	139,307.70
13-Jul-2005	137,479.98	138,897.38	140,314.77
14-Jul-2005	136,238.87	137,620.78	139,002.69
15-Jul-2005	137,057.45	138,465.00	139,872.54
18-Jul-2005	136,543.86	137,934.65	139,325.45
19-Jul-2005	136,399.49	137,800.39	139,201.29
20-Jul-2005	136,793.21	138,192.28	139,591.35
21-Jul-2005	137,605.16	139,029.74	140,454.32
22-Jul-2005	137,663.88	139,060.19	140,456.50
25-Jul-2005	136,030.70	137,416.26	138,801.83
26-Jul-2005	135,588.07	136,986.38	138,384.68
27-Jul-2005	135,192.43	136,569.50	137,946.57
28-Jul-2005	135,792.54	137,169.92	138,547.31
29-Jul-2005	136,278.02	137,694.71	139,111.40
01-Aug-2005	136,962.59	138,351.79	139,740.98
02-Aug-2005	137,456.90	138,856.83	140,256.76
03-Aug-2005	136,858.55	138,263.92	139,669.30
04-Aug-2005	138,629.38	140,046.89	141,464.40
05-Aug-2005	138,934.59	140,355.18	141,775.77
09-Aug-2005	138,255.92	139,680.97	141,106.02
10-Aug-2005	136,929.78	138,329.87	139,729.97
15-Aug-2005	137,987.49	139,409.71	140,831.93
11-Aug-2005	137,387.05	138,803.03	140,219.02
16-Aug-2005	137,622.13	139,029.31	140,436.50
17-Aug-2005	138,781.11	140,211.51	141,641.90
12-Aug-2005	137,387.05	138,803.03	140,219.02
18-Aug-2005	138,083.00	139,506.45	140,929.90
19-Aug-2005	136,949.00	138,349.55	139,750.09
22-Aug-2005	137,260.53	138,664.24	140,067.95
23-Aug-2005	137,567.20	138,985.51	140,403.82
24-Aug-2005	137,324.00	138,734.08	140,144.15

Exchange Date	Spot Buying	Mean	Spot Selling
25-Aug-2005	138,364.35	139,779.16	141,193.97
26-Aug-2005	138,464.73	139,880.58	141,296.42
29-Aug-2005	138,235.82	139,649.32	141,062.82
30-Aug-2005	136,911.72	138,323.27	139,734.82
31-Aug-2005	137,121.84	138,524.09	139,926.33
01-Sep-2005	138,598.79	140,015.98	141,433.16
02-Sep-2005	140,551.08	141,988.03	143,424.98
05-Sep-2005	141,754.63	143,203.75	144,652.86
06-Sep-2005	140,776.08	142,209.56	143,643.05
07-Sep-2005	140,471.61	141,896.26	143,320.90
08-Sep-2005	139,862.46	141,303.93	142,745.40
09-Sep-2005	139,839.51	141,269.25	142,698.99
12-Sep-2005	139,070.00	140,492.01	141,914.02
13-Sep-2005	138,003.85	139,426.45	140,849.05
14-Sep-2005	138,003.05	139,402.75	140,802.44
15-Sep-2005	137,278.86	138,688.43	140,097.99
16-Sep-2005	138,099.38	139,511.54	140,923.70
19-Sep-2005	137,083.55	138,473.98	139,864.42
20-Sep-2005	137,399.71	138,804.88	140,210.04
21-Sep-2005	137,560.61	138,973.19	140,385.77
22-Sep-2005	137,928.00	139,338.51	140,749.02
23-Sep-2005	137,359.68	138,764.45	140,169.22
26-Sep-2005	135,994.92	137,391.65	138,788.39
27-Sep-2005	135,639.71	137,027.07	138,414.43
28-Sep-2005	135,518.53	136,898.90	138,279.26
29-Sep-2005	135,808.96	137,203.75	138,598.54
30-Sep-2005	135,548.94	136,923.86	138,298.78
03-Oct-2005	134,299.24	135,667.26	137,035.29
04-Oct-2005	134,228.20	135,607.02	136,985.83
05-Oct-2005	134,680.78	136,069.94	137,459.09
06-Oct-2005	135,984.33	137,380.91	138,777.49
07-Oct-2005	137,396.71	138,801.84	140,206.96
10-Oct-2005	136,967.54	138,368.36	139,769.17
27-Jan-2006	141,960.76	143,412.50	144,864.24
30-Jan-2006	141,279.03	142,723.98	144,168.92
31-Jan-2006	141,857.77	143,302.64	144,747.51
01-Feb-2006	142,372.31	143,828.34	145,284.38
02-Feb-2006	141,547.56	143,001.28	144,455.00
03-Feb-2006	141,805.82	143,256.15	144,706.48
06-Feb-2006	141,633.06	143,069.71	144,506.35
07-Feb-2006	141,458.28	142,917.30	144,376.31
08-Feb-2006	141,646.70	143,107.66	144,568.63
09-Feb-2006	141,741.30	143,203.22	144,665.13
10-Feb-2006	141,118.25	142,561.71	144,005.17
13-Feb-2006	139,866.44	141,303.22	142,740.00
14-Feb-2006	139,250.00	140,680.43	142,110.87
15-Feb-2006	139,603.28	141,019.39	142,435.50
16-Feb-2006	139,681.89	141,116.82	142,551.74

Exchange Date	Spot Buying	Mean	Spot Selling
17-Feb-2006	139,801.87	141,232.01	142,662.15
20-Feb-2006	141,047.26	142,502.05	143,956.83
21-Feb-2006	140,927.57	142,369.17	143,810.77
22-Feb-2006	140,803.59	142,243.93	143,684.27
23-Feb-2006	140,747.88	142,187.67	143,627.45
24-Feb-2006	140,416.38	141,840.73	143,265.08
27-Feb-2006	139,282.35	140,713.19	142,144.03
28-Feb-2006	139,229.52	140,641.87	142,054.22
01-Mar-2006	140,657.01	142,083.80	143,510.59
02-Mar-2006	140,925.19	142,366.77	143,808.35
03-Mar-2006	142,218.27	143,660.86	145,103.45
06-Mar-2006	142,946.77	144,408.81	145,870.85
07-Mar-2006	142,725.84	144,210.05	145,694.25
08-Mar-2006	142,287.84	143,731.19	145,174.55
09-Mar-2006	143,015.54	144,478.46	145,941.39
10-Mar-2006	142,581.90	144,040.45	145,498.99
13-Mar-2006	143,680.43	145,162.43	146,644.43
14-Mar-2006	144,170.32	145,645.02	147,119.71
15-Mar-2006	144,350.52	145,833.11	147,315.70
16-Mar-2006	144,622.80	146,114.23	147,605.67
17-Mar-2006	146,188.08	147,695.37	149,202.66
20-Mar-2006	146,467.54	147,977.70	149,487.86
21-Mar-2006	146,104.75	147,599.00	149,093.24
22-Mar-2006	145,498.19	146,992.44	148,486.69
23-Mar-2006	145,093.74	146,565.47	148,037.21
24-Mar-2006	144,091.77	145,577.96	147,064.14
27-Mar-2006	145,493.80	146,981.91	148,470.01
28-Mar-2006	144,878.17	146,384.69	147,891.21
29-Mar-2006	145,329.39	146,815.89	148,302.38
30-Mar-2006	145,968.22	147,461.17	148,954.12
31-Mar-2006	147,243.54	148,749.39	150,255.23
03-Apr-2006	145,937.82	147,424.31	148,910.79
04-Apr-2006	147,296.38	148,815.14	150,333.90
05-Apr-2006	148,746.16	150,279.57	151,812.98
10-Apr-2006	146,936.79	148,439.56	149,942.33
12-Apr-2006	147,059.72	148,576.02	150,092.32
13-Apr-2006	146,588.87	148,100.46	149,612.04
18-Apr-2006	148,545.98	150,071.16	151,596.34
19-Apr-2006	149,811.76	151,343.58	152,875.40
20-Apr-2006	150,181.49	151,717.08	153,252.66
21-Apr-2006	149,622.26	151,158.40	152,694.53
24-Apr-2006	150,110.71	151,633.18	153,155.64
25-Apr-2006	150,240.53	151,764.30	153,288.08
28-Apr-2006	151,935.20	153,500.85	155,066.49
02-May-2006	152,914.80	154,478.00	156,041.20
03-May-2006	153,847.97	155,420.61	156,993.25
04-May-2006	154,014.43	155,588.81	157,163.20
05-May-2006	154,992.77	156,595.73	158,198.69

Exchange Date	Spot Buying	Mean	Spot Selling
08-May-2006	155,572.49	157,156.39	158,740.29
09-May-2006	155,156.00	156,735.70	158,315.40
10-May-2006	156,370.28	157,974.78	159,579.28
11-May-2006	156,107.22	157,690.31	159,273.40
12-May-2006	157,290.99	158,898.52	160,506.04
15-May-2006	158,169.93	159,780.10	161,390.26
16-May-2006	157,141.77	158,747.81	160,353.85
17-May-2006	157,772.81	159,397.75	161,022.70
18-May-2006	156,823.76	158,414.11	160,004.46
11-Oct-2005	136,118.94	137,522.73	138,926.53
12-Oct-2005	135,412.40	136,803.27	138,194.15
13-Oct-2005	135,570.65	136,957.36	138,344.07
17-Oct-2005	136,976.55	138,377.47	139,778.38
19-Oct-2005	135,021.10	136,413.82	137,806.53
18-Oct-2005	135,818.73	137,207.95	138,597.18
20-Oct-2005	135,400.89	136,791.68	138,182.47
21-Oct-2005	136,375.11	137,787.31	139,199.51
24-Oct-2005	135,173.46	136,556.19	137,938.92
25-Oct-2005	135,631.57	137,013.14	138,394.71
26-Oct-2005	136,767.19	138,165.99	139,564.79
27-Oct-2005	136,970.78	138,371.64	139,772.49
28-Oct-2005	137,205.49	138,614.48	140,023.46
31-Oct-2005	136,192.51	137,585.48	138,978.46
01-Nov-2005	135,448.78	136,845.79	138,242.80
02-Nov-2005	136,424.00	137,836.70	139,249.39
03-Nov-2005	136,873.88	138,285.38	139,696.87
07-Nov-2005	134,013.03	135,395.64	136,778.24
09-Nov-2005	134,135.79	135,508.14	136,880.50
08-Nov-2005	133,430.15	134,801.15	136,172.15
10-Nov-2005	134,090.18	135,467.89	136,845.60
11-Nov-2005	133,360.44	134,730.78	136,101.12
14-Nov-2005	135,666.12	137,042.37	138,418.61
15-Nov-2005	135,090.44	136,472.67	137,854.91
16-Nov-2005	135,668.20	137,056.31	138,444.42
12-Jun-2005	138,057.29	139,487.67	140,918.04
06-Dec-2005	138,057.29	139,487.67	140,918.04
02-Dec-2005	138,312.52	139,715.63	141,118.74
24-Nov-2005	139,863.48	141,294.36	142,725.25
25-Nov-2005	140,111.39	141,544.81	142,978.23
28-Nov-2005	140,137.12	141,570.80	143,004.48
30-Nov-2005	139,329.96	140,761.47	142,192.99
17-Nov-2005	135,885.56	137,275.95	138,666.35
18-Nov-2005	137,694.37	139,103.11	140,511.86
21-Nov-2005	137,670.99	139,085.46	140,499.93
22-Nov-2005	138,608.57	140,026.74	141,444.91
23-Nov-2005	139,735.60	141,165.18	142,594.76
07-Dec-2005	137,364.32	138,781.60	140,198.89
05-Dec-2005	137,430.64	138,836.81	140,242.97

Exchange Date	Spot Buying	Mean	Spot Selling
08-Dec-2005	136,061.34	137,453.47	138,845.60
12-Dec-2005	137,494.99	138,907.53	140,320.08
13-Dec-2005	139,003.39	140,419.32	141,835.26
15-Dec-2005	139,633.18	141,073.32	142,513.47
16-Dec-2005	138,436.27	139,858.25	141,280.24
20-Dec-2005	138,299.86	139,708.60	141,117.34
19-Dec-2005	138,693.95	140,100.79	141,507.63
21-Dec-2005	136,802.30	138,213.53	139,624.76
22-Dec-2005	136,148.51	137,553.10	138,957.69
23-Dec-2005	136,631.88	138,029.61	139,427.34
27-Dec-2005	136,585.38	137,994.44	139,403.51
28-Dec-2005	136,674.12	138,072.32	139,470.51
29-Dec-2005	136,653.20	138,051.19	139,449.17
30-Dec-2005	137,054.89	138,474.59	139,894.30
02-Jan-2006	136,627.86	138,025.60	139,423.35
03-Jan-2006	137,077.66	138,468.17	139,858.68
04-Jan-2006	139,514.19	140,941.13	142,368.07
05-Jan-2006	140,197.42	141,643.11	143,088.80
06-Jan-2006	140,301.32	141,736.26	143,171.21
09-Jan-2006	141,267.87	142,712.62	144,157.38
10-Jan-2006	140,849.10	142,289.69	143,730.28
13-Jan-2006	141,545.25	142,992.99	144,440.73
16-Jan-2006	143,109.08	144,584.67	146,060.25
17-Jan-2006	142,895.12	144,356.56	145,818.00
18-Jan-2006	141,402.16	142,860.31	144,318.46
19-Jan-2006	141,494.68	142,941.82	144,388.96
20-Jan-2006	140,460.80	141,897.39	143,333.98
23-Jan-2006	142,380.99	143,848.83	145,316.67
24-Jan-2006	142,479.40	143,948.17	145,416.95
25-Jan-2006	142,361.91	143,829.51	145,297.11
26-Jan-2006	142,082.68	143,547.44	145,012.21
19-May-2006	158,140.11	159,762.63	161,385.15
22-May-2006	157,579.81	159,190.44	160,801.08
23-May-2006	159,047.01	160,678.78	162,310.56
24-May-2006	158,526.76	160,140.69	161,754.62
25-May-2006	158,155.48	159,759.33	161,363.19
26-May-2006	159,061.45	160,680.84	162,300.23
29-May-2006	157,829.84	159,449.36	161,068.87
30-May-2006	158,564.63	160,191.56	161,818.48
31-May-2006	160,207.92	161,845.22	163,482.53
01-Jun-2006	158,050.51	159,678.55	161,306.58
02-Jun-2006	158,622.75	160,237.63	161,852.50
05-Jun-2006	159,978.32	161,625.80	163,273.27
07-Jun-2006	158,351.37	159,957.17	161,562.98
08-Jun-2006	157,899.46	159,525.91	161,152.37
09-Jun-2006	156,429.87	158,035.22	159,640.57
12-Jun-2006	156,596.93	158,197.70	159,798.47
13-Jun-2006	156,331.40	157,916.84	159,502.29

Exchange Date	Spot Buying	Mean	Spot Selling
14-Jun-2006	155,944.87	157,570.77	159,196.68
15-Jun-2006	157,041.30	158,633.93	160,226.56
16-Jun-2006	157,610.99	159,241.17	160,871.34
19-Jun-2006	156,688.78	158,284.19	159,879.61
06-Jun-2006	159,207.07	160,846.72	162,486.38
20-Jun-2006	156,511.97	158,124.64	159,737.31
21-Jun-2006	157,225.53	158,832.72	160,439.91
22-Jun-2006	157,634.99	159,239.95	160,844.91
23-Jun-2006	156,184.61	157,774.91	159,365.20
26-Jun-2006	155,418.25	157,013.47	158,608.69
27-Jun-2006	156,353.10	157,964.09	159,575.07
28-Jun-2006	156,213.21	157,803.80	159,394.39
29-Jun-2006	155,803.25	157,396.03	158,988.80
30-Jun-2006	157,673.80	159,291.78	160,909.76
03-Jul-2006	158,739.89	160,349.65	161,959.42
04-Jul-2006	158,781.33	160,416.81	162,052.29
05-Jul-2006	158,572.28	160,192.99	161,813.70
06-Jul-2006	158,166.23	159,795.55	161,424.88
10-Jul-2006	158,782.73	160,437.26	162,091.79
11-Jul-2006	158,279.49	159,909.96	161,540.43
12-Jul-2006	158,752.63	160,375.24	161,997.84
13-Jul-2006	158,280.43	159,910.98	161,541.54
14-Jul-2006	158,080.56	159,715.52	161,350.47
17-Jul-2006	157,879.17	159,493.05	161,106.93
18-Jul-2006	156,842.95	158,459.16	160,075.38
19-Jul-2006	156,793.04	158,396.00	159,998.97
20-Jul-2006	158,379.09	160,010.93	161,642.76
21-Jul-2006	159,029.40	160,661.42	162,293.44
24-Jul-2006	159,668.92	161,301.04	162,933.17
25-Jul-2006	159,920.59	161,568.23	163,215.87
26-Jul-2006	160,239.47	161,884.04	163,528.61
27-Jul-2006	162,599.52	164,268.00	165,936.49
28-Jul-2006	161,738.42	163,398.15	165,057.88
31-Jul-2006	162,727.14	164,409.87	166,092.60
01-Aug-2006	162,652.98	164,328.49	166,003.99
02-Aug-2006	163,222.89	164,891.09	166,559.29
03-Aug-2006	162,443.62	164,103.95	165,764.28
04-Aug-2006	163,022.54	164,688.73	166,354.92
07-Aug-2006	164,016.20	165,705.42	167,394.64
09-Aug-2006	162,896.86	164,561.77	166,226.68
10-Aug-2006	163,989.39	165,665.34	167,341.28
11-Aug-2006	162,724.49	164,400.66	166,076.83
14-Aug-2006	162,905.18	164,563.72	166,222.25
15-Aug-2006	163,006.44	164,685.62	166,364.80
16-Aug-2006	163,707.43	165,393.70	167,079.97
17-Aug-2006	164,845.41	166,530.14	168,214.87
18-Aug-2006	165,329.85	167,026.14	168,722.44
21-Aug-2006	166,015.78	167,705.87	169,395.95

Exchange Date	Spot Buying	Mean	Spot Selling
22-Aug-2006	166,775.34	168,479.77	170,184.19
23-Aug-2006	166,270.76	167,983.42	169,696.08
24-Aug-2006	165,541.37	167,233.35	168,925.33
25-Aug-2006	166,078.98	167,789.70	169,500.42
28-Aug-2006	166,377.96	168,071.81	169,765.66
29-Aug-2006	167,370.39	169,074.31	170,778.24
30-Aug-2006	168,191.09	169,916.73	171,642.36
31-Aug-2006	167,649.37	169,362.80	171,076.22
01-Sep-2006	167,367.43	169,091.35	170,815.27
04-Sep-2006	169,347.55	171,091.72	172,835.89
05-Sep-2006	169,502.66	171,268.71	173,034.77
06-Sep-2006	168,658.03	170,388.51	172,118.98
07-Sep-2006	169,513.79	171,253.02	172,992.25
08-Sep-2006	168,222.17	169,948.36	171,674.55
11-Sep-2006	167,915.51	169,645.42	171,375.33
12-Sep-2006	168,109.48	169,841.27	171,573.07
13-Sep-2006	168,465.43	170,187.42	171,909.41
14-Sep-2006	167,877.53	169,600.25	171,322.98
15-Sep-2006	168,220.29	169,946.47	171,672.64
18-Sep-2006	167,281.24	168,991.18	170,701.11
19-Sep-2006	167,846.44	169,562.07	171,277.69
20-Sep-2006	166,414.79	168,115.84	169,816.89
21-Sep-2006	165,887.11	167,589.34	169,291.57
22-Sep-2006	164,818.53	166,503.09	168,187.64
25-Sep-2006	163,307.36	164,989.45	166,671.53
26-Sep-2006	159,605.30	161,230.25	162,855.20
27-Sep-2006	155,280.43	156,873.88	158,467.32
28-Sep-2006	154,362.89	155,946.92	157,530.95
29-Sep-2006	160,129.97	161,766.72	163,403.48
02-Oct-2006	159,744.35	161,370.78	162,997.22
03-Oct-2006	163,398.74	165,081.93	166,765.11
04-Oct-2006	160,520.33	162,167.51	163,814.68
05-Oct-2006	160,759.46	162,415.58	164,071.71
06-Oct-2006	159,493.57	161,130.26	162,766.95
09-Oct-2006	156,089.98	157,679.29	159,268.60
10-Oct-2006	155,825.02	157,417.95	159,010.88
11-Oct-2006	154,899.62	156,495.78	158,091.94
12-Oct-2006	155,278.28	156,872.03	158,465.78
13-Oct-2006	156,339.00	157,943.56	159,548.13
16-Oct-2006	155,475.79	157,077.97	158,680.16
17-Oct-2006	156,787.14	158,402.75	160,018.37
18-Oct-2006	156,878.87	158,495.40	160,111.93
19-Oct-2006	156,815.02	158,405.39	159,995.76
20-Oct-2006	158,159.36	159,776.09	161,392.81
23-Oct-2006	159,339.13	160,967.95	162,596.76
26-Oct-2006	159,505.42	161,135.90	162,766.38
27-Oct-2006	160,782.52	162,432.41	164,082.30
30-Oct-2006	162,171.12	163,828.72	165,486.31

Exchange Date	Spot Buying	Mean	Spot Selling
31-Oct-2006	161,934.05	163,589.25	165,244.45
01-Nov-2006	163,622.80	165,295.18	166,967.55
02-Nov-2006	163,329.03	164,998.42	166,667.81
03-Nov-2006	164,157.04	165,828.30	167,499.56
06-Nov-2006	162,666.85	164,336.08	166,005.30
07-Nov-2006	163,729.69	165,403.16	167,076.62
08-Nov-2006	163,945.22	165,614.33	167,283.43
09-Nov-2006	164,605.02	166,274.27	167,943.53
10-Nov-2006	165,300.30	166,976.56	168,652.82
13-Nov-2006	165,993.34	167,696.36	169,399.38
14-Nov-2006	165,732.06	167,419.31	169,106.56
15-Nov-2006	166,348.48	168,048.64	169,748.80
16-Nov-2006	166,620.33	168,323.24	170,026.15
17-Nov-2006	166,127.04	167,824.99	169,522.94
20-Nov-2006	166,351.90	168,058.67	169,765.43
21-Nov-2006	166,179.97	167,891.63	169,603.29
22-Nov-2006	166,716.87	168,433.94	170,151.01
23-Nov-2006	167,113.38	168,807.99	170,502.59
24-Nov-2006	166,789.94	168,481.25	170,172.57
27-Nov-2006	169,140.50	170,875.28	172,610.05
28-Nov-2006	169,018.84	170,739.22	172,459.60
29-Nov-2006	169,376.40	171,106.92	172,837.44
30-Nov-2006	168,174.53	169,879.78	171,585.03
01-Dec-2006	168,239.44	169,951.78	171,664.11
04-Dec-2006	169,021.97	170,748.69	172,475.41
05-Dec-2006	168,991.59	170,730.93	172,470.26
06-Dec-2006	168,862.54	170,587.62	172,312.70
07-Dec-2006	168,199.23	169,930.50	171,661.77
08-Dec-2006	167,993.73	169,722.89	171,452.04
11-Dec-2006	166,384.06	168,084.07	169,784.07
12-Dec-2006	168,025.41	169,754.94	171,484.48
13-Dec-2006	168,536.06	170,257.86	171,979.66
14-Dec-2006	168,052.68	169,769.65	171,486.62
15-Dec-2006	167,265.47	168,987.47	170,709.48
18-Dec-2006	166,571.09	168,273.10	169,975.11
19-Dec-2006	165,271.29	166,960.02	168,648.75
20-Dec-2006	166,157.33	167,867.70	169,578.08
21-Dec-2006	165,570.98	167,249.82	168,928.65
22-Dec-2006	164,593.28	166,274.94	167,956.60
27-Dec-2006	163,889.13	165,576.35	167,263.57
28-Dec-2006	163,753.61	165,426.80	167,099.98
29-Dec-2006	164,521.39	166,202.33	167,883.28

Source: Bank of Tanzania, Exchange Rates Report

Appendix 4: GBP / TZS Exchange Rates from the Year 2001 to 2006

Exchange Date	Spot Buying	Mean	Spot Selling
02-Jan-2001	118,881.50	120,114.78	121,348.06
03-Jan-2001	119,371.59	120,605.75	121,839.92
04-Jan-2001	118,434.69	119,671.57	120,908.44
05-Jan-2001	119,652.89	120,889.90	122,126.92
08-Jan-2001	119,540.53	120,768.30	121,996.06
09-Jan-2001	118,908.70	120,138.20	121,367.69
10-Jan-2001	118,285.65	119,508.85	120,732.06
11-Jan-2001	118,450.05	119,662.75	120,875.45
15-Jan-2001	117,483.86	118,690.86	119,897.85
16-Jan-2001	117,502.54	118,717.85	119,933.17
17-Jan-2001	117,207.44	118,423.87	119,640.31
18-Jan-2001	117,535.42	118,742.98	119,950.55
19-Jan-2001	117,703.14	118,912.43	120,121.71
22-Jan-2001	116,889.43	118,098.65	119,307.86
23-Jan-2001	117,240.74	118,457.57	119,674.41
24-Jan-2001	117,009.20	118,207.40	119,405.60
25-Jan-2001	116,132.46	117,346.27	118,560.08
26-Jan-2001	116,515.95	117,733.63	118,951.32
29-Jan-2001	116,760.33	117,980.55	119,200.77
30-Jan-2001	118,881.50	120,114.78	121,348.06
31-Jan-2001	117,101.30	118,325.02	119,548.74
01-Feb-2001	117,647.47	118,876.79	120,106.10
02-Feb-2001	118,684.84	119,916.48	121,148.13
05-Feb-2001	118,388.75	119,592.81	120,796.87
06-Feb-2001	118,603.65	119,842.76	121,081.88
07-Feb-2001	118,616.76	119,856.02	121,095.27
08-Feb-2001	117,051.16	118,274.61	119,498.05
09-Feb-2001	116,364.36	117,572.65	118,780.93
12-Feb-2001	116,775.40	117,975.51	119,175.61
13-Feb-2001	116,994.69	118,217.58	119,440.46
14-Feb-2001	117,120.49	118,307.64	119,494.79
15-Feb-2001	117,590.38	118,806.99	120,023.60
16-Feb-2001	117,085.63	118,288.90	119,492.17
19-Feb-2001	116,872.22	118,073.33	119,274.44
20-Feb-2001	116,931.97	118,141.95	119,351.93
21-Feb-2001	116,909.22	118,110.75	119,312.28
22-Feb-2001	116,849.40	118,071.01	119,292.62
23-Feb-2001	117,311.82	118,517.48	119,723.13
26-Feb-2001	117,960.58	119,185.20	120,409.81
27-Feb-2001	117,582.86	118,791.30	119,999.75
28-Feb-2001	117,216.87	118,421.64	119,626.40
01-Mar-2001	117,679.75	118,909.94	120,140.14
02-Mar-2001	118,960.10	120,182.56	121,405.02
05-Mar-2001	119,955.22	121,208.58	122,461.93
07-Mar-2001	120,184.05	121,431.38	122,678.71
08-Mar-2001	119,478.15	120,718.38	121,958.61

Exchange Date	Spot Buying	Mean	Spot Selling
09-Mar-2001	120,424.63	121,682.81	122,940.98
12-Mar-2001	120,202.09	121,437.15	122,672.21
13-Mar-2001	119,978.57	121,223.92	122,469.28
14-Mar-2001	118,831.39	120,044.26	121,257.14
15-Mar-2001	118,830.94	120,048.01	121,265.08
16-Mar-2001	118,114.93	119,349.96	120,584.99
19-Mar-2001	117,845.94	119,057.31	120,268.67
20-Mar-2001	117,600.09	118,809.00	120,017.91
21-Mar-2001	118,536.72	119,767.77	120,998.83
22-Mar-2001	118,264.52	119,480.21	120,695.89
23-Mar-2001	118,095.56	119,322.33	120,549.10
26-Mar-2001	119,139.76	120,385.78	121,631.80
27-Mar-2001	120,995.25	122,234.62	123,474.00
28-Mar-2001	121,182.87	122,428.47	123,674.08
29-Mar-2001	121,787.15	123,030.29	124,273.43
30-Mar-2001	121,545.83	122,795.28	124,044.73
02-Apr-2001	121,498.48	122,747.59	123,996.71
03-Apr-2001	122,502.36	123,752.95	125,003.55
04-Apr-2001	124,154.08	125,430.28	126,706.48
05-Apr-2001	125,156.59	126,465.24	127,773.89
06-Apr-2001	124,268.66	125,546.12	126,823.58
09-Apr-2001	126,018.08	127,313.33	128,608.59
10-Apr-2001	126,852.98	128,179.10	129,505.21
11-Apr-2001	125,863.52	127,179.67	128,495.82
12-Apr-2001	126,292.38	127,590.47	128,888.56
17-Apr-2001	126,319.59	127,617.96	128,916.34
18-Apr-2001	125,785.91	127,078.89	128,371.88
19-Apr-2001	125,433.94	126,723.37	128,012.80
20-Apr-2001	126,945.05	128,263.22	129,581.38
23-Apr-2001	127,364.18	128,668.65	129,973.12
24-Apr-2001	126,716.21	128,041.09	129,365.97
25-Apr-2001	126,241.77	127,548.39	128,855.02
27-Apr-2001	126,909.62	128,214.01	129,518.39
30-Apr-2001	126,374.20	127,686.65	128,999.09
02-May-2001	126,459.36	127,781.63	129,103.90
03-May-2001	126,229.61	127,527.10	128,824.59
04-May-2001	126,231.52	127,529.01	128,826.51
07-May-2001	126,319.84	127,627.18	128,934.53
08-May-2001	126,312.98	127,624.73	128,936.49
09-May-2001	125,476.63	126,762.00	128,047.37
10-May-2001	125,043.16	126,342.09	127,641.02
11-May-2001	125,087.21	126,386.60	127,685.99
14-May-2001	124,669.71	125,960.39	127,251.08
15-May-2001	124,652.02	125,956.00	127,259.98
16-May-2001	125,047.83	126,328.88	127,609.94
17-May-2001	125,818.62	127,125.42	128,432.22
18-May-2001	125,973.87	127,291.22	128,608.57
21-May-2001	126,784.85	128,110.39	129,435.94

Exchange Date	Spot Buying	Mean	Spot Selling
22-May-2001	126,629.31	127,930.84	129,232.36
23-May-2001	125,568.77	126,855.10	128,141.42
24-May-2001	124,607.77	125,888.88	127,169.99
25-May-2001	123,983.02	125,257.82	126,532.62
28-May-2001	125,146.35	126,455.36	127,764.36
29-May-2001	125,086.14	126,394.54	127,702.94
30-May-2001	125,267.83	126,555.61	127,843.40
31-May-2001	125,399.87	126,688.99	127,978.11
01-Jun-2001	124,878.71	126,167.06	127,455.40
04-Jun-2001	125,010.77	126,304.93	127,599.10
06-Jun-2001	124,227.25	125,513.50	126,799.76
07-Jun-2001	122,523.49	123,779.06	125,034.64
08-Jun-2001	122,488.27	123,747.98	125,007.69
11-Jun-2001	122,059.63	123,337.46	124,615.30
12-Jun-2001	120,974.72	122,241.60	123,508.48
13-Jun-2001	120,842.00	122,085.09	123,328.17
14-Jun-2001	122,338.06	123,605.23	124,872.41
15-Jun-2001	123,272.71	124,562.81	125,852.90
18-Jun-2001	123,651.31	124,945.23	126,239.14
19-Jun-2001	123,449.31	124,741.17	126,033.04
20-Jun-2001	123,056.48	124,317.44	125,578.39
21-Jun-2001	122,824.88	124,083.49	125,342.10
22-Jun-2001	124,547.17	125,836.65	127,126.13
25-Jun-2001	124,466.56	125,755.22	127,043.89
26-Jun-2001	124,350.74	125,651.70	126,952.67
27-Jun-2001	124,632.38	125,913.74	127,195.10
28-Jun-2001	124,633.93	125,924.27	127,214.62
29-Jun-2001	123,784.28	125,079.47	126,374.66
02-Jul-2001	124,449.75	125,751.65	127,053.55
03-Jul-2001	124,424.61	125,703.83	126,983.05
04-Jul-2001	123,555.13	124,825.55	126,095.98
05-Jul-2001	123,324.93	124,615.42	125,905.91
09-Jul-2001	123,500.61	124,792.76	126,084.91
10-Jul-2001	123,368.47	124,636.95	125,905.44
11-Jul-2001	123,482.33	124,751.96	126,021.60
12-Jul-2001	123,360.53	124,628.94	125,897.35
13-Jul-2001	123,099.29	124,387.48	125,675.66
16-Jul-2001	123,191.09	124,480.28	125,769.48
17-Jul-2001	122,910.09	124,187.49	125,464.90
18-Jul-2001	123,251.09	124,527.47	125,803.86
19-Jul-2001	124,974.15	126,258.96	127,543.78
20-Jul-2001	125,870.03	127,177.39	128,484.76
23-Jul-2001	125,520.80	126,833.65	128,146.50
24-Jul-2001	125,222.74	126,523.63	127,824.51
25-Jul-2001	125,474.17	126,786.62	128,099.07
26-Jul-2001	126,188.29	127,498.97	128,809.66
30-Jul-2001	125,794.32	127,087.52	128,380.72
27-Jul-2001	126,245.55	127,556.84	128,868.12

Exchange Date	Spot Buying	Mean	Spot Selling
31-Jul-2001	126,228.59	127,535.18	128,841.77
01-Aug-2001	125,849.10	127,142.79	128,436.48
02-Aug-2001	126,393.80	127,692.97	128,992.15
03-Aug-2001	125,953.25	127,270.45	128,587.65
06-Aug-2001	125,724.16	127,016.57	128,308.99
07-Aug-2001	124,984.04	126,259.98	127,535.93
09-Aug-2001	124,684.46	125,966.37	127,248.28
10-Aug-2001	125,601.53	126,901.69	128,201.86
13-Aug-2001	125,486.26	126,767.28	128,048.31
14-Aug-2001	125,216.13	126,503.42	127,790.72
15-Aug-2001	125,979.93	127,274.94	128,569.94
16-Aug-2001	127,102.41	128,399.76	129,697.11
17-Aug-2001	127,175.96	128,505.56	129,835.15
20-Aug-2001	127,369.99	128,701.54	130,033.10
21-Aug-2001	127,364.98	128,673.99	129,983.00
22-Aug-2001	128,097.11	129,413.52	130,729.93
23-Aug-2001	127,752.44	129,078.87	130,405.30
24-Aug-2001	127,741.05	129,053.88	130,366.70
27-Aug-2001	127,237.47	128,545.21	129,852.95
28-Aug-2001	127,264.59	128,572.60	129,880.62
29-Aug-2001	128,179.06	129,505.33	130,831.60
30-Aug-2001	127,949.24	129,264.18	130,579.12
31-Aug-2001	128,873.92	130,198.21	131,522.50
03-Sep-2001	128,352.63	129,671.65	130,990.68
04-Sep-2001	128,184.75	129,502.08	130,819.41
05-Sep-2001	127,340.83	128,640.62	129,940.41
06-Sep-2001	128,648.33	129,970.35	131,292.36
07-Sep-2001	128,676.28	129,998.58	131,320.88
10-Sep-2001	129,263.83	130,592.07	131,920.30
11-Sep-2001	128,689.44	130,011.88	131,334.31
12-Sep-2001	130,197.69	131,557.89	132,918.09
13-Sep-2001	129,614.52	130,946.29	132,278.07
14-Sep-2001	129,894.36	131,228.96	132,563.56
17-Sep-2001	130,144.32	131,481.42	132,818.53
18-Sep-2001	129,208.60	130,536.25	131,863.90
19-Sep-2001	129,325.18	130,654.01	131,982.83
20-Sep-2001	129,354.68	130,697.31	132,039.94
21-Sep-2001	129,084.12	130,410.51	131,736.90
24-Sep-2001	128,491.40	129,834.31	131,177.22
25-Sep-2001	129,170.92	130,520.70	131,870.47
26-Sep-2001	129,909.23	131,243.95	132,578.67
27-Sep-2001	130,053.28	131,389.46	132,725.64
28-Sep-2001	129,592.19	130,923.67	132,255.16
01-Oct-2001	129,765.72	131,112.48	132,459.24
02-Oct-2001	130,417.01	131,779.35	133,141.68
04-Oct-2001	129,684.69	131,039.64	132,394.59
05-Oct-2001	130,226.69	131,587.14	132,947.59
08-Oct-2001	130,923.64	132,291.18	133,658.72

Exchange Date	Spot Buying	Mean	Spot Selling
09-Oct-2001	130,274.06	131,635.09	132,996.12
10-Oct-2001	129,109.29	130,449.55	131,789.80
11-Oct-2001	128,496.43	129,839.55	131,182.67
12-Oct-2001	128,110.56	129,431.73	130,752.90
15-Oct-2001	128,856.23	130,194.00	131,531.77
16-Oct-2001	128,678.47	130,005.44	131,332.41
17-Oct-2001	128,865.74	130,212.80	131,559.86
18-Oct-2001	128,837.55	130,184.34	131,531.13
19-Oct-2001	128,264.36	129,596.29	130,928.22
22-Oct-2001	127,778.31	129,105.36	130,432.41
23-Oct-2001	127,038.04	128,343.99	129,649.94
24-Oct-2001	127,331.57	128,649.60	129,967.63
25-Oct-2001	127,339.76	128,662.44	129,985.12
26-Oct-2001	127,508.61	128,823.91	130,139.21
29-Oct-2001	128,446.75	129,780.65	131,114.55
30-Oct-2001	130,144.15	131,476.98	132,809.81
31-Oct-2001	130,058.46	131,408.71	132,758.95
01-Nov-2001	130,145.43	131,496.57	132,847.71
02-Nov-2001	131,113.32	132,474.26	133,835.20
05-Nov-2001	130,550.58	131,896.72	133,242.86
06-Nov-2001	130,884.81	132,229.77	133,574.72
08-Nov-2001	131,652.87	133,005.64	134,358.41
07-Nov-2001	131,089.19	132,436.24	133,783.29
09-Nov-2001	130,882.75	132,227.78	133,572.80
12-Nov-2001	131,432.38	132,792.20	134,152.02
13-Nov-2001	131,098.49	132,468.75	133,839.01
14-Nov-2001	130,534.60	131,876.22	133,217.84
15-Nov-2001	130,563.01	131,904.94	133,246.86
16-Nov-2001	129,963.65	131,299.53	132,635.41
19-Nov-2001	129,465.64	130,796.52	132,127.41
20-Nov-2001	128,376.24	129,696.12	131,016.01
21-Nov-2001	128,768.76	130,092.61	131,416.46
22-Nov-2001	128,609.55	129,931.79	131,254.03
23-Nov-2001	128,257.56	129,599.41	130,941.25
26-Nov-2001	128,056.38	129,373.05	130,689.71
27-Nov-2001	128,340.04	129,659.57	130,979.10
28-Nov-2001	128,651.79	129,974.48	131,297.16
29-Nov-2001	129,584.75	130,916.87	132,248.99
30-Nov-2001	129,392.07	130,722.25	132,052.43
03-Dec-2001	129,277.96	130,606.97	131,935.99
04-Dec-2001	129,153.68	130,481.42	131,809.16
05-Dec-2001	129,076.68	130,399.01	131,721.33
06-Dec-2001	128,469.83	129,804.55	131,139.27
07-Dec-2001	129,579.63	130,920.93	132,262.24
10-Dec-2001	130,035.01	131,371.65	132,708.29
11-Dec-2001	130,092.32	131,429.54	132,766.77
12-Dec-2001	130,831.66	132,176.35	133,521.04
13-Dec-2001	131,367.30	132,717.40	134,067.49

Exchange Date	Spot Buying	Mean	Spot Selling
14-Dec-2001	130,995.67	132,342.01	133,688.34
19-Dec-2001	131,944.22	133,323.28	134,702.33
20-Dec-2001	131,508.67	132,860.18	134,211.70
21-Dec-2001	131,604.18	132,956.65	134,309.13
24-Dec-2001	130,611.01	131,953.45	133,295.89
27-Dec-2001	131,616.51	132,969.10	134,321.70
28-Dec-2001	131,571.15	132,923.29	134,275.43
31-Dec-2001	131,652.79	133,019.64	134,386.48
02-Jan-2002	131,932.84	133,302.51	134,672.17
03-Jan-2002	131,152.45	132,514.23	133,876.01
04-Jan-2002	130,566.69	131,931.82	133,296.94
07-Jan-2002	131,009.22	132,355.68	133,702.14
08-Jan-2002	130,456.27	131,787.89	133,119.51
09-Jan-2002	130,629.54	131,986.06	133,342.57
10-Jan-2002	130,566.07	131,917.33	133,268.60
11-Jan-2002	130,844.89	132,203.61	133,562.33
14-Jan-2002	131,598.59	132,951.03	134,303.47
15-Jan-2002	131,688.02	133,032.11	134,376.20
16-Jan-2002	131,058.26	132,405.29	133,752.33
17-Jan-2002	130,912.30	132,257.91	133,603.53
18-Jan-2002	131,563.62	132,906.57	134,249.51
21-Jan-2002	131,946.39	133,307.24	134,668.09
22-Jan-2002	131,930.71	133,286.85	134,642.99
23-Jan-2002	131,912.27	133,291.74	134,671.20
24-Jan-2002	131,879.40	133,235.15	134,590.90
25-Jan-2002	133,450.28	134,822.15	136,194.01
28-Jan-2002	130,489.09	131,844.92	133,200.76
29-Jan-2002	130,530.29	131,872.38	133,214.47
30-Jan-2002	130,840.63	132,185.86	133,531.09
31-Jan-2002	131,082.49	132,430.19	133,777.89
01-Feb-2002	130,776.70	132,121.31	133,465.92
04-Feb-2002	131,361.24	132,711.77	134,062.30
05-Feb-2002	131,980.47	133,351.47	134,722.47
06-Feb-2002	131,997.46	133,378.39	134,759.32
07-Feb-2002	132,258.18	133,632.34	135,006.50
08-Feb-2002	132,454.85	133,816.67	135,178.48
11-Feb-2002	133,000.04	134,391.35	135,782.65
12-Feb-2002	133,843.01	135,218.95	136,594.89
13-Feb-2002	135,060.52	136,463.26	137,866.00
14-Feb-2002	134,982.22	136,360.13	137,738.04
15-Feb-2002	135,406.42	136,812.84	138,219.26
18-Feb-2002	136,365.83	137,791.84	139,217.84
19-Feb-2002	136,122.89	137,546.50	138,970.12
20-Feb-2002	137,418.93	138,831.49	140,244.05
21-Feb-2002	137,178.86	138,588.99	139,999.13
25-Feb-2002	137,111.42	138,535.50	139,959.57
26-Feb-2002	137,064.19	138,473.18	139,882.17
27-Feb-2002	136,115.83	137,515.24	138,914.65

Exchange Date	Spot Buying	Mean	Spot Selling
28-Feb-2002	136,317.59	137,719.05	139,120.50
01-Mar-2002	136,173.48	137,573.47	138,973.46
05-Mar-2002	136,650.56	138,055.37	139,460.18
04-Mar-2002	136,419.06	137,821.54	139,224.01
06-Mar-2002	136,339.33	137,740.94	139,142.55
07-Mar-2002	135,853.15	137,249.74	138,646.34
08-Mar-2002	135,292.11	136,707.08	138,122.05
11-Mar-2002	134,770.48	136,180.18	137,589.88
12-Mar-2002	135,184.87	136,584.39	137,983.91
13-Mar-2002	135,004.65	136,378.07	137,751.50
14-Mar-2002	135,417.74	136,809.99	138,202.24
15-Mar-2002	136,001.99	137,400.16	138,798.32
18-Mar-2002	136,102.76	137,501.95	138,901.14
19-Mar-2002	136,541.15	137,944.77	139,348.39
20-Mar-2002	136,270.32	137,671.21	139,072.11
21-Mar-2002	137,012.59	138,421.02	139,829.45
22-Mar-2002	137,240.83	138,651.62	140,062.41
25-Mar-2002	137,333.09	138,769.51	140,205.93
26-Mar-2002	137,874.76	139,306.89	140,739.02
27-Mar-2002	138,194.84	139,615.46	141,036.09
28-Mar-2002	138,560.37	139,984.74	141,409.12
02-Apr-2002	139,863.82	141,301.36	142,738.91
03-Apr-2002	139,538.93	140,973.20	142,407.47
04-Apr-2002	139,470.89	140,904.48	142,338.06
05-Apr-2002	139,378.18	140,825.70	142,273.23
08-Apr-2002	138,935.48	140,363.61	141,791.74
09-Apr-2002	138,722.95	140,173.65	141,624.35
10-Apr-2002	139,399.45	140,832.25	142,265.05
11-Apr-2002	139,194.59	140,625.35	142,056.10
12-Apr-2002	139,373.50	140,806.06	142,238.61
15-Apr-2002	139,428.21	140,861.32	142,294.44
16-Apr-2002	139,433.90	140,867.07	142,300.25
17-Apr-2002	139,829.44	141,266.62	142,703.80
18-Apr-2002	140,414.65	141,857.75	143,300.85
19-Apr-2002	140,769.24	142,240.71	143,712.17
22-Apr-2002	140,533.88	142,002.97	143,472.06
23-Apr-2002	140,773.66	142,220.38	143,667.11
24-Apr-2002	139,984.33	141,408.18	142,832.03
25-Apr-2002	139,109.06	140,563.19	142,017.31
29-Apr-2002	139,502.95	140,936.46	142,369.98
30-Apr-2002	139,453.84	140,886.87	142,319.89
02-May-2002	140,197.99	141,662.92	143,127.84
03-May-2002	139,991.48	141,429.96	142,868.44
06-May-2002	141,005.78	142,469.27	143,932.77
07-May-2002	141,417.99	142,895.61	144,373.23
08-May-2002	141,455.49	142,923.73	144,391.97
09-May-2002	141,178.41	142,629.18	144,079.95
10-May-2002	142,720.63	144,187.14	145,653.64

Exchange Date	Spot Buying	Mean	Spot Selling
13-May-2002	143,131.91	144,602.64	146,073.37
14-May-2002	143,119.65	144,590.38	146,061.11
15-May-2002	142,959.14	144,428.33	145,897.53
16-May-2002	143,918.84	145,397.74	146,876.64
17-May-2002	144,215.34	145,697.28	147,179.22
20-May-2002	144,779.51	146,267.19	147,754.86
21-May-2002	144,081.82	145,562.43	147,043.04
22-May-2002	144,587.19	146,072.88	147,558.57
23-May-2002	143,192.64	144,689.16	146,185.68
24-May-2002	141,461.84	142,915.56	144,369.29
27-May-2002	141,329.03	142,781.35	144,233.66
28-May-2002	140,749.57	142,195.94	143,642.30
29-May-2002	139,950.74	141,388.87	142,827.01
30-May-2002	139,700.83	141,136.32	142,571.80
31-May-2002	139,318.09	140,749.57	142,181.05
03-Jun-2002	137,894.53	139,311.57	140,728.60
04-Jun-2002	138,539.70	139,963.23	141,386.77
05-Jun-2002	138,921.67	140,373.51	141,825.35
06-Jun-2002	138,588.41	140,012.57	141,436.72
07-Jun-2002	139,738.93	141,174.84	142,610.76
10-Jun-2002	139,771.67	141,207.99	142,644.32
11-Jun-2002	140,829.66	142,276.76	143,723.85
12-Jun-2002	141,970.91	143,444.32	144,917.72
13-Jun-2002	141,129.41	142,564.76	144,000.12
14-Jun-2002	141,511.50	142,965.43	144,419.35
17-Jun-2002	141,794.13	143,275.40	144,756.67
18-Jun-2002	141,412.71	142,880.14	144,347.57
19-Jun-2002	141,477.81	142,931.05	144,384.30
20-Jun-2002	140,387.97	141,830.04	143,272.12
21-Jun-2002	140,191.69	141,655.41	143,119.13
24-Jun-2002	139,626.31	141,055.70	142,485.10
25-Jun-2002	139,314.53	140,731.22	142,147.91
26-Jun-2002	141,328.87	142,780.23	144,231.60
27-Jun-2002	142,934.73	144,402.41	145,870.09
28-Jun-2002	143,159.62	144,629.59	146,099.56
01-Jul-2002	143,642.55	145,117.40	146,592.24
02-Jul-2002	143,193.66	144,678.28	146,162.90
03-Jul-2002	143,048.30	144,517.07	145,985.84
04-Jul-2002	141,814.67	143,270.85	144,727.02
05-Jul-2002	140,870.59	142,317.16	143,763.73
08-Jul-2002	141,803.82	143,245.63	144,687.43
09-Jul-2002	142,773.75	144,225.37	145,676.98
10-Jul-2002	143,433.66	144,891.94	146,350.23
11-Jul-2002	144,023.16	145,501.67	146,980.18
12-Jul-2002	145,042.93	146,531.86	148,020.78
15-Jul-2002	146,096.43	147,620.12	149,143.80
16-Jul-2002	148,401.60	149,939.11	151,476.61
17-Jul-2002	148,797.19	150,324.30	151,851.40

Exchange Date	Spot Buying	Mean	Spot Selling
18-Jul-2002	148,315.98	149,852.71	151,389.43
19-Jul-2002	149,640.85	151,200.61	152,760.38
22-Jul-2002	148,899.75	150,442.39	151,985.03
23-Jul-2002	148,537.08	150,047.10	151,557.13
24-Jul-2002	147,982.58	149,515.95	151,049.32
25-Jul-2002	149,021.83	150,551.21	152,080.60
26-Jul-2002	149,759.28	151,296.11	152,832.95
29-Jul-2002	147,847.46	149,345.69	150,843.92
30-Jul-2002	147,266.84	148,778.41	150,289.98
31-Jul-2002	148,092.15	149,626.48	151,160.82
01-Aug-2002	147,706.26	149,246.41	150,786.55
02-Aug-2002	147,960.70	149,479.40	150,998.10
05-Aug-2002	149,054.53	150,584.37	152,114.21
06-Aug-2002	148,119.83	149,654.82	151,189.81
07-Aug-2002	146,852.48	148,384.50	149,916.51
09-Aug-2002	146,783.50	148,305.21	149,826.92
12-Aug-2002	146,783.50	148,305.21	149,826.92
13-Aug-2002	147,596.49	149,111.95	150,627.41
14-Aug-2002	148,603.73	150,144.14	151,684.56
15-Aug-2002	147,944.29	149,487.92	151,031.55
16-Aug-2002	148,125.29	149,660.93	151,196.56
19-Aug-2002	148,937.19	150,466.24	151,995.29
20-Aug-2002	147,475.64	148,989.93	150,504.22
21-Aug-2002	147,982.22	149,526.24	151,070.27
22-Aug-2002	146,658.00	148,188.38	149,718.76
23-Aug-2002	145,172.12	146,687.30	148,202.49
26-Aug-2002	145,072.81	146,586.86	148,100.91
27-Aug-2002	145,785.58	147,282.51	148,779.43
28-Aug-2002	146,105.02	147,600.29	149,095.56
29-Aug-2002	146,330.20	147,827.71	149,325.22
30-Aug-2002	147,943.71	149,462.47	150,981.22
02-Sep-2002	148,030.34	149,549.98	151,069.63
03-Sep-2002	148,664.61	150,190.72	151,716.83
04-Sep-2002	150,200.52	151,742.19	153,283.86
05-Sep-2002	150,783.99	152,331.61	153,879.22
06-Sep-2002	151,236.21	152,788.46	154,340.70
09-Sep-2002	150,581.93	152,127.60	153,673.28
10-Sep-2002	150,787.93	152,335.69	153,883.44
11-Sep-2002	150,300.59	151,843.42	153,386.26
12-Sep-2002	149,739.52	151,276.61	152,813.70
17-Sep-2002	148,014.04	149,533.70	151,053.36
16-Sep-2002	149,154.10	150,685.25	152,216.41
18-Sep-2002	148,811.37	150,339.12	151,866.87
19-Sep-2002	149,590.38	151,140.80	152,691.23
20-Sep-2002	150,420.30	151,964.38	153,508.46
23-Sep-2002	150,369.28	151,927.65	153,486.03
24-Sep-2002	149,988.17	151,527.88	153,067.59
25-Sep-2002	150,791.81	152,339.60	153,887.39

Exchange Date	Spot Buying	Mean	Spot Selling
26-Sep-2002	150,527.98	152,087.88	153,647.77
27-Sep-2002	150,223.93	151,765.92	153,307.90
30-Sep-2002	150,336.10	151,879.13	153,422.15
01-Oct-2002	150,944.90	152,494.08	154,043.26
02-Oct-2002	150,620.14	152,166.09	153,712.05
03-Oct-2002	151,513.64	153,093.33	154,673.02
04-Oct-2002	151,651.15	153,207.65	154,764.15
07-Oct-2002	151,073.59	152,624.23	154,174.88
08-Oct-2002	151,575.44	153,131.15	154,686.87
09-Oct-2002	150,127.35	151,678.29	153,229.24
10-Oct-2002	151,181.01	152,732.73	154,284.46
11-Oct-2002	150,997.42	152,532.50	154,067.59
15-Oct-2002	150,343.05	151,886.29	153,429.53
16-Oct-2002	150,233.03	151,775.19	153,317.35
17-Oct-2002	150,287.95	151,825.76	153,363.56
18-Oct-2002	150,158.40	151,699.85	153,241.31
21-Oct-2002	150,257.91	151,800.41	153,342.91
22-Oct-2002	149,786.96	151,324.71	152,862.47
23-Oct-2002	150,040.59	151,580.93	153,121.26
24-Oct-2002	150,143.04	151,684.38	153,225.71
25-Oct-2002	150,728.91	152,276.15	153,823.38
28-Oct-2002	150,232.94	151,775.19	153,317.45
29-Oct-2002	151,287.81	152,840.74	154,393.66
30-Oct-2002	151,209.59	152,786.53	154,363.47
31-Oct-2002	151,465.70	153,020.42	154,575.13
04-Nov-2002	151,731.13	153,288.51	154,845.89
01-Nov-2002	151,653.04	153,209.61	154,766.18
05-Nov-2002	151,272.71	152,840.36	154,408.01
06-Nov-2002	151,719.54	153,301.69	154,883.84
07-Nov-2002	152,331.59	153,895.14	155,458.69
08-Nov-2002	153,879.73	155,458.93	157,038.13
11-Nov-2002	155,313.29	156,907.00	158,500.71
12-Nov-2002	154,838.80	156,427.75	158,016.70
13-Nov-2002	155,145.76	156,737.82	158,329.87
14-Nov-2002	154,867.68	156,456.95	158,046.21
15-Nov-2002	154,523.71	156,109.52	157,695.32
18-Nov-2002	154,499.86	156,100.39	157,700.93
19-Nov-2002	154,730.78	156,343.63	157,956.48
20-Nov-2002	154,504.55	156,090.16	157,675.77
21-Nov-2002	153,744.46	155,347.32	156,950.19
22-Nov-2002	154,656.38	156,243.50	157,830.63
25-Nov-2002	153,883.53	155,467.81	157,052.09
26-Nov-2002	152,655.61	154,237.40	155,819.20
27-Nov-2002	151,554.63	153,115.34	154,676.06
28-Nov-2002	150,917.13	152,471.40	154,025.66
29-Nov-2002	151,116.65	152,672.91	154,229.18
02-Dec-2002	151,603.44	153,159.64	154,715.84
03-Dec-2002	151,736.94	153,299.49	154,862.04

Exchange Date	Spot Buying	Mean	Spot Selling
04-Dec-2002	153,459.52	155,034.52	156,609.53
10-Dec-2002	153,708.02	155,285.45	156,862.88
11-Dec-2002	152,463.23	154,028.02	155,592.82
12-Dec-2002	152,961.58	154,541.32	156,121.06
13-Dec-2002	153,331.02	154,904.57	156,478.12
16-Dec-2002	154,047.34	155,628.10	157,208.87
17-Dec-2002	154,181.60	155,763.64	157,345.69
18-Dec-2002	154,574.54	156,160.60	157,746.65
19-Dec-2002	154,849.04	156,437.82	158,026.60
20-Dec-2002	154,888.54	156,492.53	158,096.51
23-Dec-2002	154,698.90	156,286.13	157,873.37
24-Dec-2002	153,729.63	155,307.07	156,884.50
27-Dec-2002	154,385.52	155,969.53	157,553.54
30-Dec-2002	153,828.92	155,421.88	157,014.85
31-Dec-2002	154,926.22	156,530.57	158,134.92
02-Jan-2003	155,474.87	157,074.91	158,674.96
03-Jan-2003	154,765.62	156,353.65	157,941.68
06-Jan-2003	156,182.80	157,785.15	159,387.49
07-Jan-2003	156,187.19	157,789.65	159,392.11
08-Jan-2003	156,463.47	158,083.70	159,703.93
09-Jan-2003	157,691.75	159,334.42	160,977.10
10-Jan-2003	157,149.00	158,761.34	160,373.67
13-Jan-2003	157,491.44	159,122.25	160,753.06
14-Jan-2003	157,476.23	159,091.95	160,707.67
15-Jan-2003	158,361.50	159,986.27	161,611.03
16-Jan-2003	158,310.81	159,960.30	161,609.80
17-Jan-2003	158,967.32	160,598.25	162,229.18
20-Jan-2003	159,133.38	160,766.00	162,398.62
21-Jan-2003	159,101.26	160,723.50	162,345.74
22-Jan-2003	160,338.15	161,983.02	163,627.88
23-Jan-2003	161,279.03	162,933.56	164,588.09
24-Jan-2003	162,803.72	164,489.00	166,174.29
27-Jan-2003	163,425.42	165,101.70	166,777.97
28-Jan-2003	163,605.59	165,283.70	166,961.82
29-Jan-2003	165,238.37	166,922.82	168,607.27
30-Jan-2003	166,128.05	167,831.83	169,535.61
31-Jan-2003	167,079.87	168,783.00	170,486.14
03-Feb-2003	165,728.24	167,427.97	169,127.70
04-Feb-2003	165,310.47	167,005.95	168,701.44
06-Feb-2003	165,006.42	166,698.78	168,391.14
07-Feb-2003	164,597.28	166,290.66	167,984.05
10-Feb-2003	163,779.52	165,459.50	167,139.47
11-Feb-2003	163,416.80	165,093.11	166,769.42
13-Feb-2003	162,594.60	164,262.59	165,930.58
02-May-2003	165,553.04	167,251.53	168,950.01
14-Feb-2003	163,280.53	164,955.50	166,630.47
17-Feb-2003	161,847.94	163,523.90	165,199.85
18-Feb-2003	161,505.43	163,162.52	164,819.61

Exchange Date	Spot Buying	Mean	Spot Selling
19-Feb-2003	160,875.64	162,531.55	164,187.47
20-Feb-2003	161,778.43	163,438.35	165,098.27
21-Feb-2003	161,452.64	163,114.47	164,776.30
24-Feb-2003	159,783.29	161,423.10	163,062.91
26-Feb-2003	159,801.88	161,441.93	163,081.99
25-Feb-2003	160,855.87	162,506.54	164,157.20
27-Feb-2003	161,146.11	162,804.96	164,463.81
28-Feb-2003	160,647.22	162,295.86	163,944.50
03-Mar-2003	160,410.56	162,072.49	163,734.41
04-Mar-2003	161,765.11	163,425.18	165,085.26
05-Mar-2003	162,635.21	164,304.07	165,972.94
06-Mar-2003	163,857.26	165,538.49	167,219.72
07-Mar-2003	163,991.10	165,673.73	167,356.36
10-Mar-2003	164,297.49	165,983.27	167,669.06
11-Mar-2003	164,594.01	166,282.79	167,971.57
12-Mar-2003	165,290.32	166,986.18	168,682.03
13-Mar-2003	165,221.77	166,901.19	168,580.61
14-Mar-2003	164,970.47	166,663.10	168,355.73
17-Mar-2003	163,384.41	165,060.99	166,737.58
18-Mar-2003	161,573.65	163,231.99	164,890.32
19-Mar-2003	161,514.48	163,188.04	164,861.59
20-Mar-2003	161,093.39	162,752.12	164,410.84
21-Mar-2003	161,185.70	162,840.12	164,494.53
24-Mar-2003	161,222.38	162,877.12	164,531.87
25-Mar-2003	161,991.95	163,664.89	165,337.83
26-Mar-2003	161,552.99	163,216.23	164,879.48
27-Mar-2003	161,469.48	163,126.63	164,783.77
28-Mar-2003	160,028.91	161,671.43	163,313.95
31-Mar-2003	160,728.12	162,377.65	164,027.18
01-Apr-2003	161,052.63	162,705.39	164,358.14
02-Apr-2003	160,313.10	161,958.37	163,603.64
03-Apr-2003	159,295.69	160,941.02	162,586.35
04-Apr-2003	159,500.50	161,153.11	162,805.73
07-Apr-2003	158,580.21	160,207.99	161,835.77
08-Apr-2003	158,262.37	159,902.55	161,542.74
09-Apr-2003	158,886.74	160,517.71	162,148.67
10-Apr-2003	160,531.03	162,194.41	163,857.79
11-Apr-2003	161,578.48	163,221.07	164,863.67
14-Apr-2003	162,115.65	163,779.50	165,443.36
15-Apr-2003	162,590.02	164,258.74	165,927.46
16-Apr-2003	163,130.20	164,809.77	166,489.33
17-Apr-2003	164,402.19	166,089.33	167,776.47
22-Apr-2003	162,740.98	164,411.37	166,081.77
23-Apr-2003	164,125.33	165,836.27	167,547.21
24-Apr-2003	165,262.45	166,958.33	168,654.21
25-Apr-2003	165,655.46	167,381.83	169,108.20
28-Apr-2003	164,459.81	166,147.32	167,834.82
29-Apr-2003	163,824.71	165,505.80	167,186.88

Exchange Date	Spot Buying	Mean	Spot Selling
30-Apr-2003	164,277.29	165,962.93	167,648.56
05-May-2003	164,756.88	166,447.31	168,137.74
06-May-2003	164,313.07	165,998.88	167,684.69
07-May-2003	163,979.00	165,661.26	167,343.52
08-May-2003	162,414.43	164,080.95	165,747.46
09-May-2003	163,323.10	165,024.73	166,726.35
12-May-2003	163,141.36	164,815.13	166,488.91
13-May-2003	164,306.58	165,992.30	167,678.02
15-May-2003	165,456.34	167,153.75	168,851.16
16-May-2003	166,809.03	168,520.21	170,231.38
19-May-2003	168,296.62	170,022.93	171,749.25
20-May-2003	169,699.05	171,439.64	173,180.23
21-May-2003	170,383.18	172,136.02	173,888.87
22-May-2003	169,405.96	171,143.56	172,881.16
23-May-2003	169,228.34	170,964.16	172,699.98
26-May-2003	170,405.26	172,153.02	173,900.78
27-May-2003	169,998.32	171,741.94	173,485.56
28-May-2003	170,190.42	171,988.87	173,787.32
29-May-2003	169,013.88	170,747.43	172,480.97
30-May-2003	171,179.62	172,951.02	174,722.41
02-Jun-2003	168,287.20	170,013.45	171,739.70
03-Jun-2003	168,705.14	170,451.27	172,197.40
04-Jun-2003	167,376.19	169,093.05	170,809.91
05-Jun-2003	167,017.09	168,745.97	170,474.85
06-Jun-2003	170,010.18	171,769.20	173,528.22
09-Jun-2003	169,670.75	171,426.29	173,181.82
10-Jun-2003	167,673.55	169,393.20	171,112.84
11-Jun-2003	167,763.54	169,499.60	171,235.67
12-Jun-2003	169,749.43	171,495.20	173,240.96
13-Jun-2003	170,156.58	171,901.29	173,646.01
16-Jun-2003	171,128.03	172,898.39	174,668.74
17-Jun-2003	173,452.13	175,230.47	177,008.81
18-Jun-2003	174,519.56	176,335.20	178,150.85
19-Jun-2003	173,854.08	175,636.67	177,419.26
20-Jun-2003	174,272.36	176,075.07	177,877.78
23-Jun-2003	172,196.20	173,988.36	175,780.52
24-Jun-2003	172,660.54	174,420.43	176,180.32
25-Jun-2003	172,152.21	173,928.07	175,703.93
26-Jun-2003	172,796.77	174,573.85	176,350.93
27-Jun-2003	171,656.91	173,432.98	175,209.05
30-Jun-2003	171,464.45	173,206.99	174,949.53
01-Jul-2003	171,622.48	173,366.61	175,110.74
02-Jul-2003	171,548.02	173,307.14	175,066.26
03-Jul-2003	170,992.74	172,746.16	174,499.57
04-Jul-2003	170,606.45	172,355.83	174,105.21
08-Jul-2003	168,525.64	170,269.62	172,013.61
09-Jul-2003	167,477.88	169,195.70	170,913.51
10-Jul-2003	168,189.73	169,967.37	171,745.02

Exchange Date	Spot Buying	Mean	Spot Selling
11-Jul-2003	168,928.45	170,661.14	172,393.82
14-Jul-2003	168,321.29	170,063.72	171,806.15
15-Jul-2003	166,044.71	167,748.24	169,451.77
16-Jul-2003	164,219.41	165,904.53	167,589.64
17-Jul-2003	165,323.02	167,035.16	168,747.29
18-Jul-2003	165,114.39	166,824.47	168,534.55
21-Jul-2003	163,482.24	165,175.74	166,869.24
22-Jul-2003	164,643.90	166,333.25	168,022.60
23-Jul-2003	164,088.75	165,788.17	167,487.58
24-Jul-2003	163,859.62	165,556.66	167,253.70
25-Jul-2003	166,004.93	167,723.74	169,442.55
28-Jul-2003	167,203.89	168,919.16	170,634.44
29-Jul-2003	168,360.18	170,087.19	171,814.19
30-Jul-2003	168,214.92	169,940.47	171,666.03
31-Jul-2003	167,151.49	168,866.28	170,581.07
01-Aug-2003	166,435.35	168,142.86	169,850.36
04-Aug-2003	166,212.86	167,918.11	169,623.37
05-Aug-2003	166,800.82	168,527.97	170,255.12
06-Aug-2003	167,490.10	169,224.30	170,958.49
07-Aug-2003	166,878.17	168,590.30	170,302.42
11-Aug-2003	166,860.67	168,572.62	170,284.56
12-Aug-2003	166,709.32	168,409.13	170,108.94
13-Aug-2003	165,773.65	167,458.70	169,143.75
14-Aug-2003	166,399.39	168,106.58	169,813.76
15-Aug-2003	165,136.98	166,831.32	168,525.65
18-Aug-2003	165,230.58	166,925.87	168,621.17
19-Aug-2003	163,746.79	165,427.09	167,107.39
20-Aug-2003	163,903.62	165,585.56	167,267.50
21-Aug-2003	164,599.49	166,341.22	168,082.95
22-Aug-2003	163,202.41	164,877.31	166,552.20
25-Aug-2003	162,479.74	164,147.31	165,814.88
26-Aug-2003	161,934.77	163,596.80	165,258.84
27-Aug-2003	162,451.89	164,119.22	165,786.55
28-Aug-2003	162,469.48	164,137.01	165,804.53
29-Aug-2003	163,453.66	165,131.15	166,808.64
01-Sep-2003	163,685.02	165,364.85	167,044.68
02-Sep-2003	162,423.33	164,090.36	165,757.38
03-Sep-2003	161,723.23	163,383.14	165,043.06
04-Sep-2003	162,422.74	164,089.75	165,756.77
05-Sep-2003	164,026.72	165,725.81	167,424.90
08-Sep-2003	164,496.63	166,184.64	167,872.65
09-Sep-2003	164,461.65	166,175.81	167,889.97
10-Sep-2003	164,855.22	166,546.85	168,238.48
11-Sep-2003	165,025.71	166,719.09	168,412.48
12-Sep-2003	165,431.17	167,144.51	168,857.85
15-Sep-2003	166,577.10	168,286.16	169,995.21
16-Sep-2003	166,627.22	168,336.81	170,046.41
17-Sep-2003	165,322.95	167,019.43	168,715.90

Exchange Date	Spot Buying	Mean	Spot Selling
18-Sep-2003	167,572.28	169,291.51	171,010.75
19-Sep-2003	168,584.79	170,319.63	172,054.47
22-Sep-2003	172,367.20	174,150.95	175,934.71
23-Sep-2003	171,374.86	173,148.36	174,921.85
24-Sep-2003	171,016.58	172,770.45	174,524.33
25-Sep-2003	171,493.28	173,267.83	175,042.37
26-Sep-2003	171,470.87	173,229.29	174,987.71
29-Sep-2003	171,141.98	172,897.03	174,652.09
30-Sep-2003	172,608.56	174,378.46	176,148.36
01-Oct-2003	171,945.27	173,724.30	175,503.33
02-Oct-2003	172,604.91	174,374.74	176,144.57
03-Oct-2003	172,593.73	174,363.44	176,133.16
06-Oct-2003	171,513.91	173,272.73	175,031.54
07-Oct-2003	173,312.00	175,104.85	176,897.70
08-Oct-2003	171,751.13	173,512.28	175,273.44
09-Oct-2003	171,457.55	173,231.52	175,005.48
10-Oct-2003	171,205.99	172,977.32	174,748.66
13-Oct-2003	172,476.26	174,260.73	176,045.21
15-Oct-2003	172,742.97	174,514.23	176,285.50
16-Oct-2003	172,466.48	174,234.92	176,003.35
17-Oct-2003	173,403.20	175,181.15	176,959.11
20-Oct-2003	173,472.00	175,250.68	177,029.36
21-Oct-2003	173,019.60	174,798.97	176,578.35
22-Oct-2003	173,701.69	175,482.70	177,263.71
23-Oct-2003	175,459.41	177,252.85	179,046.29
24-Oct-2003	175,154.09	177,002.35	178,850.60
27-Oct-2003	175,319.63	177,116.97	178,914.31
28-Oct-2003	175,649.88	177,450.59	179,251.30
29-Oct-2003	176,318.41	178,125.84	179,933.26
30-Oct-2003	176,355.11	178,178.81	180,002.51
31-Oct-2003	176,267.30	178,090.19	179,913.08
03-Nov-2003	176,055.75	177,876.51	179,697.26
04-Nov-2003	173,844.85	175,627.39	177,409.93
05-Nov-2003	175,373.31	177,171.30	178,969.28
06-Nov-2003	174,341.88	176,129.44	177,916.99
07-Nov-2003	173,305.03	175,087.43	176,869.83
10-Nov-2003	175,239.22	177,051.37	178,863.53
11-Nov-2003	172,484.60	174,253.23	176,021.87
12-Nov-2003	173,116.49	174,891.56	176,666.64
13-Nov-2003	173,971.34	175,770.98	177,570.61
14-Nov-2003	176,058.26	177,863.20	179,668.14
17-Nov-2003	176,177.43	177,994.22	179,811.02
18-Nov-2003	176,574.88	178,401.01	180,227.14
19-Nov-2003	177,166.78	179,004.15	180,841.52
20-Nov-2003	176,376.58	178,195.27	180,013.96
21-Nov-2003	176,490.57	178,315.65	180,140.72
24-Nov-2003	176,792.51	178,604.74	180,416.97
25-Nov-2003	175,916.20	177,756.53	179,596.87

Exchange Date	Spot Buying	Mean	Spot Selling
28-Nov-2003	177,778.33	179,600.52	181,422.72
01-Dec-2003	179,186.36	181,033.43	182,880.50
02-Dec-2003	179,066.06	180,922.61	182,779.16
03-Dec-2003	180,360.09	182,213.83	184,067.57
04-Dec-2003	179,747.61	181,589.85	183,432.09
05-Dec-2003	179,483.96	181,339.47	183,194.98
08-Dec-2003	180,484.92	182,334.63	184,184.35
10-Dec-2003	182,336.73	184,205.18	186,073.63
11-Dec-2003	182,104.53	183,970.66	185,836.80
12-Dec-2003	183,062.76	184,954.66	186,846.57
15-Dec-2003	183,267.61	185,150.98	187,034.35
16-Dec-2003	183,886.45	185,770.76	187,655.07
17-Dec-2003	185,082.06	186,994.64	188,907.22
18-Dec-2003	186,830.19	188,760.51	190,690.84
19-Dec-2003	186,703.51	188,616.33	190,529.15
22-Dec-2003	185,710.18	187,628.97	189,547.76
23-Dec-2003	185,844.20	187,764.40	189,684.60
24-Dec-2003	185,685.17	187,587.63	189,490.08
29-Dec-2003	186,901.16	188,826.66	190,752.16
30-Dec-2003	186,936.31	188,851.44	190,766.56
31-Dec-2003	187,473.24	189,420.62	191,368.00
02-Jan-2004	187,229.62	189,147.64	191,065.66
05-Jan-2004	188,634.21	190,571.75	192,509.29
06-Jan-2004	189,743.78	191,687.17	193,630.57
07-Jan-2004	191,485.42	193,446.45	195,407.47
08-Jan-2004	191,354.04	193,351.48	195,348.92
09-Jan-2004	193,640.97	195,623.88	197,606.79
13-Jan-2004	195,369.56	197,375.34	199,381.12
14-Jan-2004	195,349.15	197,354.78	199,360.41
15-Jan-2004	194,713.83	196,713.14	198,712.46
16-Jan-2004	194,052.78	196,056.32	198,059.87
19-Jan-2004	191,439.19	193,400.07	195,360.95
20-Jan-2004	191,006.51	192,968.61	194,930.70
21-Jan-2004	195,389.13	197,390.19	199,391.26
22-Jan-2004	199,012.35	201,050.24	203,088.13
23-Jan-2004	201,983.56	204,051.75	206,119.94
26-Jan-2004	200,140.66	202,190.23	204,239.80
27-Jan-2004	199,238.40	201,278.94	203,319.47
28-Jan-2004	200,464.80	202,523.33	204,581.86
29-Jan-2004	199,668.43	201,713.30	203,758.16
30-Jan-2004	199,336.54	201,378.04	203,419.54
02-Feb-2004	200,354.39	202,406.17	204,457.95
03-Feb-2004	200,060.27	202,114.67	204,169.07
04-Feb-2004	201,105.09	203,181.17	205,257.25
05-Feb-2004	200,229.62	202,280.03	204,330.45
06-Feb-2004	201,150.06	203,209.85	205,269.63
09-Feb-2004	203,093.98	205,173.38	207,252.78
10-Feb-2004	204,473.27	206,566.63	208,660.00

Exchange Date	Spot Buying	Mean	Spot Selling
11-Feb-2004	204,969.79	207,068.14	209,166.49
12-Feb-2004	207,488.84	209,612.65	211,736.47
13-Feb-2004	207,111.36	209,231.32	211,351.28
16-Feb-2004	206,308.63	208,414.91	210,521.19
17-Feb-2004	207,744.26	209,870.72	211,997.18
18-Feb-2004	209,696.56	211,842.74	213,988.92
19-Feb-2004	208,184.64	210,332.41	212,480.18
20-Feb-2004	207,900.14	210,028.16	212,156.19
23-Feb-2004	204,278.82	206,370.29	208,461.77
24-Feb-2004	205,049.23	207,148.50	209,247.76
25-Feb-2004	207,608.62	209,733.70	211,858.78
26-Feb-2004	206,120.45	208,230.48	210,340.51
27-Feb-2004	204,783.62	206,880.17	208,976.72
01-Mar-2004	205,649.74	207,755.04	209,860.33
02-Mar-2004	205,218.52	207,319.47	209,420.43
03-Mar-2004	201,834.11	203,900.88	205,967.66
04-Mar-2004	200,892.17	202,955.03	205,017.90
05-Mar-2004	200,307.45	202,358.80	204,410.15
08-Mar-2004	203,080.29	205,159.64	207,238.99
09-Mar-2004	204,093.35	206,182.93	208,272.51
10-Mar-2004	200,617.22	202,671.67	204,726.11
11-Mar-2004	197,761.91	199,787.53	201,813.15
12-Mar-2004	196,749.35	198,764.66	200,779.98
15-Mar-2004	196,841.40	198,857.57	200,873.75
16-Mar-2004	196,925.24	198,942.24	200,959.24
17-Mar-2004	198,734.87	200,770.21	202,805.55
18-Mar-2004	199,823.77	201,875.69	203,927.61
19-Mar-2004	201,186.10	203,246.26	205,306.42
22-Mar-2004	201,006.06	203,064.42	205,122.77
23-Mar-2004	202,966.96	205,045.14	207,123.31
24-Mar-2004	202,897.41	204,974.87	207,052.34
25-Mar-2004	199,992.53	202,040.61	204,088.69
26-Mar-2004	199,992.53	202,040.61	204,088.69
29-Mar-2004	198,583.03	200,622.49	202,661.95
30-Mar-2004	200,074.60	202,123.53	204,172.46
31-Mar-2004	201,183.73	203,243.88	205,304.02
01-Apr-2004	201,751.72	203,817.56	205,883.39
02-Apr-2004	203,440.38	205,528.91	207,617.44
05-Apr-2004	200,363.05	202,420.46	204,477.88
06-Apr-2004	199,558.83	201,602.50	203,646.16
07-Apr-2004	201,562.12	203,642.76	205,723.40
08-Apr-2004	201,607.71	203,672.06	205,736.41
13-Apr-2004	201,747.80	203,813.61	205,879.43
14-Apr-2004	198,483.67	200,533.21	202,582.75
15-Apr-2004	195,596.29	197,599.95	199,603.62
16-Apr-2004	196,069.84	198,078.32	200,086.79
19-Apr-2004	197,950.78	199,978.31	202,005.84
20-Apr-2004	198,705.69	200,740.94	202,776.19

Exchange Date	Spot Buying	Mean	Spot Selling
21-Apr-2004	196,746.69	198,762.19	200,777.68
22-Apr-2004	195,720.13	197,725.28	199,730.43
23-Apr-2004	196,009.66	198,017.74	200,025.81
27-Apr-2004	197,319.12	199,340.42	201,361.72
28-Apr-2004	198,383.18	200,415.28	202,447.37
29-Apr-2004	196,225.49	198,235.84	200,246.19
30-Apr-2004	196,701.97	198,717.13	200,732.28
03-May-2004	196,005.16	198,030.06	200,054.97
04-May-2004	196,019.07	198,044.17	200,069.27
05-May-2004	198,823.78	200,871.60	202,919.42
06-May-2004	198,074.39	200,092.06	202,109.73
07-May-2004	198,096.09	200,130.90	202,165.70
10-May-2004	197,039.52	199,058.04	201,076.56
11-May-2004	196,186.42	198,224.48	200,262.54
12-May-2004	194,224.63	196,214.62	198,204.61
13-May-2004	195,307.14	197,302.45	199,297.76
14-May-2004	194,182.92	196,166.88	198,150.83
17-May-2004	194,413.85	196,422.55	198,431.26
18-May-2004	193,767.81	195,753.08	197,738.36
19-May-2004	194,362.90	196,348.56	198,334.23
20-May-2004	195,389.15	197,390.88	199,392.62
21-May-2004	196,544.39	198,557.84	200,571.30
24-May-2004	197,434.93	199,457.41	201,479.89
25-May-2004	197,932.49	199,954.35	201,976.21
26-May-2004	199,878.70	201,925.85	203,973.01
27-May-2004	200,813.02	202,869.59	204,926.17
28-May-2004	203,333.14	205,415.23	207,497.32
31-May-2004	202,795.81	204,872.45	206,949.08
01-Jun-2004	202,617.95	204,687.16	206,756.36
02-Jun-2004	204,060.40	206,149.85	208,239.30
03-Jun-2004	202,749.16	204,825.39	206,901.62
04-Jun-2004	203,274.62	205,356.09	207,437.56
07-Jun-2004	204,380.38	206,473.05	208,565.72
08-Jun-2004	203,408.32	205,485.51	207,562.71
09-Jun-2004	202,929.97	205,024.88	207,119.79
10-Jun-2004	202,158.79	204,229.00	206,299.21
11-Jun-2004	202,941.62	205,019.72	207,097.82
14-Jun-2004	200,571.04	202,625.20	204,679.36
15-Jun-2004	200,274.91	202,326.06	204,377.22
16-Jun-2004	202,190.55	204,261.03	206,331.51
17-Jun-2004	201,349.15	203,405.48	205,461.82
18-Jun-2004	201,606.10	203,687.51	205,768.92
21-Jun-2004	202,545.74	204,619.76	206,693.78
22-Jun-2004	201,542.71	203,606.58	205,670.45
23-Jun-2004	200,476.60	202,529.68	204,582.75
24-Jun-2004	199,139.07	201,178.60	203,218.14
25-Jun-2004	200,177.25	202,227.26	204,277.26
28-Jun-2004	200,201.33	202,268.38	204,335.43

Exchange Date	Spot Buying	Mean	Spot Selling
29-Jun-2004	200,595.77	202,649.99	204,704.21
30-Jun-2004	198,135.65	200,159.38	202,183.12
01-Jul-2004	198,939.82	200,977.25	203,014.69
02-Jul-2004	199,535.54	201,579.00	203,622.47
05-Jul-2004	200,906.16	202,963.46	205,020.76
06-Jul-2004	200,722.53	202,772.37	204,822.21
08-Jul-2004	202,767.44	204,843.50	206,919.56
09-Jul-2004	202,795.59	204,866.33	206,937.08
12-Jul-2004	202,040.73	204,109.27	206,177.81
13-Jul-2004	200,726.47	202,781.57	204,836.66
14-Jul-2004	200,585.81	202,639.48	204,693.15
15-Jul-2004	200,250.14	202,300.43	204,350.71
16-Jul-2004	201,546.88	203,610.46	205,674.04
19-Jul-2004	204,169.92	206,260.02	208,350.12
20-Jul-2004	203,793.01	205,879.38	207,965.75
21-Jul-2004	202,310.63	204,376.47	206,442.31
22-Jul-2004	201,421.58	203,484.06	205,546.55
23-Jul-2004	201,111.60	203,170.95	205,230.29
26-Jul-2004	201,080.32	203,144.94	205,209.56
27-Jul-2004	201,321.45	203,377.31	205,433.17
28-Jul-2004	198,832.36	200,868.57	202,904.78
29-Jul-2004	198,653.17	200,687.55	202,721.93
30-Jul-2004	197,481.45	199,503.93	201,526.40
02-Aug-2004	197,607.73	199,631.43	201,655.12
03-Aug-2004	198,150.01	200,179.19	202,208.37
04-Aug-2004	197,459.75	199,481.94	201,504.12
05-Aug-2004	197,222.95	199,253.69	201,284.42
06-Aug-2004	196,598.82	198,623.17	200,647.52
09-Aug-2004	198,838.92	200,874.92	202,910.92
10-Aug-2004	198,729.32	200,764.21	202,799.11
11-Aug-2004	197,172.89	199,192.05	201,211.22
12-Aug-2004	197,136.13	199,149.36	201,162.59
13-Aug-2004	195,687.78	197,680.88	199,673.97
16-Aug-2004	197,811.02	199,836.50	201,861.98
17-Aug-2004	197,398.28	199,425.02	201,451.77
18-Aug-2004	195,889.85	197,895.85	199,901.85
19-Aug-2004	195,097.78	197,095.75	199,093.71
20-Aug-2004	196,221.90	198,231.24	200,240.58
23-Aug-2004	194,588.60	196,581.46	198,574.32
24-Aug-2004	193,730.43	195,725.62	197,720.81
25-Aug-2004	192,675.16	194,637.82	196,600.47
26-Aug-2004	192,974.92	194,957.07	196,939.22
27-Aug-2004	193,180.70	195,159.42	197,138.13
30-Aug-2004	191,788.89	193,753.53	195,718.17
31-Aug-2004	192,838.55	194,808.30	196,778.05
01-Sep-2004	192,516.40	194,488.25	196,460.11
02-Sep-2004	192,412.92	194,383.72	196,354.51
03-Sep-2004	191,564.59	193,526.86	195,489.14

Exchange Date	Spot Buying	Mean	Spot Selling
06-Sep-2004	190,185.62	192,128.53	194,071.45
07-Sep-2004	190,618.00	192,570.71	194,523.43
08-Sep-2004	189,918.62	191,875.16	193,831.71
09-Sep-2004	190,352.50	192,307.87	194,263.25
10-Sep-2004	190,399.70	192,350.03	194,300.37
13-Sep-2004	190,965.89	192,921.92	194,877.96
14-Sep-2004	190,586.41	192,538.56	194,490.70
15-Sep-2004	189,961.20	191,912.44	193,863.68
16-Sep-2004	188,637.54	190,575.44	192,513.34
17-Sep-2004	190,560.89	192,512.85	194,464.82
20-Sep-2004	190,656.73	192,609.72	194,562.71
21-Sep-2004	189,920.80	191,860.90	193,801.01
22-Sep-2004	190,763.55	192,728.36	194,693.16
23-Sep-2004	190,031.38	191,983.31	193,935.24
24-Sep-2004	190,164.07	192,111.91	194,059.75
27-Sep-2004	190,470.85	192,421.70	194,372.55
28-Sep-2004	190,397.16	192,341.82	194,286.48
29-Sep-2004	190,508.26	192,513.03	194,517.81
30-Sep-2004	188,814.71	190,754.06	192,693.42
01-Oct-2004	189,597.74	191,539.59	193,481.45
04-Oct-2004	187,892.97	189,817.62	191,742.28
05-Oct-2004	187,177.94	189,095.37	191,012.79
06-Oct-2004	186,997.49	188,918.43	190,839.38
07-Oct-2004	186,533.05	188,443.94	190,354.82
08-Oct-2004	186,758.86	188,672.03	190,585.21
11-Oct-2004	187,661.86	189,578.77	191,495.69
12-Oct-2004	187,648.82	189,570.94	191,493.05
13-Oct-2004	187,259.06	189,171.91	191,084.76
15-Oct-2004	188,405.23	190,329.70	192,254.17
18-Oct-2004	190,042.76	191,994.63	193,946.50
19-Oct-2004	189,558.96	191,500.62	193,442.28
20-Oct-2004	190,179.55	192,127.48	194,075.40
21-Oct-2004	192,033.19	193,994.48	195,955.78
22-Oct-2004	193,532.17	195,524.84	197,517.50
25-Oct-2004	194,414.86	196,405.63	198,396.41
26-Oct-2004	194,938.14	196,939.58	198,941.02
27-Oct-2004	194,116.19	196,109.32	198,102.46
28-Oct-2004	193,332.88	195,301.87	197,270.86
29-Oct-2004	192,365.39	194,329.90	196,294.40
01-Nov-2004	192,750.82	194,724.59	196,698.35
02-Nov-2004	192,458.07	194,423.51	196,388.95
05-Nov-2004	193,271.39	195,255.69	197,239.99
03-Nov-2004	192,615.73	194,614.86	196,613.99
04-Nov-2004	193,639.86	195,643.94	197,648.02
08-Nov-2004	194,447.00	196,427.15	198,407.30
09-Nov-2004	194,414.54	196,415.76	198,416.98
10-Nov-2004	194,474.01	196,459.78	198,445.56
11-Nov-2004	193,185.27	195,174.01	197,162.75

Exchange Date	Spot Buying	Mean	Spot Selling
12-Nov-2004	193,007.61	194,983.83	196,960.05
16-Nov-2004	192,840.98	194,804.85	196,768.73
17-Nov-2004	193,619.52	195,617.93	197,616.33
18-Nov-2004	194,589.27	196,581.51	198,573.74
19-Nov-2004	193,501.34	195,509.24	197,517.15
22-Nov-2004	194,527.94	196,524.94	198,521.95
23-Nov-2004	194,593.39	196,591.10	198,588.81
24-Nov-2004	195,775.18	197,774.09	199,773.00
25-Nov-2004	196,394.77	198,400.00	200,405.24
26-Nov-2004	199,216.26	201,276.80	203,337.35
29-Nov-2004	198,903.50	200,944.82	202,986.15
30-Nov-2004	198,582.99	200,615.67	202,648.35
01-Dec-2004	200,360.80	202,400.70	204,440.60
02-Dec-2004	202,905.10	205,013.51	207,121.92
03-Dec-2004	201,311.30	203,371.45	205,431.61
06-Dec-2004	203,352.94	205,433.73	207,514.52
07-Dec-2004	203,200.05	205,273.93	207,347.81
08-Dec-2004	202,850.46	204,926.14	207,001.82
10-Dec-2004	200,433.33	202,468.59	204,503.84
13-Dec-2004	199,770.02	201,809.14	203,848.27
14-Dec-2004	199,535.07	201,571.77	203,608.48
15-Dec-2004	199,401.15	201,436.43	203,471.70
16-Dec-2004	202,088.34	204,161.50	206,234.65
17-Dec-2004	200,732.74	202,781.53	204,830.31
20-Dec-2004	201,102.96	203,171.33	205,239.70
21-Dec-2004	201,342.23	203,386.55	205,430.88
22-Dec-2004	199,646.13	201,694.46	203,742.79
23-Dec-2004	198,370.00	200,400.13	202,430.27
24-Dec-2004	198,465.66	200,496.70	202,527.74
27-Dec-2004	198,783.37	200,812.36	202,841.34
28-Dec-2004	199,542.24	201,578.89	203,615.53
29-Dec-2004	199,356.76	201,391.52	203,426.29
30-Dec-2004	198,294.74	200,324.06	202,353.37
31-Dec-2004	198,896.33	200,931.72	202,967.11
03-Jan-2005	196,640.56	198,658.43	200,676.29
04-Jan-2005	198,630.87	200,669.12	202,707.38
05-Jan-2005	195,682.96	197,686.04	199,689.11
06-Jan-2005	196,010.92	198,017.39	200,023.86
10-Jan-2005	197,276.38	199,306.68	201,336.98
11-Jan-2005	198,750.77	200,796.10	202,841.43
13-Jan-2005	200,447.19	202,493.55	204,539.91
14-Jan-2005	199,515.32	201,557.81	203,600.30
17-Jan-2005	200,642.52	202,685.61	204,728.70
18-Jan-2005	199,570.59	201,602.90	203,635.20
19-Jan-2005	204,046.55	206,135.50	208,224.46
20-Jan-2005	205,740.10	207,835.09	209,930.08
24-Jan-2005	208,842.93	210,986.53	213,130.13
25-Jan-2005	210,289.06	212,464.59	214,640.12

Exchange Date	Spot Buying	Mean	Spot Selling
26-Jan-2005	209,312.22	211,466.48	213,620.74
27-Jan-2005	210,330.66	212,506.52	214,682.37
28-Jan-2005	209,015.24	211,149.12	213,283.00
31-Jan-2005	205,589.87	207,688.79	209,787.72
01-Feb-2005	206,208.01	208,307.65	210,407.30
02-Feb-2005	206,665.19	208,775.11	210,885.03
03-Feb-2005	206,760.07	208,876.55	210,993.04
04-Feb-2005	206,520.40	208,628.87	210,737.33
07-Feb-2005	206,036.21	208,162.29	210,288.37
08-Feb-2005	204,312.32	206,426.62	208,540.92
09-Feb-2005	203,622.44	205,696.05	207,769.65
10-Feb-2005	203,288.64	205,358.78	207,428.91
11-Feb-2005	204,399.17	206,480.55	208,561.93
14-Feb-2005	205,734.12	207,840.20	209,946.28
15-Feb-2005	206,429.04	208,542.11	210,655.17
16-Feb-2005	207,428.51	209,557.27	211,686.03
17-Feb-2005	207,060.33	209,179.86	211,299.39
18-Feb-2005	208,049.01	210,206.59	212,364.17
21-Feb-2005	208,243.88	210,375.41	212,506.95
22-Feb-2005	209,710.64	211,840.17	213,969.70
23-Feb-2005	210,163.44	212,303.17	214,442.89
24-Feb-2005	210,571.57	212,726.69	214,881.81
25-Feb-2005	211,419.36	213,583.14	215,746.92
28-Feb-2005	212,560.47	214,735.77	216,911.06
01-Mar-2005	212,142.63	214,313.68	216,484.73
02-Mar-2005	211,771.10	213,927.10	216,083.10
03-Mar-2005	210,323.10	212,481.25	214,639.40
04-Mar-2005	209,786.51	211,911.18	214,035.85
07-Mar-2005	210,773.18	212,941.37	215,109.56
08-Mar-2005	210,010.73	212,160.01	214,309.29
09-Mar-2005	210,915.60	213,068.39	215,221.17
10-Mar-2005	210,763.08	212,925.47	215,087.87
11-Mar-2005	210,892.56	213,050.75	215,208.95
14-Mar-2005	211,465.49	213,635.16	215,804.83
15-Mar-2005	209,816.67	211,969.56	214,122.45
16-Mar-2005	209,608.52	211,753.72	213,898.92
17-Mar-2005	210,780.45	212,943.11	215,105.78
18-Mar-2005	210,737.14	212,888.17	215,039.20
21-Mar-2005	209,994.54	212,132.49	214,270.44
22-Mar-2005	207,915.07	210,048.78	212,182.49
23-Mar-2005	206,668.61	208,784.13	210,899.64
24-Mar-2005	205,002.81	207,095.91	209,189.01
29-Mar-2005	203,910.66	206,014.89	208,119.13
30-Mar-2005	205,301.61	207,408.81	209,516.02
31-Mar-2005	205,443.00	207,540.48	209,637.97
01-Apr-2005	203,973.52	206,061.45	208,149.37
04-Apr-2005	204,469.72	206,557.27	208,644.82
05-Apr-2005	204,479.28	206,578.08	208,676.88

Exchange Date	Spot Buying	Mean	Spot Selling
06-Apr-2005	205,383.39	207,480.23	209,577.08
08-Apr-2005	204,203.56	206,299.66	208,395.75
11-Apr-2005	205,431.53	207,528.86	209,626.19
12-Apr-2005	206,612.56	208,738.57	210,864.59
13-Apr-2005	207,368.87	209,497.04	211,625.21
14-Apr-2005	206,839.20	208,939.67	211,040.13
15-Apr-2005	206,159.07	208,275.08	210,391.09
18-Apr-2005	207,872.51	209,994.69	212,116.86
19-Apr-2005	209,197.59	211,349.94	213,502.28
20-Apr-2005	210,610.19	212,771.19	214,932.19
21-Apr-2005	210,655.99	212,806.23	214,956.47
25-Apr-2005	209,680.00	211,825.95	213,971.90
27-Apr-2005	208,767.57	210,904.28	213,040.99
28-Apr-2005	208,541.21	210,675.60	212,809.99
29-Apr-2005	209,141.36	211,287.38	213,433.40
02-May-2005	208,382.72	210,509.90	212,637.09
03-May-2005	207,226.33	209,347.46	211,468.59
04-May-2005	208,999.44	211,138.58	213,277.72
05-May-2005	209,671.43	211,817.44	213,963.45
06-May-2005	209,394.74	211,537.92	213,681.11
10-May-2005	207,278.20	209,399.97	211,521.74
11-May-2005	207,019.66	209,138.84	211,258.02
16-May-2005	204,015.73	206,104.64	208,193.55
17-May-2005	203,188.00	205,274.24	207,360.48
19-May-2005	203,920.37	206,008.44	208,096.51
18-May-2005	202,779.68	204,850.52	206,921.36
20-May-2005	203,820.39	205,907.49	207,994.59
23-May-2005	203,428.98	205,500.86	207,572.73
24-May-2005	204,354.94	206,453.32	208,551.69
25-May-2005	203,753.86	205,840.36	207,926.86
26-May-2005	201,476.19	203,516.92	205,557.65
27-May-2005	200,776.49	202,832.63	204,888.77
30-May-2005	201,437.17	203,488.78	205,540.40
31-May-2005	201,829.87	203,885.58	205,941.29
01-Jun-2005	203,026.05	205,105.27	207,184.48
02-Jun-2005	202,372.33	204,456.38	206,540.44
03-Jun-2005	203,375.42	205,463.95	207,552.48
09-May-2005	207,802.41	209,940.75	212,079.10
12-May-2005	206,625.07	208,740.37	210,855.66
13-May-2005	206,089.82	208,211.02	210,332.21
06-Jun-2005	203,053.20	205,138.42	207,223.64
07-Jun-2005	203,239.40	205,332.12	207,424.85
08-Jun-2005	204,549.47	206,632.67	208,715.86
09-Jun-2005	202,988.64	205,067.40	207,146.16
10-Jun-2005	203,275.18	205,345.54	207,415.90
13-Jun-2005	202,501.12	204,575.11	206,649.09
14-Jun-2005	202,123.16	204,216.15	206,309.15
15-Jun-2005	202,108.84	204,184.58	206,260.31

Exchange Date	Spot Buying	Mean	Spot Selling
16-Jun-2005	203,305.87	205,387.98	207,470.10
17-Jun-2005	203,804.77	205,874.81	207,944.86
20-Jun-2005	204,394.18	206,510.14	208,626.10
21-Jun-2005	204,377.28	206,470.29	208,563.29
22-Jun-2005	204,867.24	206,959.48	209,051.72
23-Jun-2005	204,145.26	206,224.48	208,303.70
24-Jun-2005	203,246.37	205,333.64	207,420.92
27-Jun-2005	204,384.20	206,460.12	208,536.04
28-Jun-2005	204,548.32	206,637.33	208,726.33
29-Jun-2005	203,531.64	205,616.08	207,700.52
30-Jun-2005	201,464.89	203,528.32	205,591.76
04-Jul-2005	196,833.39	198,855.80	200,878.21
05-Jul-2005	197,065.83	199,113.48	201,161.13
06-Jul-2005	196,822.70	198,839.38	200,856.06
08-Jul-2005	199,981.75	202,036.08	204,090.40
01-Jul-2005	199,068.55	201,113.49	203,158.43
11-Jul-2005	195,375.94	197,400.93	199,425.91
12-Jul-2005	198,138.26	200,156.84	202,175.42
13-Jul-2005	199,787.74	201,834.50	203,881.26
14-Jul-2005	199,074.93	201,108.83	203,142.72
15-Jul-2005	199,471.69	201,521.25	203,570.80
18-Jul-2005	198,808.13	200,839.42	202,870.71
19-Jul-2005	197,843.87	199,865.42	201,886.97
20-Jul-2005	196,356.60	198,363.09	200,369.58
21-Jul-2005	197,407.92	199,413.48	201,419.04
22-Jul-2005	198,181.68	200,218.14	202,254.60
25-Jul-2005	196,011.06	198,019.75	200,028.44
26-Jul-2005	196,262.49	198,279.42	200,296.34
27-Jul-2005	195,430.59	197,427.61	199,424.63
28-Jul-2005	196,032.27	198,064.05	200,095.83
29-Jul-2005	197,238.28	199,247.79	201,257.30
01-Aug-2005	198,042.18	200,082.74	202,123.30
02-Aug-2005	199,221.37	201,268.14	203,314.91
03-Aug-2005	198,726.27	200,756.57	202,786.87
04-Aug-2005	199,933.67	201,987.63	204,041.60
05-Aug-2005	199,827.42	201,868.82	203,910.22
09-Aug-2005	199,617.26	201,662.12	203,706.98
10-Aug-2005	198,057.17	200,080.37	202,103.56
15-Aug-2005	201,880.49	203,976.50	206,072.50
11-Aug-2005	199,104.92	201,155.62	203,206.32
16-Aug-2005	201,617.65	203,654.19	205,690.74
17-Aug-2005	203,041.58	205,149.64	207,257.70
12-Aug-2005	199,104.92	201,155.62	203,206.32
18-Aug-2005	202,947.49	205,026.14	207,104.79
19-Aug-2005	201,782.86	203,826.81	205,870.76
22-Aug-2005	202,668.29	204,749.93	206,831.57
23-Aug-2005	202,789.33	204,854.96	206,920.58
24-Aug-2005	201,957.00	204,019.93	206,082.86

Exchange Date	Spot Buying	Mean	Spot Selling
25-Aug-2005	202,974.07	205,052.97	207,131.87
26-Aug-2005	202,844.71	204,928.06	207,011.41
29-Aug-2005	202,526.59	204,612.40	206,698.20
30-Aug-2005	201,038.62	203,097.92	205,157.21
31-Aug-2005	200,430.43	202,466.43	204,502.43
01-Sep-2005	202,452.47	204,514.64	206,576.82
02-Sep-2005	206,315.07	208,433.54	210,552.00
05-Sep-2005	208,218.67	210,356.39	212,494.11
06-Sep-2005	207,353.27	209,476.50	211,599.73
07-Sep-2005	206,932.02	209,050.95	211,169.87
08-Sep-2005	206,849.16	208,961.52	211,073.88
09-Sep-2005	206,755.48	208,849.66	210,943.83
12-Sep-2005	206,975.32	209,094.75	211,214.17
13-Sep-2005	204,436.02	206,535.38	208,634.73
14-Sep-2005	205,001.04	207,106.11	209,211.18
15-Sep-2005	204,189.40	206,280.55	208,371.71
16-Sep-2005	203,577.06	205,656.34	207,735.63
19-Sep-2005	203,443.40	205,515.64	207,587.88
20-Sep-2005	203,817.86	205,893.91	207,969.96
21-Sep-2005	203,756.64	205,843.63	207,930.62
22-Sep-2005	204,190.42	206,281.78	208,373.14
23-Sep-2005	202,473.58	204,559.12	206,644.67
26-Sep-2005	200,541.39	202,601.63	204,661.87
27-Sep-2005	199,602.20	201,658.66	203,715.11
28-Sep-2005	199,285.34	201,315.55	203,345.77
29-Sep-2005	199,203.00	201,243.87	203,284.75
30-Sep-2005	198,205.18	200,253.15	202,301.13
03-Oct-2005	197,565.00	199,595.02	201,625.03
04-Oct-2005	197,705.08	199,730.82	201,756.56
05-Oct-2005	198,685.14	200,726.56	202,767.97
06-Oct-2005	199,979.60	202,034.11	204,088.61
07-Oct-2005	200,550.87	202,599.68	204,648.48
10-Oct-2005	198,864.70	200,902.28	202,939.85
11-Oct-2005	198,232.89	200,252.56	202,272.22
12-Oct-2005	197,317.15	199,327.55	201,337.96
13-Oct-2005	197,587.49	199,600.63	201,613.78
17-Oct-2005	200,367.10	202,408.33	204,449.55
19-Oct-2005	197,676.33	199,701.92	201,727.52
18-Oct-2005	198,176.96	200,196.07	202,215.17
20-Oct-2005	199,274.79	201,322.32	203,369.85
21-Oct-2005	201,124.11	203,184.56	205,245.01
24-Oct-2005	200,086.18	202,141.93	204,197.68
25-Oct-2005	200,127.93	202,178.32	204,228.71
26-Oct-2005	201,587.97	203,658.83	205,729.69
27-Oct-2005	201,633.21	203,756.45	205,879.69
28-Oct-2005	201,607.84	203,730.80	205,853.75
31-Oct-2005	200,395.45	202,506.12	204,616.79
01-Nov-2005	199,911.05	201,959.19	204,007.33

Exchange Date	Spot Buying	Mean	Spot Selling
02-Nov-2005	200,109.68	202,206.13	204,302.57
03-Nov-2005	201,301.13	203,421.27	205,541.40
07-Nov-2005	198,489.51	200,523.39	202,557.27
09-Nov-2005	198,615.37	200,708.83	202,802.30
08-Nov-2005	197,755.23	199,834.03	201,912.84
10-Nov-2005	198,672.39	200,714.08	202,755.76
11-Nov-2005	198,672.39	200,760.61	202,848.83
14-Nov-2005	201,181.18	203,230.96	205,280.75
15-Nov-2005	200,775.46	202,891.90	205,008.34
16-Nov-2005	200,809.32	202,861.33	204,913.34
12-Jun-2005	204,010.31	206,100.90	208,191.50
06-Dec-2005	204,010.31	206,100.90	208,191.50
02-Dec-2005	204,113.28	206,205.11	208,296.94
24-Nov-2005	203,898.51	206,018.49	208,138.47
25-Nov-2005	204,259.92	206,383.66	208,507.40
28-Nov-2005	204,297.43	206,421.55	208,545.68
30-Nov-2005	203,232.90	205,321.97	207,411.04
17-Nov-2005	199,946.06	201,995.40	204,044.75
18-Nov-2005	200,824.75	202,883.10	204,941.45
21-Nov-2005	200,813.06	202,871.29	204,929.52
22-Nov-2005	202,824.51	204,897.36	206,970.21
23-Nov-2005	203,740.16	205,828.33	207,916.49
07-Dec-2005	202,889.82	204,968.98	207,048.13
05-Dec-2005	203,261.52	205,338.64	207,415.76
08-Dec-2005	201,472.98	203,537.69	205,602.39
12-Dec-2005	204,383.50	206,477.61	208,571.72
13-Dec-2005	206,209.09	208,315.73	210,422.37
15-Dec-2005	206,304.88	208,412.53	210,520.18
16-Dec-2005	204,294.30	206,393.34	208,492.38
20-Dec-2005	202,972.87	205,052.53	207,132.19
19-Dec-2005	204,456.70	206,539.58	208,622.47
21-Dec-2005	202,368.77	204,448.17	206,527.56
22-Dec-2005	200,747.13	202,810.10	204,873.07
23-Dec-2005	200,171.69	202,222.98	204,274.27
27-Dec-2005	199,624.78	201,670.61	203,716.44
28-Dec-2005	199,412.05	201,461.61	203,511.17
29-Dec-2005	198,602.66	200,638.16	202,673.66
30-Dec-2005	199,213.05	201,260.62	203,308.18
02-Jan-2006	198,586.60	200,621.97	202,657.34
03-Jan-2006	199,406.68	201,450.32	203,493.97
04-Jan-2006	202,426.91	204,501.13	206,575.36
05-Jan-2006	203,552.76	205,638.40	207,724.04
06-Jan-2006	203,534.41	205,643.60	207,752.78
09-Jan-2006	205,997.71	208,114.10	210,230.50
10-Jan-2006	206,169.92	208,282.23	210,394.54
13-Jan-2006	206,886.49	209,006.23	211,125.98
16-Jan-2006	209,221.94	211,365.33	213,508.73
17-Jan-2006	208,308.60	210,442.82	212,577.03

Exchange Date	Spot Buying	Mean	Spot Selling
18-Jan-2006	206,287.54	208,401.10	210,514.66
19-Jan-2006	206,065.66	208,176.97	210,288.27
20-Jan-2006	204,144.90	206,242.55	208,340.21
23-Jan-2006	207,056.30	209,183.35	211,310.41
24-Jan-2006	206,949.55	209,069.54	211,189.53
25-Jan-2006	206,864.03	208,965.40	211,066.78
26-Jan-2006	207,051.66	209,178.60	211,305.53
27-Jan-2006	206,877.37	208,996.70	211,116.02
30-Jan-2006	206,402.03	208,516.71	210,631.38
31-Jan-2006	207,479.45	209,611.10	211,742.74
01-Feb-2006	208,356.58	210,491.07	212,625.57
02-Feb-2006	208,201.67	210,340.64	212,479.61
03-Feb-2006	208,662.83	210,794.47	212,926.10
06-Feb-2006	207,444.27	209,539.67	211,635.06
07-Feb-2006	206,655.79	208,767.34	210,878.89
08-Feb-2006	206,497.56	208,613.59	210,729.62
09-Feb-2006	206,387.55	208,502.45	210,617.36
10-Feb-2006	205,401.01	207,505.80	209,610.59
13-Feb-2006	204,921.14	207,027.03	209,132.92
14-Feb-2006	203,756.80	205,844.78	207,932.77
15-Feb-2006	203,304.16	205,393.57	207,482.99
16-Feb-2006	204,578.30	206,674.74	208,771.17
17-Feb-2006	204,096.84	206,188.43	208,280.02
20-Feb-2006	205,618.29	207,731.32	209,844.35
21-Feb-2006	205,983.79	208,094.58	210,205.38
22-Feb-2006	206,166.99	208,285.64	210,404.29
23-Feb-2006	206,163.08	208,281.72	210,400.35
24-Feb-2006	206,338.84	208,447.10	210,555.35
27-Feb-2006	204,668.16	206,765.45	208,862.75
28-Feb-2006	204,359.07	206,453.25	208,547.43
01-Mar-2006	206,754.96	208,873.45	210,991.94
02-Mar-2006	206,765.94	208,884.63	211,003.32
03-Mar-2006	207,214.76	209,338.02	211,461.29
06-Mar-2006	208,286.75	210,408.79	212,530.84
07-Mar-2006	208,014.82	210,146.36	212,277.89
08-Mar-2006	207,786.18	209,915.54	212,044.89
09-Mar-2006	208,074.85	210,194.95	212,315.04
10-Mar-2006	207,813.18	209,942.84	212,072.51
13-Mar-2006	207,696.11	209,818.59	211,941.08
14-Mar-2006	208,971.12	211,118.79	213,266.46
15-Mar-2006	209,776.62	211,913.95	214,051.29
16-Mar-2006	209,555.48	211,690.56	213,825.64
17-Mar-2006	210,926.98	213,075.93	215,224.89
20-Mar-2006	211,109.64	213,272.75	215,435.86
21-Mar-2006	211,124.55	213,281.72	215,438.88
22-Mar-2006	210,299.19	212,454.14	214,609.09
23-Mar-2006	209,922.34	212,073.48	214,224.62
24-Mar-2006	208,924.64	211,065.70	213,206.77

Exchange Date	Spot Buying	Mean	Spot Selling
27-Mar-2006	210,931.61	213,086.86	215,242.11
28-Mar-2006	210,750.54	212,897.81	215,045.07
29-Mar-2006	211,009.65	213,159.59	215,309.52
30-Mar-2006	210,495.92	212,646.85	214,797.77
31-Mar-2006	211,408.91	213,569.07	215,729.24
03-Apr-2006	209,604.58	211,752.71	213,900.84
04-Apr-2006	210,847.65	213,008.34	215,169.03
05-Apr-2006	213,055.72	215,238.72	217,421.72
10-Apr-2006	211,564.24	213,726.00	215,887.75
12-Apr-2006	211,704.54	213,873.82	216,043.10
13-Apr-2006	212,163.33	214,324.92	216,486.52
18-Apr-2006	214,586.60	216,778.86	218,971.12
19-Apr-2006	216,180.37	218,382.58	220,584.79
20-Apr-2006	217,431.28	219,658.57	221,885.85
21-Apr-2006	216,319.58	218,535.63	220,751.68
24-Apr-2006	217,023.72	219,240.68	221,457.63
25-Apr-2006	216,894.06	219,122.06	221,350.06
28-Apr-2006	218,480.41	220,718.23	222,956.06
02-May-2006	221,730.72	224,001.43	226,272.14
03-May-2006	224,147.19	226,429.92	228,712.65
04-May-2006	224,423.82	226,721.86	229,019.90
05-May-2006	226,065.73	228,367.91	230,670.09
08-May-2006	227,409.01	229,743.46	232,077.91
09-May-2006	226,892.43	229,202.98	231,513.52
10-May-2006	228,619.41	230,959.94	233,300.48
11-May-2006	227,475.07	229,791.56	232,108.04
12-May-2006	230,582.50	232,949.07	235,315.64
15-May-2006	232,064.99	234,446.54	236,828.09
16-May-2006	230,860.18	233,210.85	235,561.52
17-May-2006	231,845.70	234,212.60	236,579.50
18-May-2006	231,645.75	234,016.96	236,388.18
19-May-2006	233,063.50	235,455.39	237,847.28
22-May-2006	231,425.26	233,794.42	236,163.58
23-May-2006	233,042.22	235,421.41	237,800.61
24-May-2006	232,872.22	235,256.10	237,639.98
25-May-2006	231,720.78	234,099.35	236,477.92
26-May-2006	232,834.85	235,218.50	237,602.15
29-May-2006	230,365.67	232,717.87	235,070.07
30-May-2006	231,255.05	233,628.85	236,002.65
31-May-2006	234,413.28	236,806.48	239,199.68
01-Jun-2006	230,831.22	233,194.42	235,557.62
02-Jun-2006	230,905.13	233,262.75	235,620.38
05-Jun-2006	232,927.25	235,305.28	237,683.30
07-Jun-2006	229,962.42	232,304.16	234,645.90
08-Jun-2006	229,213.67	231,566.77	233,919.88
09-Jun-2006	228,018.10	230,340.25	232,662.40
12-Jun-2006	228,494.57	230,840.57	233,186.56
13-Jun-2006	228,742.49	231,084.72	233,426.95

Exchange Date	Spot Buying	Mean	Spot Selling
14-Jun-2006	227,971.99	230,306.43	232,640.87
15-Jun-2006	229,613.89	231,964.99	234,316.10
16-Jun-2006	230,857.85	233,208.82	235,559.79
19-Jun-2006	229,560.33	231,910.88	234,261.43
06-Jun-2006	231,036.13	233,401.32	235,766.52
20-Jun-2006	229,304.47	231,639.72	233,974.97
21-Jun-2006	229,879.29	232,233.06	234,586.84
22-Jun-2006	229,611.77	231,962.80	234,313.84
23-Jun-2006	227,090.66	229,422.52	231,754.39
26-Jun-2006	225,911.61	228,225.23	230,538.84
27-Jun-2006	226,411.61	228,730.25	231,048.90
28-Jun-2006	226,455.74	228,755.85	231,055.95
29-Jun-2006	225,670.07	227,981.24	230,292.41
30-Jun-2006	227,405.07	229,727.41	232,049.74
03-Jul-2006	229,181.95	231,522.26	233,862.56
04-Jul-2006	228,679.84	231,021.36	233,362.89
05-Jul-2006	228,603.93	230,944.68	233,285.42
06-Jul-2006	228,012.31	230,353.49	232,694.67
10-Jul-2006	229,583.20	231,940.22	234,297.23
11-Jul-2006	229,013.86	231,365.16	233,716.46
12-Jul-2006	229,569.25	231,913.51	234,257.78
13-Jul-2006	228,547.02	230,887.34	233,227.66
14-Jul-2006	229,673.40	232,025.15	234,376.90
17-Jul-2006	229,669.72	232,008.76	234,347.80
18-Jul-2006	227,893.82	230,227.72	232,561.62
19-Jul-2006	229,154.23	231,494.52	233,834.81
20-Jul-2006	231,744.86	234,117.76	236,490.67
21-Jul-2006	232,563.99	234,938.78	237,313.58
24-Jul-2006	233,927.08	236,328.59	238,730.10
25-Jul-2006	233,849.85	236,250.70	238,651.56
26-Jul-2006	234,550.85	236,946.04	239,341.23
27-Jul-2006	236,942.77	239,362.20	241,781.63
28-Jul-2006	236,814.42	239,245.49	241,676.57
31-Jul-2006	237,811.38	240,239.53	242,667.68
01-Aug-2006	237,930.71	240,360.09	242,789.47
02-Aug-2006	238,952.21	241,398.34	243,844.47
03-Aug-2006	238,776.08	241,220.43	243,664.79
04-Aug-2006	240,183.41	242,648.49	245,113.58
07-Aug-2006	242,807.67	245,292.76	247,777.85
09-Aug-2006	242,034.21	244,511.47	246,988.74
10-Aug-2006	242,736.90	245,214.77	247,692.64
11-Aug-2006	241,233.25	243,702.44	246,171.63
14-Aug-2006	241,924.34	244,400.60	246,876.86
15-Aug-2006	242,006.89	244,484.06	246,961.22
16-Aug-2006	242,423.76	244,905.15	247,386.53
17-Aug-2006	243,240.61	245,730.30	248,219.99
18-Aug-2006	243,090.43	245,578.76	248,067.09
21-Aug-2006	243,265.42	245,748.96	248,232.50

Exchange Date	Spot Buying	Mean	Spot Selling
22-Aug-2006	245,194.60	247,704.36	250,214.11
23-Aug-2006	245,356.31	247,867.81	250,379.32
24-Aug-2006	245,238.31	247,748.54	250,258.78
25-Aug-2006	245,374.67	247,879.73	250,384.79
28-Aug-2006	245,829.65	248,339.30	250,848.95
29-Aug-2006	247,785.96	250,322.14	252,858.32
30-Aug-2006	248,847.35	251,394.38	253,941.40
31-Aug-2006	248,840.86	251,387.73	253,934.60
01-Sep-2006	248,874.91	251,422.14	253,969.36
04-Sep-2006	251,130.61	253,700.87	256,271.13
05-Sep-2006	251,400.77	253,967.12	256,533.48
06-Sep-2006	249,386.96	251,939.59	254,492.22
07-Sep-2006	249,234.44	251,785.67	254,336.91
08-Sep-2006	247,719.18	250,255.11	252,791.05
11-Sep-2006	247,136.44	249,666.57	252,196.69
12-Sep-2006	247,120.27	249,650.16	252,180.04
13-Sep-2006	248,708.56	251,254.63	253,800.70
14-Sep-2006	248,277.22	250,825.56	253,373.91
15-Sep-2006	249,467.48	252,021.08	254,574.68
18-Sep-2006	248,536.28	251,080.46	253,624.64
19-Sep-2006	248,422.24	250,965.24	253,508.23
20-Sep-2006	247,239.59	249,770.44	252,301.29
21-Sep-2006	246,587.89	249,111.93	251,635.97
22-Sep-2006	245,120.69	247,622.95	250,125.21
25-Sep-2006	242,793.81	245,278.79	247,763.77
26-Sep-2006	237,962.01	240,397.59	242,833.18
27-Sep-2006	231,722.05	234,100.11	236,478.17
28-Sep-2006	230,352.82	232,716.83	235,080.84
29-Sep-2006	236,547.33	238,968.83	241,390.34
02-Oct-2006	235,766.88	238,167.65	240,568.41
03-Oct-2006	241,790.65	244,265.67	246,740.70
04-Oct-2006	237,833.15	240,261.26	242,689.37
05-Oct-2006	238,695.77	241,139.13	243,582.49
06-Oct-2006	236,072.60	238,476.41	240,880.22
09-Oct-2006	231,755.71	234,128.28	236,500.85
10-Oct-2006	230,983.45	233,341.87	235,700.29
11-Oct-2006	229,155.57	231,501.78	233,848.00
12-Oct-2006	230,042.82	232,391.77	234,740.71
13-Oct-2006	231,547.44	233,918.03	236,288.62
16-Oct-2006	230,651.44	233,012.98	235,374.51
17-Oct-2006	232,866.56	235,244.27	237,621.98
18-Oct-2006	234,005.36	236,388.18	238,771.01
19-Oct-2006	233,596.86	235,975.56	238,354.26
20-Oct-2006	234,973.18	237,365.81	239,758.43
23-Oct-2006	237,695.19	240,121.92	242,548.65
26-Oct-2006	237,478.27	239,902.79	242,327.32
27-Oct-2006	239,332.18	241,781.96	244,231.73
30-Oct-2006	241,733.98	244,214.74	246,695.50

Exchange Date	Spot Buying	Mean	Spot Selling
31-Oct-2006	242,021.84	244,479.50	246,937.17
01-Nov-2006	244,523.90	247,026.54	249,529.18
02-Nov-2006	244,282.63	246,782.80	249,282.97
03-Nov-2006	245,111.55	247,613.63	250,115.72
06-Nov-2006	243,353.71	245,844.48	248,335.26
07-Nov-2006	244,376.12	246,864.20	249,352.27
08-Nov-2006	244,621.77	247,105.79	249,589.81
09-Nov-2006	245,566.34	248,073.12	250,579.90
10-Nov-2006	245,475.51	247,994.41	250,513.31
13-Nov-2006	246,900.26	249,420.52	251,940.78
14-Nov-2006	246,115.99	248,634.98	251,153.98
15-Nov-2006	246,081.48	248,600.27	251,119.06
16-Nov-2006	245,345.44	247,863.43	250,381.42
17-Nov-2006	245,276.65	247,793.98	250,311.32
20-Nov-2006	245,471.44	247,984.00	250,496.57
21-Nov-2006	246,047.51	248,565.91	251,084.31
22-Nov-2006	246,588.54	249,112.39	251,636.24
23-Nov-2006	247,310.23	249,841.27	252,372.31
24-Nov-2006	246,496.92	249,019.62	251,542.32
27-Nov-2006	249,671.94	252,220.16	254,768.39
28-Nov-2006	249,361.94	251,906.99	254,452.03
29-Nov-2006	250,642.66	253,187.50	255,732.34
30-Nov-2006	248,819.10	251,358.49	253,897.88
01-Dec-2006	249,649.72	252,203.80	254,757.88
04-Dec-2006	251,089.71	253,645.40	256,201.08
05-Dec-2006	250,665.58	253,223.43	255,781.29
06-Dec-2006	250,023.55	252,587.83	255,152.12
07-Dec-2006	248,849.29	251,382.29	253,915.29
08-Dec-2006	248,279.17	250,806.40	253,333.62
11-Dec-2006	246,628.90	249,152.36	251,675.82
12-Dec-2006	248,585.88	251,129.16	253,672.44
13-Dec-2006	250,139.79	252,685.87	255,231.95
14-Dec-2006	250,087.93	252,653.01	255,218.09
15-Dec-2006	249,524.05	252,063.97	254,603.88
18-Dec-2006	248,635.03	251,178.95	253,722.87
19-Dec-2006	246,013.07	248,517.37	251,021.67
20-Dec-2006	247,760.85	250,295.50	252,830.16
21-Dec-2006	246,831.42	249,356.68	251,881.94
22-Dec-2006	245,005.36	247,512.00	250,018.63
27-Dec-2006	244,351.27	246,851.24	249,351.21
28-Dec-2006	244,363.10	246,863.25	249,363.41
29-Dec-2006	245,433.14	247,950.49	250,467.84

Source: Bank of Tanzania, Exchange Rates Report