# DERIVATIVES: <br> OPTIMIZING THE PORTFOLIO RETURN FOR INDONESIAN INVESTORS IN BEARISH MARKET 

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## 1. INTRODUCTION

The year 2008, particularly in the $4^{\text {th }}$ quarter, is probably one of the worst periods for Indonesian investors in the financial market. Driven by the USA economic recession (which is boosted by the sub-prime mortgage), the Indonesian Stock Index (IDX) fell to 1,355 (30 December 2008) from its 2008 high at 2,830 (9 January 2008). That is a $52 \%$ drop. In the beginning of 2008, IDX was at 2,731 , and people who invested in the stock market in general will experience unrealized loss of $50 \%$.


Indonesian Composite Index IDX, 2 January - 30 December 2008 (www.finance.yahoo.com)

Rising oil price (although it has declined sharply in August-December 2008) has caused cost push inflation. Investors placing their fund in traditional time deposit will experience higher negative real interest rate due to high inflation rate in 2008.

## Traditional Investment Tools Available for Investors

Some investment tools that Indonesian investors are aware and can access these days are: time deposit, Indonesian Government Bonds (ORI), mutual funds, and the stock market itself. These investment tools have different characteristics (risk, return, and time horizon), which will be shortly discussed below.

## Time Deposit, the "Safest" Investment Tool

The deposit rate itself is not and never attractive. Although Bank Indonesia ("BI", the Central Bank) has raised the 1 month BI rate to $9.75 \%$ in September 2008, it still yields negative real interest rate since the current year on year inflation stands at $11 \%-12 \%$. Currently, if people place their fund in 1 month deposit, banks will quote them 11-12\% (excluding $20 \%$ taxes), but that is also with minimum amount of IDR 2 billion for each investor, increased from IDR 100 million since October 2008. Moreover, the government through the Saving Guarantor Body (Lembaga Penjamin Simpanan, LPS) only guarantees funds that are placed in banks with reasonable interest rate, which is currently set at $10 \%$. In this case, if the investor place fund in the deposit and get $11 \%$ interest rate, his deposit will not be guaranteed by the government. Thus, deposit itself is not always the safest investment tool especially for those who invest more than IDR 2 billion and earn interest rate more than 10\% (higher than interest rate set by LPS).

## Indonesian Government Bond (ORI)

Indonesian Government Bond started to be accessible to retail investor since 2006 through ORI (Obligasi Ritel Indonesia). Prior to 2006, Indonesian Government Bonds are only accessible for corporate/ institutional investors. Retail investors can only access Indonesian Government Bond indirectly through mutual funds (will be discussed in more
details in mutual fund section). But since 2006, through the series of ORI, retail investors can invest directly Indonesian Government Bond. ORI is offered by selling agents who are appointed banks and Fund Managers. The coupon offered is above the inflation rate in the current year, but the risk is that the tenor is more than 1 year. So there is a risk, when inflation rate is higher in the $2^{\text {nd }}$ and forthcoming year than the coupon offered, then the investor will also experience negative real interest rate as if they were investing in deposit.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SERIES | Issuance Date | Maturity Date | Coupon | Value (IDR <br> trillion) | Demand (IDR <br> trillion) | Issuance Price |
| ORI001 | 9-Aug-06 | 9-Aug-09 | $12.05 \%$ | 2.93 | 3.84 | $101.18 \%$ |
| ORI002 | $28-M a r-07$ | $28-M a r-10$ | $9.28 \%$ | 6.23 | 6.27 | $102.72 \%$ |
| ORI003 | 12-Sep-07 | $12-$ Sep-11 | $9.40 \%$ | 9.37 | 9.45 | $100.85 \%$ |
| ORI004 | 12-Mar-08 | 12-Mar-12 | $9.50 \%$ | 13.46 | 13.56 | $100.18 \%$ |
| ORI005 | 3-Sep-08 | 15-Sep-13 | $11.45 \%$ | 2.71 | 6.23 | $100.30 \%$ |
| Series of ORI issued from 2006 -2008 |  |  |  |  |  |  |

Source: http://www.finansialbisnis.com/Obligasi\ pemerintah.htm

## Mutual Funds: Disappointing Performance

An alternative investment basket which is quite popular in Indonesia in the past few years is mutual fund. Mutual Fund is accessible through Banks (as selling agent) and Securities Houses. Mutual fund is managed by Fund Manager whereby he would place the investor's fund accordingly as per agreed prospectus. The fund can be placed in money market, bonds (corporate and government), and the stock market. The risk profile (and yield offered) will also differ for each type of the mutual fund.

There are 12 types of mutual fund i.e. Money Market, Fixed Income, Equity, Index, Balanced/ Mixed, ETF, Syariah, Protected/ Capital Guaranteed, Real Estate Investment Fund, Guaranteed Fund, Limited Participation, and Special Purpose Fund. Among Indonesian investors, only 5 types of mutual funds that are popular which are:

## - Fixed Income

The portfolio of Fixed Income Mutual Fund basically consists of minimum $80 \%$ of Debt instrument which can be either corporate bonds or Government bonds. Before ORI was available, Fixed Income Mutual Fund is the only investment tools that gave retail investors access to bonds (either government or corporate).

- Money Market

The fund is invested in money market securities, which have maturity profile less than 1 year.

- Balanced

The portfolio consists of Debt instrument (maximum 75\%) and Equity (maximum $75 \%$ ). Investors who are still in the introduction stage of the equity/ stock market and do not want to be fully exposed to the stock market will prefer this product.

- Equity

The fund is invested minimum $80 \%$ in equity. Usually, fund manager will leave up to $5 \%$ of the fund and place it in money market securities for liquidity purpose i.e. just in case there are investors who would like to redeem their investment.

- Capital Guaranteed

This type of mutual fund gives $100 \%$ capital protection to the investor but investor are not allowed to redeem the mutual fund within the agreed investment period. So, should equity market, bond market falls, the value of the initial investment will be protected. How come? Fund manager will place bulk of the fund in zero coupon bonds, which is sold at discount. Then the remaining fund will be placed in other instrument with higher risk and higher return profile. The capital protection is derive from the zero coupon bond which at maturity will be repaid at face value 100 . Investor will enjoy the upside by the return of the riskier asset.

Capital Guaranteed Mutual Fund is popular post the 2005 mutual fund crisis (when interest rate was hiking, bond's price was declining, thus the Fixed Income Mutual Fund's Net Asset Value deteriorated. Subsequently, driven by unnecessary fear, investor massively redeemed the Fixed Income Fund which eventually deteriorate even further the Net Asset Value of the said Mutual Fund, and thus investor experienced loss of their initial investment) due to its capital protection feature.

For the past 1 year, the performance of mutual funds has been disappointed. Among many types of mutual funds, Fixed Income Mutual Fund is the type of mutual fund that gives the highest return for the past 1 year, with 'Optima Fund' as the number 1, with 1 year return of $9.96 \%$ p.a. Money Market Mutual Fund is in the second position, with its 'DPLK BRI Pasar Uang' giving a 1 year return of $9.85 \%$ p.a. Although both delivered positive returns, still the figures are lower than Indonesian year on year inflation rate above $10 \%$, thus investors will end up at negative real interest rate.

The performance of Equity Mutual Fund and Balanced Mutual Fund were more disappointing than the 2 above. The Balanced Mutual Fund which gave the highest return in the past 1 year was 'Reksadana BIG Bhakti Kombinasi', with negative $0.29 \%$ return. On the Equity Mutual Fund, 'Reksadana Panin Dana Maksima' was the one which deliver the least loss to investor, with negative $34.85 \%$ return for the past 1 year. Clearly, in bearish market environment, mutual funds are not investment alternatives which deliver optimum return.

## Capital Guaranteed Mutual Fund: Does it really protect the Principal?

As a reaction in "Indonesian Mutual Fund Crisis" back in 2005 where the Net Asset Value (NAV) of Mutual Funds decreased sharply as investors made a huge redemption, for the past 2 years many Fund Managers and Banks offered Capital Guaranteed Mutual Fund.

The key driver for the Capital Guaranteed Mutual Fund's popularity is the capital protection feature.

However, this capital guaranteed mutual fund is proven to be not fully capital guaranteed. Recent economic crisis in USA where big banks such as Lehman Brothers and Citibank suffered the most, have also impacted Indonesian investors. There were cases where Indonesian investors placed their fund in Capital Guaranteed Mutual Fund issued by Lehman Brothers and sold by Citibank in Indonesia. When Lehman Brothers was bankrupt, the investors lose their money and the so called Capital Guaranteed Mutual Fund is no longer giving protection to the principal amount invested.

### 1.1. Objective: Where should invest now in this turbulence and bearish market?

With the current situation, where deposit rate yield negative real interest rate (since inflation rate is higher) and bearish market (stock market), Indonesian investors need to look for other alternative investment tools to optimize the yield amid the current market condition. Futures Market, which allows investors to open SHORT position, is one of the alternatives accessible for Indonesian investors to optimize their investment yield.

## 2. DERIVATIVE AS ALTERNATIVE INVESTMENT PRODUCT

Derivatives, by definition, are securities whose prices are determined by or 'derived from' the prices of other securities. Derivatives play an increasingly role (and has increasing volume) in financial markets. Derivatives include Options and Future Contracts (for Stock, Foreign Exchange/ FX, and Commodity). However, there are limited derivatives products available for Indonesian investors these days and part of it because of regulatory constraint.

## The Derivatives Product Available for Indonesian Investor

Derivative products available to Indonesian investors recently are the ones which involve FX option, FX forward, and also Index Future Margin Trading. Some favorite products offered by banks recently are Dual Currency Deposit and Forward Deposit. Another derivative product available for Indonesian investors is futures market. There are many financial service companies providing investment alternative in the future market i.e. index futures (South Korean Index KOSPI, Japanese Index NIKKEI, Hong Kong Index HANGSENG), FX (Foreign Exchange) future, and also commodity futures (gold).

### 2.1. Dual Currency Deposit: The (Used to be) Most Popular

This is probably the most sold 'structured deposit product' by banks in Indonesia. The structure of this product basically consists of time deposit and FX option (put option). Unfortunately, due to recent IDR depreciation against USD, the Central Bank has forbidden banks to offer this product. But we will still discuss the details of this product as additional knowledge and benchmark.

## Dual Currency Deposit: How It Works

Base currency of investment is in IDR and the period of investment usually ranges from 1 to 4 weeks. At the end of investment period, investor will either get his IDR principal back plus IDR interest or he will get his principal and interest in USD. This depends on the USD/IDR rate at the end of investment period. Some key features/ terms in this product:

- Base Currency:

This is the currency of the initial investment, usually in IDR.

- Alternate currency:

This is the principal currency at the end of investment period should the rate goes below the Strike Price. Alternate currency is usually in USD, EUR, or AUD.

- Strike Price:

It is the agreed rate in order for investor to get the agreed return. At expiration date (end of investment period), the USD/IDR rate (or any other FX rate depend on base and alternate currency) should not fall below the Strike Price if the investor would like the principal and interest to be remain in IDR at the end of investment period.

- Return on Investment/ Yield:

It is usually agreed upfront, fixed return, in \% p.a. The figure will be subject to the prevailing base currency (IDR) deposit rate, FX spot rate, Strike Price, and market condition.

For example, investor is willing to place IDR 1 billion in Dual Currency Deposit. At that time the current USD/IDR spot rate is 9,300 and with the agreed Strike Price at 9,250 ; investor will get fixed return $24 \%$ p.a. The period of investment is 1 month.

The calculation of the investment will be as follow:

1) Initial investment: IDR 1 billion
2) Fixed return: $24 \%$ p.a. in IDR for 1 month
3) Strike price: 9,250
4) In 1 month time, investor will get:
a. If USD/IDR at expiration date is above 9,250:
$=$ IDR principal + IDR interest
$=$ IDR 1 billion $+24 \% \times$ IDR 1 billion $\times 1$ month/ 12 months
$=$ IDR 1,020,000,000,-
This means that when USD/IDR rate is above 9,250 in 1 month time, investor's initial investment IDR 1 billion will be IDR 1,020,000,000,-.
b. If USD/IDR at expiration date is at or below 9,250, investor then must buy USD at rate 9,250 . Thus the investment calculation will be:
$=$ principal + interest in USD
$=($ IDR 1 billion $+24 \% \times$ IDR 1 billion $\times 1$ month $/ 12$ months $) / 9,250$
$=$ USD 110,270
This means that when USD/IDR rate is below 9,250 in 1 month time, investor's initial investment IDR 1 billion will be USD 110,270.

## Dual Currency Deposit: Where do the additional return/ premium over deposit rate come from?

Key question here is: how do banks determine the fixed return, which is always above the IDR deposit rate? As previously mentioned, Dual Currency Deposit is a structure that involves FX Put Option (European Style). In this case, the investor is actually the seller of the Put Option, and thus he is actually entitled for the Option Premium (bank as the option buyer is supposed to pay the premium to the investor as the option seller). With USD/IDR spot at 9,300 and taking into account several factors such as volatility (Black-Scholes Formula), the Put Option Premium for USD 107,527,- (IDR 1 billion equivalent at prevailing spot rate), tenor 1 month, and strike price at 9,250 is USD $1,075,-$. Banks then bundle this premium entitled to the investor and adding this with 1 month IDR deposit rate, thus the fixed rate calculation will be as follows:

- Fixed Return = IDR deposit rate + additional return from selling Put Option
- $\operatorname{IDR}$ deposit rate $=12 \%$ p.a.
- Additional return from selling Put Option is as follows: $=$ USD 1,075 for 1 month tenor $=$ IDR 10 million equivalent (USD/IDR rate at 9,300) for 1 month $=$ IDR 10 million/ IDR 1 billion $=1 \%$ per month $=12 \%$ p.a.
- Thus, the fixed return for this Dual Currency Deposit is $12 \%+12 \%=24 \%$

We can see from the above calculation that the additional return/ premium over the deposit rate are derived from the Option Premium. Thus, the higher the option premium, the higher investor will get additional return. Option Premium, as per BlackScholes Formula, can be calculated/ estimated by taking into account several factors:

- Investment period/ tenor:

The longer the tenor, the higher the option premium, thus the higher the additional return will be.

- Strike Price:

Out of the Money Strike Price (in this Dual Currency Deposit case is the lower the Strike Price) will reduce the premium value, thus lowering the additional return. On the other hand, the more In the Money Strike Price will increase the premium value.

- Current Spot rate/ Current market condition:

The more volatile the market condition/ FX rate, the more expensive the Option premium, thus increasing the additional return.

## Dual Currency Deposit: The Risk and Return vs Time Deposit

Dual Currency deposit will offer higher interest rate compared to ordinary IDR time deposit (from the above example: $24 \%$ vs IDR time deposit at $12 \%$ ). This is why investors are keen to place their fund in this kind of product. If USD/IDR rate is stable, this product will be more attractive. The risk is the FX rate movement (FX risk). If the USD/IDR rate, at anytime within the investment period, move adversely (in this case, USD/IDR rate goes below the Strike Price), then at the end of the investment period the principal currency will be converted to USD. Thus investor will suffer opportunity loss.

The opportunity loss arises from the investor holding weaker currency (in this case USD) by converting his IDR to USD using the Strike Price as the conversion rate. For example, investor agrees to invest IDR 1 billion in Dual Currency Deposit with same key conditions as previous examples (Investment period 1 month, Fixed return
$24 \%$ p.a., and Strike Price 9,250 ) and at expiry date the USD/IDR rate goes down to 8,000 ; then investor will end up holding:
$=($ principal 1 billion + interest $24 \% \times$ IDR 1 billion x 1 month $/ 12$ months $) / 9,250$
$=$ USD 110,270
Should investor decide not to invest in Dual Currency Deposit, instead he invest his IDR 1 billion in 1 month deposit at $12 \%$ p.a. and then in 1 month time he use the proceeds to buy USD from the market using USD/IDR rate 8,000; then with IDR 1 billion he will get:

1) Invest IDR 1 billion in 1 month time deposit at $12 \%$ p.a.
$=$ IDR 1 billion $+(12 \% \times 1$ billion $\times 1$ month $/ 12$ months $)$
$=$ IDR $1,010,000,000$ (principal plus interest)
2) buy USD from the market using market rate at 8,000
$=$ IDR 1,010,000,000/8,000
= USD126,250,-
This means, using these 2 steps, in 1 month time investor's initial investment IDR 1 billion will be USD 126,250,-

The opportunity loss arises from the investment in Dual Currency Deposit if USD/IDR spot at 8,000 in 1 month time is:
$=$ USD proceeds (from 2 steps above) - USD proceeds (Dual Currency Deposit)
$=$ USD 126,250 - USD 110,270
= USD 15,980
From the above opportunity loss calculation, we can see that when USD depreciate against IDR by $14 \%$ (from 9,300 to 8,000 ), the investor is experiencing similar amount of opportunity loss of $14 \%$ (USD 15,980/ USD 110,270).


Different Results between Dual Currency Deposit and Traditional Investment when FX Rate Movement is Unfavorable

Then who should invest in this kind of product? Looking at the feature, this product is suitable for Indonesian investor (with IDR revenue) who has fixed foreign currency (USD, etc.) payment. This type of investors will most likely be parents who send their children to study abroad and have already allocated the fund to cover their children's expense.

The most important thing that investor need to be aware of is, although this product offer higher return compare to ordinary time deposit, at the expiry date investor will be the one holding the weaker currency.

### 2.2. Forward Deposit

This is the $2^{\text {nd }}$ most popular structured deposit products among Indonesian investors. The structure of Forward Deposit basically consists of time deposit and FX Forward. Same case like Dual Currency Deposit, Central Bank recently has also forbidden banks to offer this product.

## Forward Deposit: How it works, how to invest

The tenor for Forward Deposit usually ranges from 1 week to 1 month. Investor invests in IDR, it is converted to USD, placed in USD time deposit, and at the maturity converted back to IDR using the agreed USD/IDR rate (forward rate) thus he will get his IDR principal back plus yield/ return. The yield/ return is agreed upfront. For example, an investor would like to invest IDR 1 billion in Forward Deposit for 1 month. The agreed 1 month Forward Rate at that time was 9,400 (USD/IDR spot at 9,300). At that time the IDR time deposit rate was $12 \%$ p.a., USD time deposit rate was $0.5 \%$ p.a. The calculation is as follows (All rates and pricing are as per August 2008):

1) Available information:
a. Initial investment: IDR $1,0000,0000,0000,-$
b. Investment period: 1 month
c. IDR time deposit rate: $12 \%$ p.a.
d. USD time deposit rate: $0.5 \%$ p.a.
e. USD/IDR spot rate: 9,300
f. USD/IDR 1 month forward rate: 9,400
2) Initial investment IDR $1,000,000,000$, is converted to USD currency at rate 9,300 .
= IDR 1 billion/ 9,300
$=$ USD 107,527,-
It will be USD 107,527,- equivalent.
3) USD 107,527 is placed in USD time deposit at $0.5 \%$ p.a. for 1 month
4) At the maturity (in 1 month time), USD fund will be (principal plus interest):
$=$ USD 107,527 + (0.5\% x 107,527 x 30 days/ 360 days $)$
$=$ USD 107,572,-
5) Subsequently, USD 107,572 will be converted to IDR currency using the 1 month forward rate 9,400 ; thus investor will get IDR $1,011,173,835$. The return for this investment is:
= IDR 11,173,835/ IDR 1 billion
$=1.12 \%$ in 1 month or equal to $13.41 \%$ p.a.
This means that in 1 month time, investor's initial investment of IDR 1 billion will be IDR $1,011,173,835,-$. ( $1.12 \%$ return in 1 month).

## Forward Deposit: The Risk and Return vs Time Deposit

Forward Deposit will offer higher interest rate compare to ordinary time deposit (from the above example, Forward Deposit offer $1.41 \%$ p.a. premium over time deposit i.e. return from Forward Deposit is $13.41 \%$ p.a. vs IDR time deposit $12 \%$ p.a.). The key drivers for the additional return/ premium over time deposit are:

- USD time deposit rate:

The higher the USD time deposit rate, with other conditions remain the same, the higher the yield/ return for investor will be.

- USD/IDR Forward Rate:

The higher USD/IDR Forward rate, with other conditions remain the same, the higher the yield/ return for investor will be. USD/IDR Forward rate itself is basically a function of interest rate differential between USD and IDR, current spot rate and market condition, and tenor/ period. The higher the interest rate differential, the more volatile the market condition, and the longer the tenor

However, as we see from above investor will be exposed to FX risk (USD/IDR rate movement). Should USD/IDR rate move adversely (in this case, IDR currency depreciate further beyond the agreed forward rate), then investor will experience opportunity loss. From the above example, should the USD/IDR rate goes to 10,000 or even higher, at the end of the investment period (which is 1 month), investor will still end up with IDR 1,011,173,835 (see below table).

|  | Amount in IDR | Return in IDR | Return in \% p.a. |
| :--- | :---: | :---: | :---: |
| Initial investment with agreed forward rate <br> USD/IDR 9,400 | $1,000,000,000$ |  |  |
| Principal + Interest After 1 month IF <br> USD/DR at 9,300 | $1,011,173,835$ | $11,173,835$ |  |
| Principal + Interest After 1 month IF <br> USD/IDR at 10,000 | $1,011,173,835$ | $11,173,835$ | $13.4 \%$ |

Wherever USD/IDR rate move, the Return is Fixed

If investor decide not to invest in Forward Deposit since he believe that USD/IDR in 1 month will be at 10,000 , investor will instead exchange IDR 1 billion to USD at current spot rate of 9,300, invest in USD time deposit for 1 month at rate $0.5 \%$ p.a., and after 1 month investor will get $7.6 \%$ return on investment. The calculation is as follows:

1) IDR $1,000,000,000$, converted to USD at rate $9,300=$ USD 107,527,-
2) USD 107,527 placed in time deposit at $0.5 \%$ p.a. for 1 month
3) At the maturity, USD fund will be (principal plus interest):
$=$ USD $107,527+(0.5 \% \times 107,527 \times 30 / 360)$
$=$ USD 107,572,-
4) Subsequently, USD 107,572 will be converted to IDR using the assumed USD/IDR rate 10,000 , thus investor will get IDR $1,075,716,846$. The return for this investment is:
= IDR 75,716,846/ IDR 1 billion
$=7.6 \% \%$ in 1 month or equal to $90.9 \%$ p.a
This means that in 1 month time, investor's initial investment IDR 1 billion will be IDR 1,075,716,846,-.

$\square$

Invest IDR 1 billion convert to USD with USD/IDR rate 9,300. Investor will get: USD 107,527,-


Different Results between Forward Deposit and Traditional Investment when FX Rate Movement is Unfavorable

Opportunity loss is the difference between return in Forward Deposit investment and return in traditional investment for the same period of time. Below is the calculation for the opportunity losses if in 1 month USD/IDR rate actually depreciates to 10,000 :

Opportunity loss = Return from ordinary investment - return from Forward Deposit $=$ IDR 75,716,846 - IDR 11,173,835
$=\operatorname{IDR} 64,543,011 /$ month $\operatorname{OR} 6.5 \% /$ month equal to $77.5 \%$ p.a.

This means that when USD/IDR rate move unfavorably (from 9,300 to 10,000 ) in 1 month time; investor will have better return (IDR 64,543,011) if he invests in traditional investment (conversion to USD and deposit) rather than if he invests in Forward Deposit.

We can see from the above 2 examples that the key driver for Forward Deposit is the agreed Forward Rate, actual USD/IDR rate at the end of investment period, USD and IDR time deposit rate. Forward Deposit will be attractive only if the USD/IDR rate is stable and if investor believes that USD/IDR at the end of investment period will be below the USD/IDR forward rate and his belief is right. If at the end of the investment period the USD/IDR rate is above the agreed Forward Rate, then investor will suffer opportunity loss.

## 3. Future Index Trading: Introduction

Another investment alternative which involves derivative is margin trading. Margin trading available for Indonesian investor is Future Index. The product is sold by Financial Service Companies (not banks), and they are governed by BAPPEBTI (Badan Pengawas Perdagangan Berjangka Komoditi). The future indexes available for investors are NIKKEI (Japan's stock market) and Hangseng (Hong Kong's stock market). One of the key features that differentiate Future Index Trading among other investment tools is the ability to gain profit although prices are declining (by opening a Short position).

## Future Index: How it works, how to invest

To invest, investors need to come to companies who are licensed (the list of the companies can be found via BAPPEPTI website) to sell these products. As mentioned above, future index trading gives flexibility to investor since either the market goes up or down, investor will still be able to gain profit.

Investing in future index, investors need to be aware that there were some cases in 2008 regarding mis-selling and fraud. In light of that, investors need to know few things (extracted from Kontan weekly magazine):

1. The financial institution selling Future index

When a company is listed in BAPPEBTI website (www.bappebti.go.id), then it is eligible to market this product. Aside from legality, we also need to pay attention to the quality of the financial institution. One indicator is whether it has a good Market Research team or not.
2. Segregated accounts

The investor's fund should be placed in segregated account, which is approved by BAPPEBTI.
3. The Return

This is a high risk investment tools. There is no fixed return guaranteed. But investor could maximize his return if he is taking the right view and position on the market, either it is bearish or bullish.


How to gain profit in Future index trading

If investor is expecting the market to strengthen, then he will open a Long/ Buy position and then close it with Sell/ Short position. If he believes the market is in its down trend, then he is able to do the other way around (open with Sell/ Short, close with Buy/ Long). Some key terms applied:

- Trading hours:

This is the operating hours for the indexes. NIKKEI and Hangseng have different trading hours.

- NIKKEI trading hours: Monday to Friday, 06.45-13.30 and 14.30-21.55
- Hangseng trading hours: Monday to Friday, 08.45-11.30 and 13.30-15.30
- Contract size:

Each point movement in those indexes will impact IDR 50,000/ point.

- Margin requirement:

The margin/ cash required for doing the transaction. Basically, the companies will restrict the use of cash invested for this margin requirement.

- Day trade: IDR 10 million/ lot

If investor decides to do daily trading (open and close the position within the same day).

- Overnight: IDR 20 million/ lot

If investor decides to hold his position longer than 1 day, then the margin requirement will be doubled.

- Commission fee (including tax $10 \%$ )

Transaction charges amounting IDR $55,000,-/$ lot for open position and another IDR 55,000 ,-/lot for closing the position (settlement).

- Rollover fee:

If investor decides to hold his position longer than 1 day, then there is an additional charge i.e. Rollover fee of IDR $30,000,-/$ lot/ night

- Maintenance Margin: $70 \%$ of necessary margin

When the market moves against the investor's favor and his position deteriorate (suffer floating loss), then the company will start calling investor for cash top up once maintenance margin level has been reached.

- Auto Liquidation: $30 \%$ of necessary margin

When things get worse (maintenance margin $70 \%$ of necessary margin has been breached), company will do auto liquidation/ close the position without notifying the investor once Auto Liquidation level has been reached. If this auto liquidation occurs, the floating loss that the investor suffers will be turned to be realized loss.

Below are some examples for the profit/ loss calculation, taking into account the transaction charges:

1. Overnight trading, profit on NIKKEI

On 6 April 2008, investor views that NIKKEI will strengthen from its current position at 14,000 . In the opening hour he then buys 2 lot of NIKKEI at 14,000 . Few hours later, within the same day, NIKKEI strengthen to 14,100 ; investor then close his position by selling 2 lot NIKKEI at 14,100. Since investor is trading 2 lots, then the margin required is IDR 20,000,000,-. The profit/ loss calculation are as follows:

Profit/ loss $=$ no. of lot x (close price - buy price) x contract size - commission rollover fee

Commission $=$ no. of lot x IDR 110,000 (for open and close including VAT)
Rollover fee $=$ no. nights x no. of lot x IDR 30,000
Profit/ loss $=2 \times(14,100-14,000) \times 50,000-(2 \times 110,000)-$ NIL
$=2 \times 100 \times 50,000-220,000$
$=\operatorname{IDR} 9,780,000,-$
In this case, investor gain profit of IDR 9,780,000 from intraday trading. Please note that from 100 points $(0.7 \%)$ movement of NIKKEI and initial investment of IDR 20 million, within one day investor will gain profit of IDR 9.78 million, which is a $49 \%$ return on investment (ROI) in 1 day only.
2. Overnight trading, loss on Hangseng

Investor believes that Hangseng will weaken from its current position at 12,150 on 11 March 2008. He then sells 1 lot Hangseng at 12,150 at the opening hour. Few hours later within the same day, Hangseng strengthen to 12,200 . Investor then decided to close his position on that day and buy 1 lot Hangseng at 12,200. The profit/ loss calculation:

Profit/ loss $=$ no. of lot x (close price - buy price) x contract size - commission rollover fee

$$
\begin{aligned}
& \text { Profit/ loss }=1 \times(12,150-12,200) \times 50,000-(1 \times 110,000)-\text { NIL } \\
& =1 \times-500 \times 50,000-110,000 \\
& =- \text { IDR } 2,500,000,-
\end{aligned}
$$

In this case, investor suffer loss (since the closing price is higher than the opening price, whilst he is taking a short/ sell position) of IDR 2.5 million. Please note that within 1 day, Hangseng strengthened by 50 points ( $0.4 \%$ ) and investor suffers loss of IDR 2.5 million from his investment of IDR 10 million, which is a negative return on investment of $25 \%$.
3. More than 1 day trading, profit on Hangseng

Investor believes that Hangseng will weaken from its current position at 12,150 on 11 March 2008. He then sells 1 lot Hangseng at 12,150 at the opening hour. Few hours later within the same day, Hangseng strengthen to 12,200. Experiencing a floating loss, investor then decided to maintain his position on that day and wait further. On 18 March 2008, Hangseng is traded at 11,900 . Investor then decided to take profit and close his position by buying 1 lot Hangseng. The profit/ loss calculation are as follows:

Profit/ loss $=$ no. of lot x (close price - buy price) x contract size - commission rollover fee

Commission $=$ no. of lot x IDR 110,000 (for open and close including VAT)
Rollover fee $=$ no. nights x no. of lot x IDR 30,000
$=7$ nights x IDR 30,000
= IDR 210,000,-

$$
\begin{aligned}
\text { Profit/ loss } & =1 \times(12,150-11,900) \times 50,000-(1 \times 110,000)-210,000 \\
& =\operatorname{IDR} 12,180,000,-
\end{aligned}
$$

When Hangseng weakened 250 points ( $2.1 \%$ ) from 12,150; investor gained profit of IDR 12.18 million from his IDR 10 million investment. This is a $122 \%$ Return on Investment within 7 days.

For more than 1 day trading, investor also needs to monitor closely the market movement (in this case Hangseng index) and its implication (floating profit/ loss) to the investor's trading position particularly on the remaining margin and maintenance margin. Let's say from the above example, the initial investment is IDR 100 million and other things remain the same, with the day to day Hangseng movement the implication to investor's trading position will be displayed as per below table:

| Date | Hangseng Closing Price | Floating Profit/ Loss | Remaining margin | Maintenance Margin 70\% |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & =\text { (Closing - Opening } \\ & \text { Price) } \times 50,000+ \\ & \text { Commission + } \\ & \text { Rollover Fee } \end{aligned}$ | $\begin{aligned} & =90 \text { million + Floating } \\ & \text { Profit/ Loss } \end{aligned}$ | = $70 \% \times 10$ million |
| 11-Mar-08 | 12,200 | $(2,555,000)$ | 87,445,000 | 7,000,000 |
| 12-Mar-08 | 12,400 | $(12,500,000)$ | 77,500,000 | 7,000,000 |
| 13-Mar-08 | 12,350 | $(10,000,000)$ | 80,000,000 | 7,000,000 |
| 14-Mar-08 | 12,000 | 7,500,000 | 97,500,000 | 7,000,000 |
| 15-Mar-08 | 12,050 | 5,000,000 | 95,000,000 | 7,000,000 |
| 18-Mar-08 | 11,900 | 12,500,000 | 102,500,000 | 7,000,000 |

Notes for the above table:

- Floating Profit/ loss:

Opening position is Sell 1 lot at 12,150. The floating profit/ loss is calculated based on the mark to market and adding the transaction charges (including commission and rollover fee for keeping position more than 1 night).

- Remaining margin

Remaining margin is the remaining fund available to further trade or absorb the loss from the trading. Remaining margin can be calculated as follows:

Remaining margin $=$ initial investment - contract size + Floating profit/ loss. From the above example, since the initial investment is IDR 100 million and investor is trading (sell) 1 lot of Hangseng (margin requirement will be IDR 10 million), thus the remaining margin for start of the calculation will be IDR 90 million. Then, this remaining margin figures will be updated on every second, each time the market (price) moves.

- Maintenance Margin 70\%

As previously mentioned, investor also needs to monitor his maintenance margin level, the level where the company will start calling investor asking for cash top up. From the above example, since investor is trading 1 lot of Hangseng with contract size worth of IDR 10 million, then the maintenance margin level is at IDR 7 million ( $70 \%$ of contract size $=70 \% \times 1$ lot $\times$ IDR $10,000,000,-/$ lot), meaning when market (price) move adversely and the floating loss has caused the Remaining Margin/ position to deteriorate to IDR 7 million.
4. More than 1 day trading, loss on Nikkei

On 6 April 2008, investor view that Nikkei will strengthen from its current position at 14,000. In the opening hour he then buys 2 lot of Nikkei at 14,000 . Few hours later, within the same day, Nikkei strengthen to 14,100 ; but he expects it to strengthen further and does not want to take the profit now. On 9 April 2008, Nikkei is traded at

13,700 and investor is getting worried things will get worse so he then close the position. The profit/ loss calculation are as follows:

Profit/ loss $=2 \times(13,700-14,000) \times 50,000-(2 \times 110,000)-(3 \times 30,000)$

$$
\begin{aligned}
& =-30,000,000-220,000-90,000 \\
& =- \text { IDR } 30,310,000,-
\end{aligned}
$$

When Nikkei weakened by $2.1 \%$ ( 300 points) in 3 days, investor suffered loss of IDR 30.31 million, which is a $152 \%$ loss from his initial investment of IDR 20 million.

Table below shows the investor's position on a daily basis against the Nikkei price movement.

| Date | Nikkei <br> Closing Price | Floating Profit// <br> Loss | (open price - A) $x$ <br> 50,000 | $=80$ million + Floating Profit// <br> Loss |
| :--- | :--- | :--- | :--- | :--- |
|  |  | $9,890,000$ | $89,890,000$ | Maintenance Margin <br> $70 \%$ |
| 6-Apr-08 | 14,100 | $4,860,000$ | $84,860,000$ | $14,000,000$ |
| 7-Apr-08 | 14,050 | $(40,170,000)$ | $39,830,000$ | $14,000,000$ |
| 8-Apr-08 | 13,600 | $(30,310,000)$ | $49,690,000$ | $14,000,000$ |
| 9-Apr-08 | 13,700 | Daillion |  |  |
| Dalculation of the investment against daily market (Hangseng) movement |  |  |  |  |

Notes for the above table:

- Floating Profit/ loss:

Opening position is Buy 2 lot at 14,000 . The floating profit/ loss is calculated based on the mark to market and adding the transaction charges (including commission and rollover fee for keeping position more than 1 night).

- Remaining margin

Remaining margin is the remaining fund available to further trade or absorb the loss from the trading. Remaining margin can be calculated as follows:

Remaining margin $=$ initial investment - contract size + Floating profit/ loss.
From the above example, since the initial investment is IDR 100 million and investor is trading (buy) 2 lot of NIKKEI (margin requirement will be IDR 20 million), thus the remaining margin for start of the calculation will be IDR 80 million. Then, this remaining margin figures will be updated on every second, each time the market (price) moves.

- Maintenance Margin 70\%

From the above example, since investor is trading 2 lot of NIKKEI with contract size worth of IDR 20 million, then the maintenance margin level is at IDR 14 million ( $70 \%$ of contract size $=70 \% \times 2 \operatorname{lot} \times$ IDR 10,000,000,-/lot).

## Future Index: Risk and Return Disclosure

We see from the above 4 examples, Future index Margin trading is a very risky products. The impact of market price movement will be amplified to either the profit or the loss. A 300 points adverse move on Nikkei ( $2.1 \%$ ) could result a $150 \%$ loss (see Example 4 above) and a 250 points move on Hangseng ( $2.1 \%$ ) could result a $122 \%$ profit within few days only. All of this is due to the high leverage characteristics.

## Then, why should invest in future index?

In this bearish market environment, investor has very limited option to optimize his portfolio return and Future Index trading with its key features is a good investment alternative. Although the market is bearish, investors should not put all of his eggs into one basket i.e. future index trading. The next thing that he should think is the portfolio composition which could at least protect the initial investment amount and also optimize the return amidst the bearish market.

## 4. Finding the right portfolio composition in bearish market: The 'BEAR Portfolio'

The portfolio i.e. 'BEAR Portfolio' should consist of low risk and high risk products. The idea will be similar to capital guaranteed mutual fund where the high risk product will be part of the offensive strategy which is to maximize the return, while the low risk product will be part of the defensive strategy i.e. to protect the initial investment.

Since future index trading the high risk product with minimum initial investment is IDR 100 million, then the low risk product that we chose should yield minimum IDR 100 million p.a. The yield from the low risk product will be used to cover the IDR 100 million invested in future index trading that is possibly to fully evaporate.

For the low risk product, we should choose ORI (Obligasi Ritel Indonesia) due to the following reasons:

1. ORI is government bond which is accessible to retail investors.
2. Since ORI is a government bond, the risk is lower (in general) compare to corporate bonds.
3. Compare to ordinary time deposit, ORI will most likely offer higher yield/ return. On the other hand, we could say that the risk of ORI and time deposit have similar (low) risk.
4. Compare to time deposit, ORI offer fixed return (from the coupon) for longer period. Unlike time deposit rate which is usually revised/ refreshed on a monthly basis. So there is a risk when time deposit rate will be declining while we have set the budget for interest rate income to cover our investment in future index.

The ORI coupon (including 20\% tax) ideally should cover the IDR 100 million investments in future index. If we see from the last 2 ORI, ORI005 offer higher coupon with $11.45 \%$ until September 2013. The coupon $11.45 \%$ should be equal to IDR 100 million future index investments, thus the amount should be invested in ORI:

- ORI coupon $=11.45 \%$ p.a. excluding $20 \%$ tax
- ORI coupon after tax $=11.45 \% \times(1-20 \%)$

$$
=9.16 \%
$$

- The $9.16 \%$ should be equal to IDR 100 million future index investments. The investment in ORI should be:
=IDR 100 million/ 9.16\%
$=$ IDR 1,091,703,057,-
This means, to get coupon amounting IDR 100 million per year from ORI005, investor should invest IDR 1,091,703,057,- in ORI005.

From the calculation above, the minimum total amount of BEAR portfolio which consists of ORI005 (low risk) and future index (high risk) should be:
$=$ IDR 1,091,703,057,- + IDR 100 million
= IDR 1,191,703,057,-
Thus, total amount of Bear Portfolio will be IDR $1,191,703,057$,- and it should consists of $91.6 \%$ of ORI005 and $8.4 \%$ of future index investment.

We will try to change the total investment amount of IDR 1.19 billion to a simpler figure i.e. IDR 1 billion and keeping the future index investment at IDR 100 million. The new BEAR portfolio composition will be $90 \%$ ORI005 and $10 \%$ future index. The changes on the portfolio composition and total investment amount will have some impacts:

- We know that the net return from ORI005 is $9.16 \%$ p.a. With IDR 900 million on ORI005, then the net return will be:
$=$ IDR 900 million $\mathrm{x} 9.16 \%$
$=$ IDR 82.44 million
The IDR 82.44 million is the figure reflecting that the return from ORI005 which is able to cover the maximum loss arise from the high risk investment (future index).
- Although we invest IDR 100 million in future index, with the new BEAR portfolio, we can only suffer maximum loss of IDR 82.44 million in this investment. In other words, there is an IDR 17.56 million that will be 'uncovered/ unprotected' by ORI005 investment. Limiting the maximum loss to IDR 82.44 million is one way to keep the initial investment IDR 1 billion protected.


## BEAR Portfolio: Historical Test on Nikkei and Hangseng

After deciding that the total portfolio amount is IDR 1 billion and it will consist of 90\% ORI005 and $10 \%$ future index (BEAR Portfolio), we then need to conduct the historical test on the return/ loss that we will get from this portfolio. First, we will conduct the test for the portfolio of which the high risk product consists of Nikkei and then we will conduct the same test for Hangseng. We assume that the investor is a passive investor, thus he only trades Future Index 1 or 2 times within 1 year (instead of doing daily or weekly trades).

## BEAR Portfolio: 10\% Future Index on Nikkei

The high risk product of the portfolio amounting IDR 100 million will be invested in Future Index Nikkei. Although we know that IDR 100 million is sufficient to do 10 transactions (IDR 10 million/ lot), we should be aware that this is a very high risk product because of the high leverage characteristic. Thus, we will conduct 2 tests, to trade 1 lot on Nikkei and trade 2 lot of Nikkei. Since the general view that in 2008 the market is bearish, we open the position with Short/ Sell position on Nikkei.

## 1) Short $\mathbf{1}$ lot of Nikkei in the beginning of 2008

From the Profit and Loss Table of trading (Short) 1 lot of Nikkei for the past 1 year, we can see that at the end of 2008 the IDR 100 million invested in Future Index will grow to IDR 272 million. If we settle the position at end 2008 by Buy/ Long 1 lot Nikkei, our investment will yield $172 \%$ p.a.

We can also see that throughout the year, the lowest level of the remaining balance (due to floating loss) is on 9 January 2008 when the remaining balance was IDR 98.9 million. This is more than enough buffers compare to minimum remaining balance of IDR 17.56 million to cover the unprotected part of the BEAR portfolio. The highest remaining balance was on 24 October 2008, when the remaining balance was IDR 352 million, meaning if we settle the position on 24 October 2008, our investment will yield even higher at $252 \%$ p.a.

The calculation of the BEAR portfolio return will be as follows:

|  | Initial <br> investment <br> (IDR million) | After Tax Return (IDR <br> million) | Annual Return <br> (\%) |
| :--- | :--- | :--- | ---: |
| ORI005 | 900 | 82.44 | $9.16 \%$ |
| Future Index: <br> Nikkei | 100 | 172.48 | $172.48 \%$ |
| TOTAL Portfolio | $\mathbf{1 , 0 0 0}$ | $\mathbf{2 5 4 . 9 2}$ | $\mathbf{2 5 . 4 9 \%}$ |

We can see from the above that by trading 1 lot Nikkei, the BEAR Portfolio in 2008 will yield $25.49 \%$ return.
2) Short $\mathbf{2}$ lots of Nikkei in the beginning of 2008

If investor strongly believes that 2008 market is bearish, then he could do a more aggressive trading on the Nikkei by trading more than 1 lot. From the Profit and Loss Table of trading (Short) 2 lot of Nikkei for the past 1 year, we can see that at the end of 2008 the IDR 100 million invested in Future Index will grow to IDR 445 million. If we settle the position at end 2008 by Buy/ Long 2 lot Nikkei, our investment will yield $345 \%$ p.a.

We can also see that throughout the year, the lowest level of the remaining balance (due to floating loss) is on 9 January 2008 when the remaining balance was IDR 97.9 million. Again, this is more than enough buffers compare to minimum remaining balance of IDR 17.56 million to cover the unprotected part of the BEAR portfolio. The highest remaining balance was on 24 October 2008, when the remaining balance was IDR 604 million, meaning if we settle the position on 24 October 2008, our investment will yield even higher at $504 \%$ p.a.

The calculation of the BEAR portfolio return will be as follows:

|  | Initial <br> investment <br> (IDR million) | After Tax Return (IDR <br> million) | Annual Return <br> (\%) |  |
| :--- | :--- | :--- | ---: | :---: |
| ORI005 | 900 | 82.44 | $9.16 \%$ |  |
| Future Index: <br> Nikkei | 100 | 345.01 | $345.01 \%$ |  |
| TOTAL Portfolio | $\mathbf{1 , 0 0 0}$ | $\mathbf{4 2 7 . 4 5}$ | $\mathbf{4 2 . 7 5 \%}$ |  |

We can see from the above table that by trading 2 lots Nikkei, the BEAR portfolio in 2008 will yield $42.75 \%$ p.a.

## BEAR Portfolio: 10\% Future Index on Hangseng

The high risk product of the portfolio amounting IDR 100 million will be invested in Future Index Hangseng.Same as Nikkei's test; we will conduct 2 tests, to trade 1 lot on Hangseng and trade 2 lot of Hangseng. Since the general view that in 2008 the market is bearish, we open the position with Short/ Sell position on Hangseng.

1) Short 1 lot Hangseng in the beginning of 2008

From the Profit and Loss Table of trading (Short) 1 lot of Hangseng for 1 year starting beginning of 2008, we can see that at the end of 2008 the IDR 100 million invested in Future Index will grow to IDR 539 million. If we settle the position at end 2008 by Buy/ Long 1 lot Hangseng, our investment will yield $439 \%$ p.a.

We can also see that throughout the year, the lowest level of the remaining balance (due to floating loss) is on 9 January 2008 when the remaining balance was IDR 44.4 million. This is more than enough buffers compare to minimum remaining balance of IDR 17.56 million to cover the unprotected part of the BEAR portfolio. The highest remaining balance was on 27 October 2008, when the remaining balance was IDR 698 million, meaning if we settle the position on 27 October 2008, our investment will yield even higher at $598 \%$.

The calculation of the BEAR portfolio (which consists of Future Index Hangseng) return will be as follows:

|  | Initial <br> investment <br> (IDR million) | After Tax Return (IDR <br> million) | Annual Return <br> (\%) |  |
| :--- | ---: | :--- | ---: | :---: |
| ORI005 | 900 | 82.44 | $9.16 \%$ |  |
| Future Index: <br> Hangseng | 100 | 439.90 | $439.90 \%$ |  |
| TOTAL Portfolio | 1,000 | 522.34 | $52.23 \%$ |  |

We can see from the above table that by trading 1 lot Hangseng, the BEAR portfolio in 2008 will yield $52.23 \%$ p.a.

## 2) Short 2 lots of Hangseng in the beginning of 2008

We will try a more aggressive trading on Hangseng, by trading (Short/ Sell) 2 lots of Hangseng at the beginning of 2008. From the Profit and Loss Table of trading (Short) 2 lots of Hangseng for the past 1 year, we can see that at the end of 2008 the IDR 100 million invested in Future Index will grow to IDR 979 million. If we settle the position at end 2008 by Buy/ Long 2 lots Hangseng, our investment will yield $879 \%$ p.a. However, if we see the remaining balance and floating profit/ loss movement throughout the year, we can see that on 9 January 2008 the remaining balance was negative IDR 11.2 million. At this point, investor should top up (provide additional cash) at least IDR 25.2 million in order to maintain $70 \%$ of margin requirement (maintenance margin) to keep his trading position (sell 2 lots Hangseng) 'alive'.

Hence, the most important note from the test on trading 2 lots of Hangseng is that the initial investment of IDR 100 million will not be enough to maintain the trading position for 1 year, meaning investor need to provide more than IDR 100 million should he wants to trade more aggressive on Hangseng for 1 year period.

Let's say investor is willing to increase the future index investment to IDR 200 million, but he would like to keep his total investment at IDR 1 billion. This means, the investment in ORI005 will be decreased to IDR 800 million. This will impact the portfolio risk profile, meaning the $100 \%$ capital guarantee feature will be changed.

- The annual coupon from ORI005 net after tax is $9.16 \%$ and if we invest IDR 800 mio in ORI005, the annual coupon payment will be IDR 73.28 mio.
- We invest IDR 200 mio in future index, which is a high risk product. This IDR 200 mio investment can only be 'covered' by the ORI coupon partially, which is IDR 73.28.
- Hence, the new BEAR portfolio ( $80 \%$ in ORI and $20 \%$ in Hangseng) will only have $87 \%$ of capital guarantee feature. This means investor might loose $13 \%$ or IDR 130 mio of his initial investment.

With the new portfolio composition, the annual return of the portfolio will be as follows:

|  | Initial <br> investment <br> (IDR million) | After Tax Return (IDR <br> million) | Annual Return <br> (\%) |
| :--- | :--- | :--- | ---: |
| ORIO05 | 800 | 73.28 | $9.16 \%$ |
| Future Index: <br> Hangseng | 200 | 879.81 | $439.91 \%$ |
| TOTAL Portfolio | $\mathbf{1 , 0 0 0}$ | 953.09 | $95.31 \%$ |

We can see from the above table that by trading 2 lots Hangseng, the BEAR portfolio in 2008 will yield $95.31 \%$ p.a.

We can also see that the highest remaining balance was on 27 October 2008, when the remaining balance was IDR 1,296 million, meaning if we settle the position on 27 October 2008, our investment in future index (now IDR 200 mio) will yield more than $600 \%$.

From the 4 tests above (trading Nikkei 1 and 2 lots, trading Hangseng 1 and 2 lots), we can see that only when we trade Hangseng 2 lots in 2008, the initial investment of IDR 100 million is not enough. Hence at that time, we increase the investment in high risk future index to IDR 200 million and decrease the investment in low risk ORI005) to IDR 800 million. As we change the portfolio composition, the risk profile change. This opens another opportunity to conduct a test should investor is an aggressive one.

## Aggressive Portfolio in Bearish Market: 20\% - 30\% Future Index

The key to turn the portfolio to more aggressive with higher risk and return profile is by trading more lots on the future index side. In future index trading, as we trade more lots, there is higher possibility for higher floating loss, thus we may need higher initial investment as buffer to keep our position 'alive' (not automatically liquidated/ closed due to insufficient margin) when the market moves against our position. A good example is previous calculation when we trade 2 lots of Hangseng in 2008, the initial investment of IDR 100 million is not enough at that time, and thus the investment should be increased.

As previously mentioned, changing the portfolio composition by increasing the future index trading will change the risk profile. If total investment stays at IDR 1 billion, increasing the high risk (future index) proportion will subsequently decreasing the low risk (ORI) proportion. On the other hand, the low risk (ORI) investment is the one that increase the level of capital protection in this portfolio. The change in the level of capital protection of the portfolio along with the increasing portion of future index investment is calculated as per below table.

|  | BEAR PORTFOLIO |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| ORI005 (IDR million) | 900 | 800 | 700 | 600 | 500 |
| Future Index (IDR million) | 100 | 200 | 300 | 400 | 500 |
| Total Portfolio (IDR million) | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Portion of Future index | 10\% | 20\% | 30\% | 40\% | 50\% |
| ORI005 net coupon 9.16\% | 82.44 | 73.28 | 64.12 | 54.96 | 45.8 |
| Capital protection (IDR million) | 982.44 | 873.28 | 764.12 | 654.96 | 545.8 |
| Level of capital protection | 98.2\% | 87.3\% | 76.4\% | 65.5\% | 54.6\% |

Graph below also emphasize that the level of capital protection in Bear Portfolio has an inverse relationship with the portion of the future index investment. We can also assume that the higher the risk the investor is willing to take, the lower the capital protection he expects.


Level of Capital Protection vs Investment in Future Index

We will now try to create a more aggressive portfolio by trading more lots on the future index side. A very conservative ratio for future index trading is $1: 10$, meaning if we want to trade 1 lot, our initial margin should be 10 times of the contract size ( 10 x IDR 10 million = IDR 100 million). Thus, if we would like to trade 2 lots, we should provide IDR 200 million. With 1:10 ratio, for 1 lot of trading, investor has IDR 90 million in the remaining margin as a buffer just in case the market moves against his trading position. This IDR 90 million is equal to 1,800 points adverse movement (IDR 90 million/ IDR 50,000) for each lot that we trade.

The calculation of the more aggressive portfolio then will consists of $20 \%, 30 \%, 40 \%$, and $50 \%$ future index trading. For simplicity, let's just assume that we invest in Nikkei future index and using 1:10 conservative rule, meaning if we invest $20 \%$ (IDR 200 million) in future index, then we will only trade 2 lots, and so forth.

|  | PORTFOLIO |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | BEAR 1 | BEAR 2 | BEAR 3 | BEAR 4 | BEAR 5 |
| ORI005 (IDR million) | 900 | 800 | 700 | 600 | 500 |
| Future Index (IDR million) | 100 | 200 | 300 | 400 | 500 |
| Total Portfolio (IDR million) | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Portion of Future index | 10\% | 20\% | 30\% | 40\% | 50\% |
| Level of capital protection | 98.2\% | 87.3\% | 76.4\% | 65.5\% | 54.6\% |
| 2008 Portfolio Return <br> (Future index: Nikkei) | 25.49\% | 42.75\% | 58.14\% | 2,227\% | 2,780\% |

The above table shows the calculation of the portfolio return should we invest in Nikkei in 2008. Some key assumptions that we use are:

1. Trading starts at the beginning of 2008 until end of 2008 , thus the floating loss/ profit is marked against Nikkei price in 2008.
2. We assume 2008 is bearish, thus the opening position is Short/ Sell Nikkei.
3. At the end of 2008, we liquidate/ close our position and realize our profit/ loss.

We can see that as we turn the Bear Portfolio to more aggressive by increasing the future index proportion, the level of capital protection decrease. However, the portfolio return shows an aggressive increase as well. Below graph shows the correlation of these key indicators.


Inverse Relationship between Portfolio Return and Level of Capital Protection

## 5. Next Question is: Invest in NIKKEI or HANGSENG? Any Difference?

Aside from the trading hour's differences, Nikkei and Hangseng have some characteristics that differentiate each other e.g. volatility and correlation to Indonesian Stock Index (IDX). Before choosing to invest either in Nikkei or Hangseng or even both, investors need to know their characteristics.


From the above and below figures showing Nikkei and Hangseng price movement for the last 2 years, we can see that both are showing declining trend. But, if we look into the details of the prices for both indexes, we will find out that Hangseng index is more volatile than Nikkei index. This volatility eventually will impact the Profit/ Loss of our trading position. For example, for the period of January-December 2008 alone, the range for Nikkei's daily highest and lowest price is between 76 points (on 17 July 2008) and 1,047 points (on 14

October 2008). If 1 points equal to IDR 50,000,-; then for each 1 lot of Nikkei transaction will impact between IDR 3.8 million to IDR 52.35 million on the Profit/ Loss.


If we see Hangseng's daily highest and lowest price for the same period (JanuaryDecember 2008), it ranges between 131 points (on 6 June 2008) to 2,060 points (on 27 October 2008). This translates to a movement between IDR 6.55 million to IDR 103 million on the Profit/ Loss on a daily basis for a single lot transaction on Hangseng.

Knowing the volatility of Nikkei or Hangseng is important for investor due to its impact on the Profit/ Loss. Since Hangseng is more volatile (the range between daily high and daily low) than Nikkei, investor who wants to invest in Hangseng should prepare additional fund to absorb the higher volatility (as buffer for the floating loss).

## Correlation with Major Indexes

Of course, investors need to know more on Nikkei and Hangseng index movers. But there are other indicators that might help to get to know Nikkei and Hangseng index, which is their correlation to other major indicators. For Indonesian investors, we need to know Nikkei and Hangseng's correlation to IDX considering Indonesian investors may be more aware of IDX and Indonesian market itself compare to Nikkei or Hangseng. Aside from IDX, we also need to know the correlation with the world's major index i.e. Dow Jones Industrial Average "DJI" (USA).

## Nikkei's Correlation



Nikkei vs IDX for Year to Date 2008
Above graph shows the performance of Nikkei and IDX for the past 1 year. We can see that in general, Nikkei's movement is bearish in 2008 which is in line with IDX. Nikkei
was weakening by more than $40 \%$ while IDX was weakening by slightly more than $50 \%$. We can see that for the past 1 year, Nikkei's movement is almost in line with IDX, this shows a strong correlation.

Meanwhile, below graph shows the performance of Nikkei and IDX for the past 2 years. Again, in general Nikkei's movement is similar to IDX's. Both of them are weakening for the past 2 years. Nikkei was weakening by more than $40 \%$ while IDX was weakening by more than $20 \%$. This is quite surprising since Nikkei, which is a representative of developed market with lower risk and return profile, was weakening more than IDX. In the period between Quarter 42007 to Quarter 3 2008, we see that IDX was still in positive territory while Nikkei was already in the negative territory.


Next, we observe Nikkei's correlation with Dow Jones Industrial Average (DJI). Below graph shows that for the past 1 year, we can see that in general Nikkei's movement is in line with DJI, which is bearish. Nikkei was weakening by $40 \%$, while DJI was weakening by slightly more than $30 \%$. We can also see that throughout the year, Nikkei's movement is almost in line with DJI, which shows a strong correlation.


Nikkei vs DJI Year To Date 2008
For period 2 years, Nikkei's and DJI's performance can be seen on the below graph. Similar to Nikkei vs IDX performance for period 2 years, Nikkei and DJI correlation for this period is not as strong as the correlation in period 1 year. We can see that for the past 2 years Nikkei was weakening by almost $50 \%$, while DJI was weakening by around $30 \%$. The gap is wider than the 1 year period gap. From the 4 graphs, we can see that in general, Nikkei's movement is in line with the 2 major indexes observed i.e. IDX and DJI. This is a good thing
for investor, as he may not need to know the details of Japanese market, instead, he can observe the local Indonesian market and major market like USA only.


Nikkei vs DJI for the past 2 years

## Hangseng's Correlation

Below graph shows the performance of Hangseng and IDX for the past 1 year. Both shows bearish trend. Hangseng was weakening by almost $50 \%$ in 2008, while IDX was also weakening by around $50 \%$. We can also see that Hangseng's movement is very similar to IDX's throughout the year, showing strong correlation.

We also see strong correlation between Hangseng and IDX for the past 2 years. This can be seen from the $2^{\text {nd }}$ graph below. Both Hangseng and IDX were weakening by more than $20 \%$ and both shows a very similar movement for the past 2 years.



Hangseng vs IDX for the past 2 years
Below graph shows Hangseng and DJI performance for the past 1 year. We can see that both shows bearish trend. Hangseng was weakening by more than $40 \%$, while DJI was weakening by around $30 \%$. Both also show similar movement throughout the year.

We can also observe the performance of Hangseng and DJI for the past 2 years on the graph below. We can see that both Hangseng and DJI also show bearish trend. For the past 2 years, both Hangseng and DJI were weakening by more than $20 \%$. Although both were weakening by similar figures, we could also see that Hangseng was more volatile than DJI as it has higher highs and lower lows for the 2 years of movement.


Hangseng vs DJI Year to Date 2008


Hangseng vs DJI for the past 2 years

From the 4 graphs above we can see that in general Hangseng has similar movement with IDX and DJI for the past 2 years. Hangseng even shows stronger correlation with IDX (as we can see from the 2 graphs). This is also a good thing for Indonesian investor, as he will be more familiar with IDX and yet he can also utilize his knowledge to invest in Hangseng.

## Hangseng vs Nikkei: Which is Riskier?

From all the 8 graphs above, we can see that in general Hangseng is more volatile than Nikkei. Hangseng has higher range between its high and low. From the correlation with IDX and DJI, we can also see that Hangseng's correlation with IDX is stronger/ closer than Nikkei's. This is a useful information should we want to decide where to invest in future index. If we are willing to take higher risk (and expecting higher return), with the same amount of investment, we should invest and trade in Hangseng.

## 6. CLOSING PART

Derivative, in this case is future index, is a very useful investment tool to optimize the portfolio in bearish market environment. Investor needs to realize that investing in future index, investor could loose all of his investment in a very short period. To avoid that, we need to learn the characteristic of either Nikkei or Hangseng and also have the right view (either bearish or bullish) to take the right open position. If we believe the market will be bearish, then future index should be considered to be included in our portfolio. But if the market is bullish, we should consider removing future index from our portfolio although taking the right open position (in this case Buy/ Long) might also optimize our portfolio return.


Our risk profile will determine the composition of the Bear Portfolio. The higher the risk and loss we are willing to suffer, the higher the portion of the future index investment. This subsequently increases the possibility of higher return. The above diagram shows the summary of 3 different investors with different risk profile and portfolio compositions.

One of the key success factors in optimizing Bear Portfolio's return is the profit/ return made by Future Index trading. Determining the trend (bearish or bullish) is a key to open the right trading position. Either Hangseng or Nikkei, investor does not necessarily have to know the details of those 2 markets. The correlation with IDX and DJI are helpful information.

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|  | HANGSENG |  |  |  |  |  | SELL 1 LOT HANGSENG (amount in IDR) |  |  | SELL 2 LOT HANGSENG (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low range | Beginning Balance | Floating Profit/Loss | Ending Balance | Beginning Balance | Floating Profit/Loss | Ending Balance |
| 1/2/2008 | 27632.2 | 27853.6 | 27299.45 | 27560.52 | -71.68 | 554.15 | 90,000,000 | 3,584,000 | 93,584,000 | 80,000,000 | 7,168,000 | 87,168,000 |
| 1/3/2008 | 27050.03 | 27223.71 | 26864.13 | 26887.28 | -162.75 | 359.58 | 93,584,000 | 8,137,500 | 101,721,500 | 87,168,000 | 16,275,000 | 103,443,000 |
| 1/4/2008 | 27004.34 | 27596.86 | 26994.85 | 27519.69 | 515.35 | 602.01 | 101,721,500 | (25,767,500) | 75,954,000 | 103,443,000 | (51,535,000) | 51,908,000 |
| 1/7/2008 | 26962.54 | 27186.07 | 26698.54 | 27179.49 | 216.95 | 487.53 | 75,954,000 | (10,847,500) | 65,106,500 | 51,908,000 | $(21,695,000)$ | 30,213,000 |
| 1/8/2008 | 27466.96 | 27637.6 | 27088.7 | 27112.9 | -354.06 | 548.9 | 65,106,500 | 17,703,000 | 82,809,500 | 30,213,000 | 35,406,000 | 65,619,000 |
| 1/9/2008 | 26847.49 | 27625.83 | 26757.03 | 27615.85 | 768.36 | 868.8 | 82,809,500 | (38,418,000) | 44,391,500 | 65,619,000 | (76,836(000) | (11,217,000) |
| 1/10/2008 | 27426.42 | 27596.5 | 27115.82 | 27230.86 | -195.56 | 480.68 | 44,391,500 | 9,778,000 | 54,169,500 | (11,217,000) | 19,556,000 | 8,339,000 |
| 1/11/2008 | 27435.51 | 27593.7 | 26725.95 | 26867.01 | -568.5 | 867.75 | 54,169,500 | 28,425,000 | 82,594,500 | 8,339,000 | 56,850,000 | 65,189,000 |
| 1/14/2008 | 27019.13 | 27142.88 | 26464.64 | 26468.13 | -551 | 678.24 | 82,594,500 | 27,550,000 | 110,144,500 | 65,189,000 | 55,100,000 | 120,289,000 |
| 1/15/2008 | 26728.93 | 26800.52 | 25823.5 | 25837.78 | -891.15 | 977.02 | 110,144,500 | 44,557,500 | 154,702,000 | 120,289,000 | 89,115,000 | 209,404,000 |
| 1/16/2008 | 25131.11 | 25131.11 | 24320.03 | 24450.85 | -680.26 | 811.08 | 154,702,000 | 34,013,000 | 188,715,000 | 209,404,000 | 68,026,000 | 277,430,000 |
| 1/17/2008 | 24705.08 | 25381.91 | 23957.61 | 25114.98 | 409.9 | 1424.3 | 188,715,000 | (20,495,000) | 168,220,000 | 277,430,000 | (40,990,000) | 236,440,000 |
| 1/18/2008 | 24247.17 | 25378.24 | 24134.25 | 25201.87 | 954.7 | 1243.99 | 168,220,000 | (47,735,000) | 120,485,000 | 236,440,000 | (95,470,000) | 140,970,000 |
| 1/21/2008 | 24459.02 | 24650.28 | 23770.13 | 23818.86 | -640.16 | 880.15 | 120,485,000 | 32,008,000 | 152,493,000 | 140,970,000 | 64,016,000 | 204,986,000 |
| 1/22/2008 | 22624.29 | 22713.69 | 21709.63 | 21757.63 | -866.66 | 1004.06 | 152,493,000 | 43,333,000 | 195,826,000 | 204,986,000 | 86,666,000 | 291,652,000 |
| 1/23/2008 | 23359.2 | 24239.98 | 22647.28 | 24090.17 | 730.97 | 1592.7 | 195,826,000 | (36,548,500) | 159,277,500 | 291,652,000 | (73,097,000) | 218,555,000 |
| 1/24/2008 | 24396.85 | 24966.17 | 23478.87 | 23539.27 | -857.58 | 1487.3 | 159,277,500 | 42,879,000 | 202,156,500 | 218,555,000 | 85,758,000 | 304,313,000 |
| 1/25/2008 | 24801.46 | 25243.58 | 24483.93 | 25122.37 | 320.91 | 759.65 | 202,156,500 | (16,045,500) | 186,111,000 | 304,313,000 | (32,091,000) | 272,222,000 |
| 1/28/2008 | 24342.39 | 24384.27 | 23586.52 | 24053.61 | -288.78 | 797.75 | 186,111,000 | 14,439,000 | 200,550,000 | 272,222,000 | 28,878,000 | 301,100,000 |
| 1/29/2008 | 24640.1 | 24736.8 | 24229.14 | 24291.8 | -348.3 | 507.66 | 200,550,000 | 17,415,000 | 217,965,000 | 301,100,000 | 34,830,000 | 335,930,000 |
| 1/30/2008 | 24605.15 | 24631.59 | 23586.37 | 23653.69 | -951.46 | 1045.22 | 217,965,000 | 47,573,000 | 265,538,000 | 335,930,000 | 95,146,000 | 431,076,000 |
| 1/31/2008 | 23789.72 | 23887.17 | 23052.95 | 23455.74 | -333.98 | 834.22 | 265,538,000 | 16,699,000 | 282,237,000 | 431,076,000 | 33,398,000 | 464,474,000 |
| 2/1/2008 | 23791.92 | 24238.3 | 23322.05 | 24123.58 | 331.66 | 916.25 | 282,237,000 | (16,583,000) | 265,654,000 | 464,474,000 | (33,166,000) | 431,308,000 |
| 2/4/2008 | 24885.07 | 25101.41 | 24728.5 | 25032.08 | 147.01 | 372.91 | 265,654,000 | $(7,350,500)$ | 258,303,500 | 431,308,000 | (14,701,000) | 416,607,000 |
| 2/5/2008 | 24710.1 | 24961.98 | 24504.53 | 24808.7 | 98.6 | 457.45 | 258,303,500 | $(4,930,000)$ | 253,373,500 | 416,607,000 | $(9,860,000)$ | 406,747,000 |
| 2/6/2008 | 23458.15 | 23592.31 | 23283.97 | 23469.46 | 11.31 | 308.34 | 253,373,500 | $(565,500)$ | 252,808,000 | 406,747,000 | (1,131,000) | 405,616,000 |
| 2/11/2008 | 23404.74 | 23404.74 | 22569.53 | 22616.11 | -788.63 | 835.21 | 252,808,000 | 39,431,500 | 292,239,500 | 405,616,000 | 78,863,000 | 484,479,000 |
| 2/12/2008 | 22953.78 | 23146.44 | 22891.22 | 22921.67 | -32.11 | 255.22 | 292,239,500 | 1,605,500 | 293,845,000 | 484,479,000 | 3,211,000 | 487,690,000 |
| 2/13/2008 | 23330.09 | 23534.49 | 22938.05 | 23169.55 | -160.54 | 596.44 | 293,845,000 | 8,027,000 | 301,872,000 | 487,690,000 | 16,054,000 | 503,744,000 |
| 2/14/2008 | 23893.51 | 24140.29 | 23756.45 | 24021.68 | 128.17 | 383.84 | 301,872,000 | (6,408,500) | 295,463,500 | 503,744,000 | (12,817,000) | 490,927,000 |
| 2/15/2008 | 23511.47 | 24208.51 | 23446.37 | 24148.43 | 636.96 | 762.14 | 295,463,500 | (31,848,000) | 263,615,500 | 490,927,000 | (63,696,000) | 427,231,000 |
| 2/19/2008 | 24040.66 | 24402.64 | 24025.05 | 24123.17 | 82.51 | 377.59 | 263,615,500 | $(4,125,500)$ | 259,490,000 | 427,231,000 | $(8,251,000)$ | 418,980,000 |
| 2/20/2008 | 24265.32 | 24265.32 | 23481.06 | 23590.58 | -674.74 | 784.26 | 259,490,000 | 33,737,000 | 293,227,000 | 418,980,000 | 67,474,000 | 486,454,000 |
| 2/21/2008 | 23957.64 | 24003.6 | 23500.95 | 23623 | -334.64 | 502.65 | 293,227,000 | 16,732,000 | 309,959,000 | 486,454,000 | 33,464,000 | 519,918,000 |
| 2/22/2008 | 23233.9 | 23420.35 | 23077.51 | 23305.04 | 71.14 | 342.84 | 309,959,000 | $(3,557,000)$ | 306,402,000 | 519,918,000 | (7,114,000) | 512,804,000 |
| 2/25/2008 | 23546.1 | 23552.99 | 23164.97 | 23269.14 | -276.96 | 388.02 | 306,402,000 | 13,848,000 | 320,250,000 | 512,804,000 | 27,696,000 | 540,500,000 |
| 2/26/2008 | 23564.77 | 23762.4 | 23395.26 | 23714.75 | 149.98 | 367.14 | 320,250,000 | (7,499,000) | 312,751,000 | 540,500,000 | (14,998,000) | 525,502,000 |
| 2/27/2008 | 24161.19 | 24610.41 | 24111.6 | 24483.84 | 322.65 | 498.81 | 312,751,000 | $(16,132,500)$ | 296,618,500 | 525,502,000 | (32,265,000) | 493,237,000 |
| 2/28/2008 | 24373.9 | 24841.23 | 24205.01 | 24591.69 | 217.79 | 636.22 | 296,618,500 | (10,889,500) | 285,729,000 | 493,237,000 | (21,779,000) | 471,458,000 |
| 2/29/2008 | 24226.83 | 24370.69 | 24010.48 | 24331.67 | 104.84 | 360.21 | 285,729,000 | (5,242,000) | 280,487,000 | 471,458,000 | (10,484,000) | 460,974,000 |
| 3/3/2008 | 23491.57 | 23738.67 | 23458.95 | 23584.97 | 93.4 | 279.72 | 280,487,000 | $(4,670,000)$ | 275,817,000 | 460,974,000 | (9,340,000) | 451,634,000 |
| 3/4/2008 | 23858.04 | 23923.2 | 23060.9 | 23119.87 | -738.17 | 862.3 | 275,817,000 | 36,908,500 | 312,725,500 | 451,634,000 | 73,817,000 | 525,451,000 |
| 3/5/2008 | 23066.64 | 23268.45 | 22873.31 | 23114.34 | 47.7 | 395.14 | 312,725,500 | (2,385,000) | 310,340,500 | 525,451,000 | (4,770,000) | 520,681,000 |
| 3/6/2008 | 23360.68 | 23615.18 | 23254.31 | 23342.73 | -17.95 | 360.87 | 310,340,500 | 897,500 | 311,238,000 | 520,681,000 | 1,795,000 | 522,476,000 |
| 3/7/2008 | 22694.23 | 22836.76 | 22447.84 | 22501.33 | -192.9 | 388.92 | 311,238,000 | 9,645,000 | 320,883,000 | 522,476,000 | 19,290,000 | 541,766,000 |
| 3/10/2008 | 22387.25 | 22725.21 | 22034.76 | 22705.05 | 317.8 | 690.45 | 320,883,000 | (15,890,000) | 304,993,000 | 541,766,000 | $(31,780,000)$ | 509,986,000 |
| 3/11/2008 | 22634.71 | 22995.35 | 22263.36 | 22995.35 | 360.64 | 731.99 | 304,993,000 | (18,032,000) | 286,961,000 | 509,986,000 | $(36,064,000)$ | 473,922,000 |


|  | HANGSENG |  |  |  |  |  | SELL 1 LOT HANGSENG (amount in IDR) |  |  | SELL 2 LOT HANGSENG (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low range | Beginning Balance | Floating Profit/Loss | Ending Balance | Beginning Balance | Floating Profit/Loss | Ending Balance |
| 3/12/2008 | 23737.65 | 23737.65 | 23139.4 | 23422.76 | -314.89 | 598.25 | 286,961,000 | 15,744,500 | 302,705,500 | 473,922,000 | 31,489,000 | 505,411,000 |
| 3/13/2008 | 22925.42 | 23007.61 | 22251.24 | 22301.64 | -623.78 | 756.37 | 302,705,500 | 31,189,000 | 333,894,500 | 505,411,000 | 62,378,000 | 567,789,000 |
| 3/14/2008 | 22536.12 | 22747.14 | 22151.51 | 22237.11 | -299.01 | 595.63 | 333,894,500 | 14,950,500 | 348,845,000 | 567,789,000 | 29,901,000 | 597,690,000 |
| 3/17/2008 | 21318.03 | 21473.4 | 21041.26 | 21084.61 | -233.42 | 432.14 | 348,845,000 | 11,671,000 | 360,516,000 | 597,690,000 | 23,342,000 | 621,032,000 |
| 3/18/2008 | 21444.61 | 21467.18 | 20572.92 | 21384.61 | -60 | 894.26 | 360,516,000 | 3,000,000 | 363,516,000 | 621,032,000 | 6,000,000 | 627,032,000 |
| 3/19/2008 | 22191.88 | 22191.88 | 21779.84 | 21866.94 | -324.94 | 412.04 | 363,516,000 | 16,247,000 | 379,763,000 | 627,032,000 | 32,494,000 | 659,526,000 |
| 3/20/2008 | 21173.3 | 21471.67 | 20896.14 | 21108.22 | -65.08 | 575.53 | 379,763,000 | 3,254,000 | 383,017,000 | 659,526,000 | 6,508,000 | 666,034,000 |
| 3/24/2008 | 21108.22 | 21108.22 | 21108.22 | 21108.22 | 0 | 0 | 383,017,000 |  | 383,017,000 | 666,034,000 |  | 666,034,000 |
| 3/25/2008 | 21841.78 | 22529.8 | 21691.55 | 22464.52 | 622.74 | 838.25 | 383,017,000 | (31,137,000) | 351,880,000 | 666,034,000 | (62,274,000) | 603,760,000 |
| 3/26/2008 | 22581.75 | 22811.35 | 22428.43 | 22617.01 | 35.26 | 382.92 | 351,880,000 | $(1,763,000)$ | 350,117,000 | 603,760,000 | $(3,526,000)$ | 600,234,000 |
| 3/27/2008 | 22312.57 | 22758.94 | 22205.2 | 22664.22 | 351.65 | 553.74 | 350,117,000 | (17,582,500) | 332,534,500 | 600,234,000 | (35,165,000) | 565,069,000 |
| 3/28/2008 | 22750.31 | 23313.88 | 22721.22 | 23285.95 | 535.64 | 592.66 | 332,534,500 | (26,782,000) | 305,752,500 | 565,069,000 | (53,564,000) | 511,505,000 |
| 3/31/2008 | 22997.04 | 23077.84 | 22700.84 | 22849.2 | -147.84 | 377 | 305,752,500 | 7,392,000 | 313,144,500 | 511,505,000 | 14,784,000 | 526,289,000 |
| 4/1/2008 | 23084.93 | 23305.71 | 22700.5 | 23137.46 | 52.53 | 605.21 | 313,144,500 | (2,626,500) | 310,518,000 | 526,289,000 | (5,253,000) | 521,036,000 |
| 4/2/2008 | 24133.77 | 24195.32 | 23858.89 | 23872.43 | -261.34 | 336.43 | 310,518,000 | 13,067,000 | 323,585,000 | 521,036,000 | 26,134,000 | 547,170,000 |
| 4/3/2008 | 23947.55 | 24334.19 | 23937.31 | 24264.63 | 317.08 | 396.88 | 323,585,000 | (15,854,000) | 307,731,000 | 547,170,000 | (31,708,000) | 515,462,000 |
| 4/4/2008 | 24264.63 | 24264.63 | 24264.63 | 24264.63 | 0 | 0 | 307,731,000 | - - | 307,731,000 | 515,462,000 | - | 515,462,000 |
| 4/7/2008 | 24484.83 | 24642.02 | 24269.55 | 24578.76 | 93.93 | 372.47 | 307,731,000 | (4,696,500) | 303,034,500 | 515,462,000 | (9,393,000) | 506,069,000 |
| 4/8/2008 | 24507.07 | 24557.43 | 24212.6 | 24311.69 | -195.38 | 344.83 | 303,034,500 | 9,769,000 | 312,803,500 | 506,069,000 | 19,538,000 | 525,607,000 |
| 4/9/2008 | 24293.42 | 24492.03 | 23921.15 | 23984.57 | -308.85 | 570.88 | 312,803,500 | 15,442,500 | 328,246,000 | 525,607,000 | 30,885,000 | 556,492,000 |
| 4/10/2008 | 24101.41 | 24214.57 | 23905.58 | 24187.1 | 85.69 | 308.99 | 328,246,000 | (4,284,500) | 323,961,500 | 556,492,000 | (8,569,000) | 547,923,000 |
| 4/11/2008 | 24442.27 | 24681.46 | 24322.11 | 24667.79 | 225.52 | 359.35 | 323,961,500 | (11,276,000) | 312,685,500 | 547,923,000 | (22,552,000) | 525,371,000 |
| 4/14/2008 | 23968.04 | 24070.26 | 23753.04 | 23811.2 | -156.84 | 317.22 | 312,685,500 | 7,842,000 | 320,527,500 | 525,371,000 | 15,684,000 | 541,055,000 |
| 4/15/2008 | 23950.4 | 24043.89 | 23613.49 | 23901.33 | -49.07 | 430.4 | 320,527,500 | 2,453,500 | 322,981,000 | 541,055,000 | 4,907,000 | 545,962,000 |
| 4/16/2008 | 24075.68 | 24194.18 | 23749.68 | 23878.35 | -197.33 | 444.5 | 322,981,000 | 9,866,500 | 332,847,500 | 545,962,000 | 19,733,000 | 565,695,000 |
| 4/17/2008 | 24369.86 | 24442.07 | 24150.51 | 24258.96 | -110.9 | 291.56 | 332,847,500 | 5,545,000 | 338,392,500 | 565,695,000 | 11,090,000 | 576,785,000 |
| 4/18/2008 | 24234.53 | 24400.87 | 24107.24 | 24197.78 | -36.75 | 293.63 | 338,392,500 | 1,837,500 | 340,230,000 | 576,785,000 | 3,675,000 | 580,460,000 |
| 4/21/2008 | 24821 | 24887.11 | 24668.28 | 24721.67 | -99.33 | 218.83 | 340,230,000 | 4,966,500 | 345,196,500 | 580,460,000 | 9,933,000 | 590,393,000 |
| 4/22/2008 | 24460.64 | 24965.74 | 24413.25 | 24939.15 | 478.51 | 552.49 | 345,196,500 | $(23,925,500)$ | 321,271,000 | 590,393,000 | $(47,851,000)$ | 542,542,000 |
| 4/23/2008 | 25000.49 | 25361.29 | 24919.73 | 25289.24 | 288.75 | 441.56 | 321,271,000 | (14,437,500) | 306,833,500 | 542,542,000 | (28,875,000) | 513,667,000 |
| 4/24/2008 | 25776.29 | 25861.68 | 25603.57 | 25680.78 | -95.51 | 258.11 | 306,833,500 | 4,775,500 | 311,609,000 | 513,667,000 | 9,551,000 | 523,218,000 |
| 4/25/2008 | 25852.97 | 25852.97 | 25437.82 | 25516.78 | -336.19 | 415.15 | 311,609,000 | 16,809,500 | 328,418,500 | 523,218,000 | 33,619,000 | 556,837,000 |
| 4/28/2008 | 25613.17 | 25717.43 | 25567.59 | 25666.29 | 53.12 | 149.84 | 328,418,500 | (2,656,000) | 325,762,500 | 556,837,000 | (5,312,000) | 551,525,000 |
| 4/29/2008 | 25661.96 | 26038.58 | 25633.47 | 25914.15 | 252.19 | 405.11 | 325,762,500 | (12,609,500) | 313,153,000 | 551,525,000 | (25,219,000) | 526,306,000 |
| 4/30/2008 | 25998.27 | 26066.5 | 25731.64 | 25755.35 | -242.92 | 334.86 | 313,153,000 | 12,146,000 | 325,299,000 | 526,306,000 | 24,292,000 | 550,598,000 |
| 5/1/2008 | 25755.35 | 25755.35 | 25755.35 | 25755.35 |  |  | 325,299,000 |  | 325,299,000 | 550,598,000 |  | 550,598,000 |
| 5/2/2008 | 26324.97 | 26374.09 | 26173.82 | 26241.02 | -83.95 | 200.27 | 325,299,000 | 4,197,500 | 329,496,500 | 550,598,000 | 8,395,000 | 558,993,000 |
| 5/5/2008 | 26321.61 | 26387.37 | 26118.61 | 26183.95 | -137.66 | 268.76 | 329,496,500 | 6,883,000 | 336,379,500 | 558,993,000 | 13,766,000 | 572,759,000 |
| 5/6/2008 | 26084.61 | 26314.99 | 26072.62 | 26262.13 | 177.52 | 242.37 | 336,379,500 | (8,876,000) | 327,503,500 | 572,759,000 | (17,752,000) | 555,007,000 |
| 5/7/2008 | 26377.99 | 26377.99 | 25471.19 | 25610.21 | -767.78 | 906.8 | 327,503,500 | 38,389,000 | 365,892,500 | 555,007,000 | 76,778,000 | 631,785,000 |
| 5/8/2008 | 25442.52 | 25616.95 | 25353.51 | 25449.79 | 7.27 | 263.44 | 365,892,500 | $(363,500)$ | 365,529,000 | 631,785,000 | (727,000) | 631,058,000 |
| 5/9/2008 | 25401.91 | 25483.76 | 24911.33 | 25063.17 | -338.74 | 572.43 | 365,529,000 | 16,937,000 | 382,466,000 | 631,058,000 | 33,874,000 | 664,932,000 |
| 5/12/2008 | 25063.17 | 25063.17 | 25063.17 | 25063.17 |  | 0 | 382,466,000 |  | 382,466,000 | 664,932,000 | - | 664,932,000 |
| 5/13/2008 | 25190.18 | 25601.55 | 25032.17 | 25552.77 | 362.59 | 569.38 | 382,466,000 | $(18,129,500)$ | 364,336,500 | 664,932,000 | (36,259,000) | 628,673,000 |
| 5/14/2008 | 25461.37 | 25546.78 | 25108.06 | 25533.48 | 72.11 | 438.72 | 364,336,500 | $(3,605,500)$ | 360,731,000 | 628,673,000 | $(7,211,000)$ | 621,462,000 |
| 5/15/2008 | 25719.02 | 25736.56 | 25208.22 | 25513.71 | -205.31 | 528.34 | 360,731,000 | 10,265,500 | 370,996,500 | 621,462,000 | 20,531,000 | 641,993,000 |
| 5/16/2008 | 25665.64 | 25748.33 | 25533.6 | 25618.86 | -46.78 | 214.73 | 370,996,500 | 2,339,000 | 373,335,500 | 641,993,000 | 4,678,000 | 646,671,000 |
| 5/19/2008 | 25592.21 | 25822 | 25592.21 | 25742.23 | 150.02 | 229.79 | 373,335,500 | $(7,501,000)$ | 365,834,500 | 646,671,000 | (15,002,000) | 631,669,000 |
| 5/20/2008 | 25692.27 | 25702.87 | 25042.09 | 25169.46 | -522.81 | 660.78 | 365,834,500 | 26,140,500 | 391,975,000 | 631,669,000 | 52,281,000 | 683,950,000 |
| 5/21/2008 | 24828.04 | 25498.09 | 24820.17 | 25460.29 | 632.25 | 677.92 | 391,975,000 | $(31,612,500)$ | 360,362,500 | 683,950,000 | $(63,225,000)$ | 620,725,000 |


|  | HANGSENG |  |  |  |  |  | SELL 1 LOT HANGSENG (amount in IDR) |  |  | SELL 2 LOT HANGSENG (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low range | Beginning Balance | Floating Profit/Loss | Ending Balance | Beginning Balance | Floating Profit/Loss | Ending Balance |
| 5/22/2008 | 24984.28 | 25057.54 | 24700.49 | 25043.12 | 58.84 | 357.05 | 360,362,500 | (2,942,000) | 357,420,500 | 620,725,000 | (5,884,000) | 614,841,000 |
| 5/23/2008 | 25085.35 | 25128.44 | 24693.55 | 24714.07 | -371.28 | 434.89 | 357,420,500 | 18,564,000 | 375,984,500 | 614,841,000 | 37,128,000 | 651,969,000 |
| 5/26/2008 | 24234.35 | 24331.69 | 24100.31 | 24127.31 | -107.04 | 231.38 | 375,984,500 | 5,352,000 | 381,336,500 | 651,969,000 | 10,704,000 | 662,673,000 |
| 5/27/2008 | 24239.05 | 24441.07 | 24221.28 | 24282.04 | 42.99 | 219.79 | 381,336,500 | (2,149,500) | 379,187,000 | 662,673,000 | $(4,299,000)$ | 658,374,000 |
| 5/28/2008 | 24209.03 | 24338.68 | 24178.71 | 24249.51 | 40.48 | 159.97 | 379,187,000 | (2,024,000) | 377,163,000 | 658,374,000 | $(4,048,000)$ | 654,326,000 |
| 5/29/2008 | 24542.1 | 24542.1 | 24222.05 | 24383.99 | -158.11 | 320.05 | 377,163,000 | 7,905,500 | 385,068,500 | 654,326,000 | 15,811,000 | 670,137,000 |
| 5/30/2008 | 24448.37 | 24585.78 | 24289.85 | 24533.12 | 84.75 | 295.93 | 385,068,500 | (4,237,500) | 380,831,000 | 670,137,000 | (8,475,000) | 661,662,000 |
| 6/2/2008 | 24542.29 | 24923.28 | 24453.79 | 24831.36 | 289.07 | 469.49 | 380,831,000 | (14,453,500) | 366,377,500 | 661,662,000 | (28,907,000) | 632,755,000 |
| 6/3/2008 | 24556.18 | 24590.6 | 24254.93 | 24375.76 | -180.42 | 335.67 | 366,377,500 | 9,021,000 | 375,398,500 | 632,755,000 | 18,042,000 | 650,797,000 |
| 6/4/2008 | 24327.72 | 24462.58 | 24123.25 | 24123.25 | -204.47 | 339.33 | 375,398,500 | 10,223,500 | 385,622,000 | 650,797,000 | 20,447,000 | 671,244,000 |
| 6/5/2008 | 24150.53 | 24321.66 | 24003.98 | 24255.29 | 104.76 | 317.68 | 385,622,000 | (5,238,000) | 380,384,000 | 671,244,000 | (10,476,000) | 660,768,000 |
| 6/6/2008 | 24505.6 | 24524.59 | 24392.82 | 24402.18 | -103.42 | 131.77 | 380,384,000 | 5,171,000 | 385,555,000 | 660,768,000 | 10,342,000 | 671,110,000 |
| 6/10/2008 | 23689.16 | 23741.09 | 23343.19 | 23375.52 | -313.64 | 397.9 | 385,555,000 | 15,682,000 | 401,237,000 | 671,110,000 | 31,364,000 | 702,474,000 |
| 6/11/2008 | 23288.96 | 23486.17 | 23178.02 | 23327.6 | 38.64 | 308.15 | 401,237,000 | (1,932,000) | 399,305,000 | 702,474,000 | $(3,864,000)$ | 698,610,000 |
| 6/12/2008 | 22820.89 | 23023.86 | 22695.1 | 23023.86 | 202.97 | 328.76 | 399,305,000 | (10,148,500) | 389,156,500 | 698,610,000 | (20,297,000) | 678,313,000 |
| 6/13/2008 | 22920.77 | 22984.09 | 22592.3 | 22592.3 | -328.47 | 391.79 | 389,156,500 | 16,423,500 | 405,580,000 | 678,313,000 | 32,847,000 | 711,160,000 |
| 6/16/2008 | 22814.17 | 23232.99 | 22814.17 | 23029.69 | 215.52 | 418.82 | 405,580,000 | (10,776,000) | 394,804,000 | 711,160,000 | (21,552,000) | 689,608,000 |
| 6/17/2008 | 23008.08 | 23128.58 | 22872.33 | 23057.99 | 49.91 | 256.25 | 394,804,000 | $(2,495,500)$ | 392,308,500 | 689,608,000 | (4,991,000) | 684,617,000 |
| 6/18/2008 | 23114.45 | 23492.21 | 22946.96 | 23325.8 | 211.35 | 545.25 | 392,308,500 | (10,567,500) | 381,741,000 | 684,617,000 | (21,135,000) | 663,482,000 |
| 6/19/2008 | 22849.36 | 22999.67 | 22733.78 | 22797.61 | -51.75 | 265.89 | 381,741,000 | 2,587,500 | 384,328,500 | 663,482,000 | 5,175,000 | 668,657,000 |
| 6/20/2008 | 22817.99 | 23411.63 | 22745.6 | 22745.6 | -72.39 | 666.03 | 384,328,500 | 3,619,500 | 387,948,000 | 668,657,000 | 7,239,000 | 675,896,000 |
| 6/23/2008 | 22407.09 | 22830.43 | 22384.58 | 22714.96 | 307.87 | 445.85 | 387,948,000 | (15,393,500) | 372,554,500 | 675,896,000 | (30,787,000) | 645,109,000 |
| 6/24/2008 | 22697.26 | 22731.49 | 22456.02 | 22456.02 | -241.24 | 275.47 | 372,554,500 | 12,062,000 | 384,616,500 | 645,109,000 | 24,124,000 | 669,233,000 |
| 6/25/2008 | 22745.17 | 22827.56 | 22567.93 | 22635.16 | -110.01 | 259.63 | 384,616,500 | 5,500,500 | 390,117,000 | 669,233,000 | 11,001,000 | 680,234,000 |
| 6/26/2008 | 22742.54 | 22885.35 | 22441.47 | 22455.67 | -286.87 | 443.88 | 390,117,000 | 14,343,500 | 404,460,500 | 680,234,000 | 28,687,000 | 708,921,000 |
| 6/27/2008 | 21901.27 | 22201.47 | 21773.67 | 22042.35 | 141.08 | 427.8 | 404,460,500 | (7,054,000) | 397,406,500 | 708,921,000 | (14,108,000) | 694,813,000 |
| 6/30/2008 | 22237.92 | 22237.92 | 21997.69 | 22102.01 | -135.91 | 240.23 | 397,406,500 | 6,795,500 | 404,202,000 | 694,813,000 | 13,591,000 | 708,404,000 |
| 7/2/2008 | 21785.39 | 21938.2 | 21555.53 | 21704.45 | -80.94 | 382.67 | 404,202,000 | 4,047,000 | 408,249,000 | 708,404,000 | 8,094,000 | 716,498,000 |
| 7/3/2008 | 21389.49 | 21742.07 | 21163.57 | 21242.78 | -146.71 | 578.5 | 408,249,000 | 7,335,500 | 415,584,500 | 716,498,000 | 14,671,000 | 731,169,000 |
| 7/4/2008 | 21402.17 | 21534.05 | 21344.85 | 21423.82 | 21.65 | 189.2 | 415,584,500 | $(1,082,500)$ | 414,502,000 | 731,169,000 | (2,165,000) | 729,004,000 |
| 7/7/2008 | 21402.7 | 21916.21 | 21402.7 | 21913.06 | 510.36 | 513.51 | 414,502,000 | (25,518,000) | 388,984,000 | 729,004,000 | (51,036,000) | 677,968,000 |
| 7/8/2008 | 21632.7 | 21684.21 | 21098.84 | 21220.81 | -411.89 | 585.37 | 388,984,000 | 20,594,500 | 409,578,500 | 677,968,000 | 41,189,000 | 719,157,000 |
| 7/9/2008 | 21740.86 | 21954.17 | 21531.97 | 21805.81 | 64.95 | 422.2 | 409,578,500 | $(3,247,500)$ | 406,331,000 | 719,157,000 | $(6,495,000)$ | 712,662,000 |
| 7/10/2008 | 21562.07 | 22020.66 | 21498.87 | 21821.78 | 259.71 | 521.79 | 406,331,000 | (12,985,500) | 393,345,500 | 712,662,000 | (25,971,000) | 686,691,000 |
| 7/11/2008 | 21834.64 | 22225.38 | 21761.04 | 22184.55 | 349.91 | 464.34 | 393,345,500 | (17,495,500) | 375,850,000 | 686,691,000 | (34,991,000) | 651,700,000 |
| 7/14/2008 | 22205 | 22360.29 | 21871.6 | 22014.46 | -190.54 | 488.69 | 375,850,000 | 9,527,000 | 385,377,000 | 651,700,000 | 19,054,000 | 670,754,000 |
| 7/15/2008 | 21644.04 | 21644.04 | 21077.24 | 21174.77 | -469.27 | 566.8 | 385,377,000 | 23,463,500 | 408,840,500 | 670,754,000 | 46,927,000 | 717,681,000 |
| 7/16/2008 | 20988.74 | 21334.38 | 20988.74 | 21223.5 | 234.76 | 345.64 | 408,840,500 | $(11,738,000)$ | 397,102,500 | 717,681,000 | (23,476,000) | 694,205,000 |
| 7/17/2008 | 21825.24 | 21892.53 | 21672.27 | 21734.72 | -90.52 | 220.26 | 397,102,500 | 4,526,000 | 401,628,500 | 694,205,000 | 9,052,000 | 703,257,000 |
| 7/18/2008 | 22010.94 | 22010.94 | 21677.15 | 21874.19 | -136.75 | 333.79 | 401,628,500 | 6,837,500 | 408,466,000 | 703,257,000 | 13,675,000 | 716,932,000 |
| 7/21/2008 | 22523.28 | 22645.52 | 22455.01 | 22532.9 | 9.62 | 190.51 | 408,466,000 | $(481,000)$ | 407,985,000 | 716,932,000 | (962,000) | 715,970,000 |
| 7/22/2008 | 22430.59 | 22690.74 | 22393.14 | 22527.48 | 96.89 | 297.6 | 407,985,000 | $(4,844,500)$ | 403,140,500 | 715,970,000 | (9,689,000) | 706,281,000 |
| 7/23/2008 | 22900.77 | 23134.55 | 22871.04 | 23134.55 | 233.78 | 263.51 | 403,140,500 | (11,689,000) | 391,451,500 | 706,281,000 | (23,378,000) | 682,903,000 |
| 7/24/2008 | 23330.89 | 23369.05 | 23062.62 | 23087.72 | -243.17 | 306.43 | 391,451,500 | 12,158,500 | 403,610,000 | 682,903,000 | 24,317,000 | 707,220,000 |
| 7/25/2008 | 22751.51 | 22843.2 | 22542.08 | 22740.71 | -10.8 | 301.12 | 403,610,000 | 540,000 | 404,150,000 | 707,220,000 | 1,080,000 | 708,300,000 |
| 7/28/2008 | 22801.85 | 22862.03 | 22619.23 | 22687.21 | -114.64 | 242.8 | 404,150,000 | 5,732,000 | 409,882,000 | 708,300,000 | 11,464,000 | 719,764,000 |
| 7/29/2008 | 22265.93 | 22265.93 | 22089.09 | 22258 | -7.93 | 176.84 | 409,882,000 | 396,500 | 410,278,500 | 719,764,000 | 793,000 | 720,557,000 |
| 7/30/2008 | 22637.33 | 22751.04 | 22573.18 | 22690.6 | 53.27 | 177.86 | 410,278,500 | (2,663,500) | 407,615,000 | 720,557,000 | $(5,327,000)$ | 715,230,000 |
| 7/31/2008 | 22878.76 | 22878.76 | 22695.73 | 22731.1 | -147.66 | 183.03 | 407,615,000 | 7,383,000 | 414,998,000 | 715,230,000 | 14,766,000 | 729,996,000 |
| 8/1/2008 | 22497.9 | 22881.27 | 22207.31 | 22862.6 | 364.7 | 673.96 | 414,998,000 | $(18,235,000)$ | 396,763,000 | 729,996,000 | $(36,470,000)$ | 693,526,000 |


|  | HANGSENG |  |  |  |  |  | SELL 1 LOT HANGSENG (amount in IDR) |  |  | SELL 2 LOT HANGSENG (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low range | Beginning Balance | Floating Profit/Loss | Ending Balance | Beginning Balance | Floating Profit/Loss | Ending Balance |
| 8/4/2008 | 22630.59 | 22713.58 | 22425.13 | 22514.92 | -115.67 | 288.45 | 396,763,000 | 5,783,500 | 402,546,500 | 693,526,000 | 11,567,000 | 705,093,000 |
| 8/5/2008 | 22225.06 | 22225.06 | 21739.22 | 21949.75 | -275.31 | 485.84 | 402,546,500 | 13,765,500 | 416,312,000 | 705,093,000 | 27,531,000 | 732,624,000 |
| 8/7/2008 | 22403.26 | 22424.54 | 21915.28 | 22104.2 | -299.06 | 509.26 | 416,312,000 | 14,953,000 | 431,265,000 | 732,624,000 | 29,906,000 | 762,530,000 |
| 8/8/2008 | 21997.64 | 22230.55 | 21690.6 | 21885.21 | -112.43 | 539.95 | 431,265,000 | 5,621,500 | 436,886,500 | 762,530,000 | 11,243,000 | 773,773,000 |
| 8/11/2008 | 22020.54 | 22235.51 | 21859.34 | 21859.34 | -161.2 | 376.17 | 436,886,500 | 8,060,000 | 444,946,500 | 773,773,000 | 16,120,000 | 789,893,000 |
| 8/12/2008 | 21992.18 | 22309.33 | 21640.89 | 21640.89 | -351.29 | 668.44 | 444,946,500 | 17,564,500 | 462,511,000 | 789,893,000 | 35,129,000 | 825,022,000 |
| 8/13/2008 | 21270.86 | 21665.75 | 21223.38 | 21293.32 | 22.46 | 442.37 | 462,511,000 | (1,123,000) | 461,388,000 | 825,022,000 | (2,246,000) | 822,776,000 |
| 8/14/2008 | 21302.7 | 21453.48 | 21109.01 | 21392.71 | 90.01 | 344.47 | 461,388,000 | (4,500,500) | 456,887,500 | 822,776,000 | $(9,001,000)$ | 813,775,000 |
| 8/15/2008 | 21383.71 | 21383.71 | 20994.54 | 21160.58 | -223.13 | 389.17 | 456,887,500 | 11,156,500 | 468,044,000 | 813,775,000 | 22,313,000 | 836,088,000 |
| 8/18/2008 | 21163.01 | 21206.6 | 20751.14 | 20930.67 | -232.34 | 455.46 | 468,044,000 | 11,617,000 | 479,661,000 | 836,088,000 | 23,234,000 | 859,322,000 |
| 8/19/2008 | 20675.75 | 20902.51 | 20484.37 | 20484.37 | -191.38 | 418.14 | 479,661,000 | 9,569,000 | 489,230,000 | 859,322,000 | 19,138,000 | 878,460,000 |
| 8/20/2008 | 20388.79 | 20971.19 | 20388.79 | 20931.26 | 542.47 | 582.4 | 489,230,000 | (27,123,500) | 462,106,500 | 878,460,000 | (54,247,000) | 824,213,000 |
| 8/21/2008 | 20762.65 | 20762.65 | 20350.48 | 20392.06 | -370.59 | 412.17 | 462,106,500 | 18,529,500 | 480,636,000 | 824,213,000 | 37,059,000 | 861,272,000 |
| 8/22/2008 | 20392.06 | 20392.06 | 20392.06 | 20392.06 | 0 | 0 | 480,636,000 |  | 480,636,000 | 861,272,000 |  | 861,272,000 |
| 8/25/2008 | 20739.48 | 21108.25 | 20739.48 | 21104.79 | 365.31 | 368.77 | 480,636,000 | (18,265,500) | 462,370,500 | 861,272,000 | $(36,531,000)$ | 824,741,000 |
| 8/26/2008 | 20849.08 | 21173.56 | 20785.8 | 21056.66 | 207.58 | 387.76 | 462,370,500 | (10,379,000) | 451,991,500 | 824,741,000 | (20,758,000) | 803,983,000 |
| 8/27/2008 | 21104.56 | 21464.72 | 21104.56 | 21464.72 | 360.16 | 360.16 | 451,991,500 | (18,008,000) | 433,983,500 | 803,983,000 | (36,016,000) | 767,967,000 |
| 8/28/2008 | 21546.94 | 21546.94 | 20857.03 | 20972.29 | -574.65 | 689.91 | 433,983,500 | 28,732,500 | 462,716,000 | 767,967,000 | 57,465,000 | 825,432,000 |
| 8/29/2008 | 21289.7 | 21474.31 | 21223.99 | 21261.89 | -27.81 | 250.32 | 462,716,000 | 1,390,500 | 464,106,500 | 825,432,000 | 2,781,000 | 828,213,000 |
| 9/1/2008 | 20999.32 | 21031.08 | 20844.15 | 20906.31 | -93.01 | 186.93 | 464,106,500 | 4,650,500 | 468,757,000 | 828,213,000 | 9,301,000 | 837,514,000 |
| 9/2/2008 | 20956.94 | 21066.58 | 20595.59 | 21042.46 | 85.52 | 470.99 | 468,757,000 | (4,276,000) | 464,481,000 | 837,514,000 | (8,552,000) | 828,962,000 |
| 9/3/2008 | 20964.75 | 20964.75 | 20526.73 | 20585.06 | -379.69 | 438.02 | 464,481,000 | 18,984,500 | 483,465,500 | 828,962,000 | 37,969,000 | 866,931,000 |
| 9/4/2008 | 20545.38 | 20621.48 | 20356.51 | 20389.48 | -155.9 | 264.97 | 483,465,500 | 7,795,000 | 491,260,500 | 866,931,000 | 15,590,000 | 882,521,000 |
| 9/5/2008 | 19833.87 | 19987.15 | 19708.39 | 19933.28 | 99.41 | 278.76 | 491,260,500 | (4,970,500) | 486,290,000 | 882,521,000 | (9,941,000) | 872,580,000 |
| 9/8/2008 | 20840.69 | 20840.69 | 20637.99 | 20794.27 | -46.42 | 202.7 | 486,290,000 | 2,321,000 | 488,611,000 | 872,580,000 | 4,642,000 | 877,222,000 |
| 9/9/2008 | 20439.47 | 20543.15 | 20299.97 | 20491.11 | 51.64 | 243.18 | 488,611,000 | (2,582,000) | 486,029,000 | 877,222,000 | $(5,164,000)$ | 872,058,000 |
| 9/10/2008 | 20114.86 | 20283.99 | 19951.36 | 19999.78 | -115.08 | 332.63 | 486,029,000 | 5,754,000 | 491,783,000 | 872,058,000 | 11,508,000 | 883,566,000 |
| 9/11/2008 | 19854.82 | 19854.82 | 19220.28 | 19388.72 | -466.1 | 634.54 | 491,783,000 | 23,305,000 | 515,088,000 | 883,566,000 | 46,610,000 | 930,176,000 |
| 9/12/2008 | 19432.72 | 19525.55 | 19157.73 | 19352.9 | -79.82 | 367.82 | 515,088,000 | 3,991,000 | 519,079,000 | 930,176,000 | 7,982,000 | 938,158,000 |
| 9/16/2008 | 18325.65 | 18538.51 | 18019.2 | 18300.61 | -25.04 | 519.31 | 519,079,000 | 1,252,000 | 520,331,000 | 938,158,000 | 2,504,000 | 940,662,000 |
| 9/17/2008 | 18691.3 | 18699.18 | 17637.19 | 17637.19 | -1054.11 | 1061.99 | 520,331,000 | 52,705,500 | 573,036,500 | 940,662,000 | 105,411,000 | 1,046,073,000 |
| 9/18/2008 | 17120.23 | 17849.97 | 16283.72 | 17632.46 | 512.23 | 1566.25 | 573,036,500 | (25,611,500) | 547,425,000 | 1,046,073,000 | (51,223,000) | 994,850,000 |
| 9/19/2008 | 18878.26 | 19327.73 | 18588.11 | 19327.73 | 449.47 | 739.62 | 547,425,000 | (22,473,500) | 524,951,500 | 994,850,000 | (44,947,000) | 949,903,000 |
| 9/22/2008 | 19869.02 | 19869.02 | 19137.67 | 19632.2 | -236.82 | 731.35 | 524,951,500 | 11,841,000 | 536,792,500 | 949,903,000 | 23,682,000 | 973,585,000 |
| 9/23/2008 | 19178.49 | 19302.76 | 18872.85 | 18872.85 | -305.64 | 429.91 | 536,792,500 | 15,282,000 | 552,074,500 | 973,585,000 | 30,564,000 | 1,004,149,000 |
| 9/24/2008 | 18954.32 | 19291.02 | 18862.9 | 18961.99 | 7.67 | 428.12 | 552,074,500 | $(383,500)$ | 551,691,000 | 1,004,149,000 | (767,000) | 1,003,382,000 |
| 9/25/2008 | 19003.22 | 19248.72 | 18870.11 | 18934.43 | -68.79 | 378.61 | 551,691,000 | 3,439,500 | 555,130,500 | 1,003,382,000 | 6,879,000 | 1,010,261,000 |
| 9/26/2008 | 18909.59 | 18936.94 | 18500.11 | 18682.09 | -227.5 | 436.83 | 555,130,500 | 11,375,000 | 566,505,500 | 1,010,261,000 | 22,750,000 | 1,033,011,000 |
| 9/29/2008 | 18742.25 | 18742.25 | 17796.34 | 17880.68 | -861.57 | 945.91 | 566,505,500 | 43,078,500 | 609,584,000 | 1,033,011,000 | 86,157,000 | 1,119,168,000 |
| 9/30/2008 | 16898.33 | 18029.77 | 16799.29 | 18016.21 | 1117.88 | 1230.48 | 609,584,000 | (55,894,000) | 553,690,000 | 1,119,168,000 | (111,788,000) | 1,007,380,000 |
| 10/2/2008 | 17870.43 | 18285.68 | 17631.7 | 18211.11 | 340.68 | 653.98 | 553,690,000 | (17,034,000) | 536,656,000 | 1,007,380,000 | (34,068,000) | 973,312,000 |
| 10/3/2008 | 17788.99 | 17926.14 | 17682.4 | 17682.4 | -106.59 | 243.74 | 536,656,000 | 5,329,500 | 541,985,500 | 973,312,000 | 10,659,000 | 983,971,000 |
| 10/6/2008 | 17156.21 | 17241.78 | 16790.86 | 16803.76 | -352.45 | 450.92 | 541,985,500 | 17,622,500 | 559,608,000 | 983,971,000 | 35,245,000 | 1,019,216,000 |
| 10/7/2008 | 16803.76 | 16803.76 | 16803.76 | 16803.76 |  | 0 | 559,608,000 |  | 559,608,000 | 1,019,216,000 |  | 1,019,216,000 |
| 10/8/2008 | 16107.98 | 16422.52 | 15431.73 | 15431.73 | -676.25 | 990.79 | 559,608,000 | 33,812,500 | 593,420,500 | 1,019,216,000 | 67,625,000 | 1,086,841,000 |
| 10/9/2008 | 15550.86 | 15990.2 | 15550.86 | 15943.24 | 392.38 | 439.34 | 593,420,500 | (19,619,000) | 573,801,500 | 1,086,841,000 | (39,238,000) | 1,047,603,000 |
| 10/10/2008 | 14717.52 | 14910.55 | 14398.54 | 14796.87 | 79.35 | 512.01 | 573,801,500 | $(3,967,500)$ | 569,834,000 | 1,047,603,000 | (7,935,000) | 1,039,668,000 |
| 10/13/2008 | 15156.16 | 16376.42 | 14754.64 | 16312.16 | 1156 | 1621.78 | 569,834,000 | (57,800,000) | 512,034,000 | 1,039,668,000 | (115,600,000) | 924,068,000 |
| 10/14/2008 | 17141.05 | 17141.05 | 16615.01 | 16832.88 | -308.17 | 526.04 | 512,034,000 | 15,408,500 | 527,442,500 | 924,068,000 | 30,817,000 | 954,885,000 |
| 10/15/2008 | 16609.09 | 16609.09 | 15961.92 | 15998.3 | -610.79 | 647.17 | 527,442,500 | 30,539,500 | 557,982,000 | 954,885,000 | 61,079,000 | 1,015,964,000 |


|  | HANGSENG |  |  |  |  |  | SELL 1 LOT HANGSENG (amount in IDR) |  |  | SELL 2 LOT HANGSENG (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low range | Beginning Balance | Floating Profit/Loss | Ending Balance | Beginning Balance | Floating Profit/Loss | Ending Balance |
| 10/16/2008 | 14902.34 | 15230.52 | 14578.54 | 15230.52 | 328.18 | 651.98 | 557,982,000 | (16,409,000) | 541,573,000 | 1,015,964,000 | $(32,818,000)$ | 983,146,000 |
| 10/17/2008 | 15081.46 | 15300.07 | 14554.21 | 14554.21 | -527.25 | 745.86 | 541,573,000 | 26,362,500 | 567,935,500 | 983,146,000 | 52,725,000 | 1,035,871,000 |
| 10/20/2008 | 14691.9 | 15472.68 | 14691.79 | 15323.01 | 631.11 | 780.89 | 567,935,500 | (31,555,500) | 536,380,000 | 1,035,871,000 | $(63,111,000)$ | 972,760,000 |
| 10/21/2008 | 15616.96 | 15616.96 | 14884.07 | 15041.17 | -575.79 | 732.89 | 536,380,000 | 28,789,500 | 565,169,500 | 972,760,000 | 57,579,000 | 1,030,339,000 |
| 10/22/2008 | 14878.21 | 15161.69 | 14038.41 | 14266.6 | -611.61 | 1123.28 | 565,169,500 | 30,580,500 | 595,750,000 | 1,030,339,000 | 61,161,000 | 1,091,500,000 |
| 10/23/2008 | 13596.31 | 14032.25 | 13403.35 | 13760.49 | 164.18 | 628.9 | 595,750,000 | (8,209,000) | 587,541,000 | 1,091,500,000 | (16,418,000) | 1,075,082,000 |
| 10/24/2008 | 13478.63 | 13478.63 | 12618.38 | 12618.38 | -860.25 | 860.25 | 587,541,000 | 43,012,500- | 630,553,500 | 1,075,082,000 | 86,025,000 | 1,161,107,000 |
| 10/27/2008 | 12372.75 | 12736.85 | 10676.29 | 11015.84 | -1356.91 | 2060.56 | 630,553,500 | 67,845,500 | 698,399,000 | 1,161,107,000 | 135,691,000 | 1,296,798,000 |
| 10/28/2008 | 11154.57 | 12596.29 | 11133.94 | 12596.29 | 1441.72 | 1462.35 | 698,399,000 | (72,086,000) | 626,313,000 | 1,296,798,000 | (144, 172,000) | 1.152.626.000 |
| 10/29/2008 | 12807.35 | 13307.42 | 12333.94 | 12702.07 | -105.28 | 973.48 | 626,313,000 | 5,264,000 | 631,577,000 | 1,152,626,000 | 10,528,000 | 1,163,154,000 |
| 10/30/2008 | 13280.44 | 14329.85 | 13280.44 | 14329.85 | 1049.41 | 1049.41 | 631,577,000 | (52,470,500) | 579,106,500 | 1,163,154,000 | (104,941,000) | 1,058,213,000 |
| 10/31/2008 | 14037.37 | 14122.78 | 13517.42 | 13968.67 | -68.7 | 605.36 | 579,106,500 | 3,435,000 | 582,541,500 | 1,058,213,000 | 6,870,000 | 1,065,083,000 |
| 11/3/2008 | 14436.03 | 14889.13 | 14272.17 | 14344.37 | -91.66 | 616.96 | 582,541,500 | 4,583,000 | 587,124,500 | 1,065,083,000 | 9,166,000 | 1,074,249,000 |
| 11/4/2008 | 14337.62 | 14539.59 | 13853.16 | 14384.34 | 46.72 | 686.43 | 587,124,500 | (2,336,000) | 584,788,500 | 1,074,249,000 | $(4,672,000)$ | 1,069,577,000 |
| 11/5/2008 | 15045.53 | 15317.83 | 14750.04 | 14840.16 | -205.37 | 567.79 | 584,788,500 | 10,268,500 | 595,057,000 | 1,069,577,000 | 20,537,000 | 1,090,114,000 |
| 11/6/2008 | 14081.76 | 14081.76 | 13674.07 | 13790.04 | -291.72 | 407.69 | 595,057,000 | 14,586,000 | 609,643,000 | 1,090,114,000 | 29,172,000 | 1,119,286,000 |
| 11/7/2008 | 13273.09 | 14254.22 | 13273.09 | 14243.43 | 970.34 | 981.13 | 609,643,000 | (48,517,000) | 561,126,000 | 1,119,286,000 | (97,034,000) | 1,022,252,000 |
| 11/10/2008 | 15033.18 | 15147.96 | 14453.62 | 14744.63 | -288.55 | 694.34 | 561,126,000 | 14,427,500 | 575,553,500 | 1,022,252,000 | 28,855,000 | 1,051,107,000 |
| 11/11/2008 | 14322.95 | 14853.83 | 13926.71 | 14040.9 | -282.05 | 927.12 | 575,553,500 | 14,102,500 | 589,656,000 | 1,051,107,000 | 28,205,000 | 1,079,312,000 |
| 11/12/2008 | 14155.26 | 14256.06 | 13626.31 | 13939.09 | -216.17 | 629.75 | 589,656,000 | 10,808,500 | 600,464,500 | 1,079,312,000 | 21,617,000 | 1,100,929,000 |
| 11/13/2008 | 13068.93 | 13373.11 | 12943.11 | 13221.35 | 152.42 | 430 | 600,464,500 | (7,621,000) | 592,843,500 | 1,100,929,000 | (15,242,000) | 1,085,687,000 |
| 11/14/2008 | 13749.53 | 13749.53 | 13493.86 | 13542.66 | -206.87 | 255.67 | 592,843,500 | 10,343,500 | 603,187,000 | 1,085,687,000 | 20,687,000 | 1,106,374,000 |
| 11/17/2008 | 13584.35 | 13738.12 | 13277.64 | 13529.53 | -54.82 | 460.48 | 603,187,000 | 2,741,000 | 605,928,000 | 1,106,374,000 | 5,482,000 | 1,111,856,000 |
| 11/18/2008 | 13298.88 | 13363.57 | 12676.28 | 12915.89 | -382.99 | 687.29 | 605,928,000 | 19,149,500 | 625,077,500 | 1,111,856,000 | 38,299,000 | 1,150,155,000 |
| 11/19/2008 | 12827.37 | 13179.33 | 12738.53 | 12815.8 | -11.57 | 440.8 | 625,077,500 | 578,500 | 625,656,000 | 1,150,155,000 | 1,157,000 | 1,151,312,000 |
| 11/20/2008 | 12170.98 | 12298.56 | 11976.88 | 12298.56 | 127.58 | 321.68 | 625,656,000 | (6,379,000) | 619,277,000 | 1,151,312,000 | (12,758,000) | 1,138,554,000 |
| 11/21/2008 | 11814.81 | 13048.5 | 11814.81 | 12659.2 | 844.39 | 1233.69 | 619,277,000 | (42,219,500) | 577,057,500 | 1,138,554,000 | (84,439,000) | 1,054,115,000 |
| 11/24/2008 | 12239.49 | 12707.23 | 12239.49 | 12457.94 | 218.45 | 467.74 | 577,057,500 | (10,922,500) | 566,135,000 | 1,054,115,000 | (21,845,000) | 1,032,270,000 |
| 11/25/2008 | 13012 | 13090.88 | 12767.44 | 12878.6 | -133.4 | 323.44 | 566,135,000 | 6,670,000 | 572,805,000 | 1,032,270,000 | 13,340,000 | 1,045,610,000 |
| 11/26/2008 | 12990.35 | 13369.45 | 12990.35 | 13369.45 | 379.1 | 379.1 | 572,805,000 | (18,955,000) | 553,850,000 | 1,045,610,000 | $(37,910,000)$ | 1,007,700,000 |
| 11/27/2008 | 13901.45 | 13930.91 | 13332.93 | 13552.06 | -349.39 | 597.98 | 553,850,000 | 17,469,500 | 571,319,500 | 1,007,700,000 | 34,939,000 | 1,042,639,000 |
| 11/28/2008 | 13550.29 | 13896.49 | 13550.29 | 13888.24 | 337.95 | 346.2 | 571,319,500 | (16,897,500) | 554,422,000 | 1,042,639,000 | $(33,795,000)$ | 1,008,844,000 |
| 12/1/2008 | 13775.28 | 14253.66 | 13659.44 | 14108.84 | 333.56 | 594.22 | 554,422,000 | (16,678,000) | 537,744,000 | 1,008,844,000 | $(33,356,000)$ | 975,488,000 |
| 12/2/2008 | 13373.02 | 13513.5 | 13344.6 | 13405.85 | 32.83 | 168.9 | 537,744,000 | (1,641,500) | 536,102,500 | 975,488,000 | (3,283,000) | 972,205,000 |
| 12/3/2008 | 13598.6 | 13778.05 | 13573.43 | 13588.66 | -9.94 | 204.62 | 536,102,500 | 497,000 | 536,599,500 | 972,205,000 | 994,000 | 973,199,000 |
| 12/4/2008 | 13857.29 | 13883.87 | 13459.61 | 13509.78 | -347.51 | 424.26 | 536,599,500 | 17,375,500 | 553,975,000 | 973,199,000 | 34,751,000 | 1,007,950,000 |
| 12/5/2008 | 13718.92 | 13875.14 | 13656.92 | 13846.09 | 127.17 | 218.22 | 553,975,000 | $(6,358,500)$ | 547,616,500 | 1,007,950,000 | $(12,717,000)$ | 995,233,000 |
| 12/8/2008 | 14303.25 | 15044.87 | 14303.25 | 15044.87 | 741.62 | 741.62 | 547,616,500 | (37,081,000) | 510,535,500 | 995,233,000 | $(74,162,000)$ | 921,071,000 |
| 12/9/2008 | 15032.33 | 15205.32 | 14717.47 | 14753.22 | -279.11 | 487.85 | 510,535,500 | 13,955,500 | 524,491,000 | 921,071,000 | 27,911,000 | 948,982,000 |
| 12/10/2008 | 14946 | 15578.96 | 14946 | 15577.74 | 631.74 | 632.96 | 524,491,000 | (31,587,000) | 492,904,000 | 948,982,000 | $(63,174,000)$ | 885,808,000 |
| 12/11/2008 | 15533.62 | 15781.05 | 15337.73 | 15613.9 | 80.28 | 443.32 | 492,904,000 | (4,014,000) | 488,890,000 | 885,808,000 | $(8,028,000)$ | 877,780,000 |
| 12/12/2008 | 15287.7 | 15393.09 | 14479.23 | 14758.39 | -529.31 | 913.86 | 488,890,000 | 26,465,500 | 515,355,500 | 877,780,000 | 52,931,000 | 930,711,000 |
| 12/15/2008 | 15363.49 | 15386.9 | 15007.42 | 15046.95 | -316.54 | 379.48 | 515,355,500 | 15,827,000 | 531,182,500 | 930,711,000 | 31,654,000 | 962,365,000 |
| 12/16/2008 | 15018.46 | 15217.25 | 14819.73 | 15130.21 | 111.75 | 397.52 | 531,182,500 | (5,587,500) | 525,595,000 | 962,365,000 | (11,175,000) | 951,190,000 |
| 12/17/2008 | 15544.97 | 15557.45 | 15179.38 | 15460.52 | -84.45 | 378.07 | 525,595,000 | 4,222,500 | 529,817,500 | 951,190,000 | 8,445,000 | 959,635,000 |
| 12/18/2008 | 15335.3 | 15548.26 | 15301.16 | 15497.81 | 162.51 | 247.1 | 529,817,500 | $(8,125,500)$ | 521,692,000 | 959,635,000 | $(16,251,000)$ | 943,384,000 |
| 12/19/2008 | 15235.22 | 15444.28 | 15014.98 | 15127.51 | -107.71 | 429.3 | 521,692,000 | 5,385,500 | 527,077,500 | 943,384,000 | 10,771,000 | 954,155,000 |
| 12/22/2008 | 15177.12 | 15227.43 | 14622.39 | 14622.39 | -554.73 | 605.04 | 527,077,500 | 27,736,500 | 554,814,000 | 954,155,000 | 55,473,000 | 1,009,628,000 |
| 12/23/2008 | 14472.03 | 14491.75 | 14084.86 | 14220.79 | -251.24 | 406.89 | 554,814,000 | 12,562,000 | 567,376,000 | 1,009,628,000 | 25,124,000 | 1,034,752,000 |
| 12/24/2008 | 13855.89 | 14300.7 | 13855.89 | 14184.14 | 328.25 | 444.81 | 567,376,000 | (16,412,500) | 550,963,500 | 1,034,752,000 | $(32,825,000)$ | 1,001,927,000 |
|  |  |  |  |  |  |  |  |  | 539,903,500 |  |  | 979,807,000 |


|  | NIKKEI |  |  |  |  |  | SELL 1 LOT NIKKEI (amount in IDR) |  |  | SELL 2 LOT NIKKEI (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low Range | Beginning Balance | Floating profit/loss | Ending Balance | Beginning Balance | Floating profit/loss | Ending Balance |
| 4-Jan-08 | 15155.73 | 15156.66 | 14542.58 | 14691.41 | -464.32 | 614.08 | 90,000,000 | 23,216,000 | 113,216,000 | 80,000,000 | 46,432,000 | 126,432,000 |
| 7-Jan-08 | 14549.38 | 14667.85 | 14438.61 | 14500.55 | -48.83 | 229.24 | 113,216,000 | 2,441,500 | 115,657,500 | 126,432,000 | 4,883,000 | 131,315,000 |
| 8-Jan-08 | 14429.3 | 14547.8 | 14365.86 | 14528.67 | 99.37 | 181.94 | 115,657,500 | (4,968,500) | 110,009,000 | 131,315,000 | (9,937,000) | 121,370,000 |
| 9-Jan-08 | 14364.71 | 14602.65 | 14271.57 | 14599.16 | 234.45 | 331.08 | 110,689,000 | (11,72R,500) | 98,966,500 | 121,378,000 | (23,445,0¢0) | 97,933,000 |
| 10-Jan-08 | 14546.32 | 14584.73 | 14388.11 | 14388.11 | -158.21 | 196.62 | 98,966,500 | 7,910,500 | 106,877,000 | 97,933,000 | 15,821,000 | 113,754,000 |
| 11-Jan-08 | 14419.43 | 14447.49 | 14096.54 | 14110.79 | -308.64 | 350.95 | 106,877,000 | 15,432,000 | 122,309,000 | 113,754,000 | 30,864,000 | 144,618,000 |
| 15-Jan-08 | 14134.91 | 14224 | 13915.15 | 13972.63 | -162.28 | 308.85 | 122,309,000 | 8,114,000 | 130,423,000 | 144,618,000 | 16,228,000 | 160,846,000 |
| 16-Jan-08 | 13796.73 | 13841.93 | 13500.59 | 13504.51 | -292.22 | 341.34 | 130,423,000 | 14,611,000 | 145,034,000 | 160,846,000 | 29,222,000 | 190,068,000 |
| 17-Jan-08 | 13596.38 | 13803.08 | 13472.45 | 13783.45 | 187.07 | 330.63 | 145,034,000 | $(9,353,500)$ | 135,680,500 | 190,068,000 | (18,707,000) | 171,361,000 |
| 18-Jan-08 | 13577.5 | 13902.64 | 13365.32 | 13861.29 | 283.79 | 537.32 | 135,680,500 | (14,189,500) | 121,491,000 | 171,361,000 | (28,379,000) | 142,982,000 |
| 21-Jan-08 | 13701.43 | 13704.65 | 13320.51 | 13325.94 | -375.49 | 384.14 | 121,491,000 | 18,774,500 | 140,265,500 | 142,982,000 | 37,549,000 | 180,531,000 |
| 22-Jan-08 | 13125.23 | 13125.23 | 12572.68 | 12573.05 | -552.18 | 552.55 | 140,265,500 | 27,609,000 | 167,874,500 | 180,531,000 | 55,218,000 | 235,749,000 |
| 23-Jan-08 | 12756.31 | 13063.78 | 12619.78 | 12829.06 | 72.75 | 444 | 167,874,500 | $(3,637,500)$ | 164,237,000 | 235,749,000 | $(7,275,000)$ | 228,474,000 |
| 24-Jan-08 | 12952.5 | 13134.77 | 12952.5 | 13092.78 | 140.28 | 182.27 | 164,237,000 | (7,014,000) | 157,223,000 | 228,474,000 | (14,028,000) | 214,446,000 |
| 25-Jan-08 | 13258.77 | 13647.16 | 13248.89 | 13629.16 | 370.39 | 398.27 | 157,223,000 | $(18,519,500)$ | 138,703,500 | 214,446,000 | (37,039,000) | 177,407,000 |
| 28-Jan-08 | 13482.84 | 13501.86 | 13087.91 | 13087.91 | -394.93 | 413.95 | 138,703,500 | 19,746,500 | 158,450,000 | 177,407,000 | 39,493,000 | 216,900,000 |
| 29-Jan-08 | 13246.69 | 13506.81 | 13224.66 | 13478.86 | 232.17 | 282.15 | 158,450,000 | (11,608,500) | 146,841,500 | 216,900,000 | (23,217,000) | 193,683,000 |
| 30-Jan-08 | 13500.52 | 13514.13 | 13271.13 | 13345.03 | -155.49 | 243 | 146,841,500 | 7,774,500 | 154,616,000 | 193,683,000 | 15,549,000 | 209,232,000 |
| 31-Jan-08 | 13227.48 | 13622.68 | 13154.77 | 13592.47 | 364.99 | 467.91 | 154,616,000 | (18,249,500) | 136,366,500 | 209,232,000 | (36,499,000) | 172,733,000 |
| 1-Feb-08 | 13517.74 | 13648.39 | 13444.08 | 13497.16 | -20.58 | 204.31 | 136,366,500 | 1,029,000 | 137,395,500 | 172,733,000 | 2,058,000 | 174,791,000 |
| 4-Feb-08 | 13642.6 | 13889.24 | 13642.6 | 13859.7 | 217.1 | 246.64 | 137,395,500 | (10,855,000) | 126,540,500 | 174,791,000 | (21,710,000) | 153,081,000 |
| 5-Feb-08 | 13806.17 | 13821.92 | 13665.64 | 13745.5 | -60.67 | 156.28 | 126,540,500 | 3,033,500 | 129,574,000 | 153,081,000 | 6,067,000 | 159,148,000 |
| 6-Feb-08 | 13548.53 | 13552.19 | 13099.24 | 13099.24 | -449.29 | 452.95 | 129,574,000 | 22,464,500 | 152,038,500 | 159,148,000 | 44,929,000 | 204,077,000 |
| 7-Feb-08 | 13077.25 | 13244.19 | 12972.55 | 13207.15 | 129.9 | 271.64 | 152,038,500 | (6,495,000) | 145,543,500 | 204,077,000 | (12,990,000) | 191,087,000 |
| 8-Feb-08 | 13143.08 | 13279.52 | 12997.88 | 13017.24 | -125.84 | 281.64 | 145,543,500 | 6,292,000 | 151,835,500 | 191,087,000 | 12,584,000 | 203,671,000 |
| 12-Feb-08 | 12998.87 | 13138.28 | 12923.42 | 13021.96 | 23.09 | 214.86 | 151,835,500 | (1,154,500) | 150,681,000 | 203,671,000 | (2,309,000) | 201,362,000 |
| 13-Feb-08 | 13162.95 | 13240.26 | 13036.62 | 13068.3 | -94.65 | 203.64 | 150,681,000 | 4,732,500 | 155,413,500 | 201,362,000 | 9,465,000 | 210,827,000 |
| 14-Feb-08 | 13254.59 | 13626.45 | 13251.86 | 13626.45 | 371.86 | 374.59 | 155,413,500 | (18,593,000) | 136,820,500 | 210,827,000 | $(37,186,000)$ | 173,641,000 |
| 15-Feb-08 | 13508.53 | 13666.68 | 13356.39 | 13622.56 | 114.03 | 310.29 | 136,820,500 | (5,701,500) | 131,119,000 | 173,641,000 | (11,403,000) | 162,238,000 |
| 19-Feb-08 | 13761.76 | 13853.21 | 13691.88 | 13757.91 | -3.85 | 161.33 | 131,119,000 | 192,500 | 131,311,500 | 162,238,000 | 385,000 | 162,623,000 |
| 20-Feb-08 | 13729.75 | 13729.75 | 13310.37 | 13310.37 | -419.38 | 419.38 | 131,311,500 | 20,969,000 | 152,280,500 | 162,623,000 | 41,938,000 | 204,561,000 |
| 21-Feb-08 | 13462.72 | 13783.97 | 13439.59 | 13688.28 | 225.56 | 344.38 | 152,280,500 | (11,278,000) | 141,002,500 | 204,561,000 | (22,556,000) | 182,005,000 |
| 22-Feb-08 | 13530.19 | 13540.62 | 13378.72 | 13500.46 | -29.73 | 161.9 | 141,002,500 | 1,486,500 | 142,489,000 | 182,005,000 | 2,973,000 | 184,978,000 |
| 25-Feb-08 | 13612.31 | 13969.18 | 13612.31 | 13914.57 | 302.26 | 356.87 | 142,489,000 | (15,113,000) | 127,376,000 | 184,978,000 | (30,226,000) | 154,752,000 |
| 26-Feb-08 | 14036.89 | 14053.85 | 13803.46 | 13824.72 | -212.17 | 250.39 | 127,376,000 | 10,608,500 | 137,984,500 | 154,752,000 | 21,217,000 | 175,969,000 |
| 27-Feb-08 | 14007.32 | 14105.47 | 13956.44 | 14031.3 | 23.98 | 149.03 | 137,984,500 | (1,199,000) | 136,785,500 | 175,969,000 | (2,398,000) | 173,571,000 |
| 28-Feb-08 | 13877.88 | 13962.3 | 13794.71 | 13925.51 | 47.63 | 167.59 | 136,785,500 | (2,381,500) | 134,404,000 | 173,571,000 | (4,763,000) | 168,808,000 |
| 29-Feb-08 | 13735.44 | 13738.56 | 13533.25 | 13603.02 | -132.42 | 205.31 | 134,404,000 | 6,621,000 | 141,025,000 | 168,808,000 | 13,242,000 | 182,050,000 |
| 3-Mar-08 | 13412.87 | 13413.63 | 12992.18 | 12992.18 | -420.69 | 421.45 | 141,025,000 | 21,034,500 | 162,059,500 | 182,050,000 | 42,069,000 | 224,119,000 |
| 4-Mar-08 | 13080.29 | 13110.39 | 12883.07 | 12992.28 | -88.01 | 227.32 | 162,059,500 | 4,400,500 | 166,460,000 | 224,119,000 | 8,801,000 | 232,920,000 |
| 5-Mar-08 | 12973.03 | 13044.01 | 12919.81 | 12972.06 | -0.97 | 124.2 | 166,460,000 | 48,500 | 166,508,500 | 232,920,000 | 97,000 | 233,017,000 |
| 6-Mar-08 | 13068.89 | 13365.22 | 13050.55 | 13215.42 | 146.53 | 314.67 | 166,508,500 | $(7,326,500)$ | 159,182,000 | 233,017,000 | (14,653,000) | 218,364,000 |
| 7-Mar-08 | 13024.61 | 13024.61 | 12744.52 | 12782.8 | -241.81 | 280.09 | 159,182,000 | 12,090,500 | 171,272,500 | 218,364,000 | 24,181,000 | 242,545,000 |
| 10-Mar-08 | 12716.84 | 12777.07 | 12527.07 | 12532.13 | -184.71 | 250 | 171,272,500 | 9,235,500 | 180,508,000 | 242,545,000 | 18,471,000 | 261,016,000 |
| 11-Mar-08 | 12392.31 | 12674.89 | 12352.79 | 12658.28 | 265.97 | 322.1 | 180,508,000 | (13,298,500) | 167,209,500 | 261,016,000 | (26,597,000) | 234,419,000 |
| 12-Mar-08 | 12841.88 | 13071.22 | 12799.42 | 12861.13 | 19.25 | 271.8 | 167,209,500 | $(962,500)$ | 166,247,000 | 234,419,000 | $(1,925,000)$ | 232,494,000 |
| 13-Mar-08 | 12741.26 | 12772.37 | 12351.72 | 12433.44 | -307.82 | 420.65 | 166,247,000 | 15,391,000 | 181,638,000 | 232,494,000 | 30,782,000 | 263,276,000 |


|  | NIKKEI |  |  |  |  |  | SELL 1 LOT NIKKEI (amount in IDR) |  |  | SELL 2 LOT NIKKEI (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low Range | Beginning Balance | Floating profit/loss | Ending Balance | Beginning Balance | Floating profit/loss | Ending Balance |
| 14-Mar-08 | 12509.81 | 12582.57 | 12167.09 | 12241.6 | -268.21 | 415.48 | 181,638,000 | 13,410,500 | 195,048,500 | 263,276,000 | 26,821,000 | 290,097,000 |
| 17-Mar-08 | 12089.03 | 12132.69 | 11691 | 11787.51 | -301.52 | 441.69 | 195,048,500 | 15,076,000 | 210,124,500 | 290,097,000 | 30,152,000 | 320,249,000 |
| 18-Mar-08 | 11828.99 | 11995.06 | 11793.6 | 11964.16 | 135.17 | 201.46 | 210,124,500 | (6,758,500) | 203,366,000 | 320,249,000 | (13,517,000) | 306,732,000 |
| 19-Mar-08 | 12142.33 | 12374.75 | 12142.33 | 12260.44 | 118.11 | 232.42 | 203,366,000 | (5,905,500) | 197,460,500 | 306,732,000 | (11,811,000) | 294,921,000 |
| 21-Mar-08 | 12331.64 | 12496.41 | 12308.03 | 12482.57 | 150.93 | 188.38 | 197,460,500 | (7,546,500) | 189,914,000 | 294,921,000 | (15,093,000) | 279,828,000 |
| 24-Mar-08 | 12473.06 | 12582.46 | 12438.2 | 12480.09 | 7.03 | 144.26 | 189,914,000 | $(351,500)$ | 189,562,500 | 279,828,000 | (703,000) | 279,125,000 |
| 25-Mar-08 | 12639.74 | 12791.24 | 12572.77 | 12745.22 | 105.48 | 218.47 | 189,562,500 | (5,274,000) | 184,288,500 | 279,125,000 | (10,548,000) | 268,577,000 |
| 26-Mar-08 | 12648.97 | 12711.78 | 12591.01 | 12706.63 | 57.66 | 120.77 | 184,288,500 | (2,883,000) | 181,405,500 | 268,577,000 | (5,766,000) | 262,811,000 |
| 27-Mar-08 | 12618.42 | 12621.56 | 12475.88 | 12604.58 | -13.84 | 145.68 | 181,405,500 | 692,000 | 182,097,500 | 262,811,000 | 1,384,000 | 264,195,000 |
| 28-Mar-08 | 12594.34 | 12874.45 | 12507.68 | 12820.47 | 226.13 | 366.77 | 182,097,500 | (11,306,500) | 170,791,000 | 264,195,000 | $(22,613,000)$ | 241,582,000 |
| 31-Mar-08 | 12709.28 | 12709.28 | 12430.63 | 12525.54 | -183.74 | 278.65 | 170,791,000 | 9,187,000 | 179,978,000 | 241,582,000 | 18,374,000 | 259,956,000 |
| 1-Apr-08 | 12539.8 | 12779.14 | 12521.84 | 12656.42 | 116.62 | 257.3 | 179,978,000 | (5,831,000) | 174,147,000 | 259,956,000 | (11,662,000) | 248,294,000 |
| 2-Apr-08 | 12836.41 | 13189.36 | 12836.41 | 13189.36 | 352.95 | 352.95 | 174,147,000 | $(17,647,500)$ | 156,499,500 | 248,294,000 | (35,295,000) | 212,999,000 |
| 3-Apr-08 | 13190.16 | 13389.9 | 13137.1 | 13389.9 | 199.74 | 252.8 | 156,499,500 | (9,987,000) | 146,512,500 | 212,999,000 | (19,974,000) | 193,025,000 |
| 4-Apr-08 | 13286.35 | 13360.81 | 13220 | 13293.22 | 6.87 | 140.81 | 146,512,500 | $(343,500)$ | 146,169,000 | 193,025,000 | (687,000) | 192,338,000 |
| 7-Apr-08 | 13240.56 | 13485.9 | 13228.86 | 13450.23 | 209.67 | 257.04 | 146,169,000 | (10,483,500) | 135,685,500 | 192,338,000 | (20,967,000) | 171,371,000 |
| 8-Apr-08 | 13373.96 | 13402.91 | 13225.76 | 13250.43 | -123.53 | 177.15 | 135,685,500 | 6,176,500 | 141,862,000 | 171,371,000 | 12,353,000 | 183,724,000 |
| 9-Apr-08 | 13295.16 | 13348.38 | 12998.54 | 13111.89 | -183.27 | 349.84 | 141,862,000 | 9,163,500 | 151,025,500 | 183,724,000 | 18,327,000 | 202,051,000 |
| 10-Apr-08 | 13029.81 | 13062.46 | 12898.49 | 12945.3 | -84.51 | 163.97 | 151,025,500 | 4,225,500 | 155,251,000 | 202,051,000 | 8,451,000 | 210,502,000 |
| 11-Apr-08 | 13061.77 | 13329.4 | 13040.35 | 13323.73 | 261.96 | 289.05 | 155,251,000 | $(13,098,000)$ | 142,153,000 | 210,502,000 | $(26,196,000)$ | 184,306,000 |
| 14-Apr-08 | 13132.67 | 13132.67 | 12858.63 | 12917.51 | -215.16 | 274.04 | 142,153,000 | 10,758,000 | 152,911,000 | 184,306,000 | 21,516,000 | 205,822,000 |
| 15-Apr-08 | 12952.65 | 13052.82 | 12875.92 | 12990.58 | 37.93 | 176.9 | 152,911,000 | (1,896,500) | 151,014,500 | 205,822,000 | $(3,793,000)$ | 202,029,000 |
| 16-Apr-08 | 13130.66 | 13222.43 | 13112.07 | 13146.13 | 15.47 | 110.36 | 151,014,500 | (773,500) | 150,241,000 | 202,029,000 | $(1,547,000)$ | 200,482,000 |
| 17-Apr-08 | 13315.83 | 13495.94 | 13313.06 | 13398.3 | 82.47 | 182.88 | 150,241,000 | $(4,123,500)$ | 146,117,500 | 200,482,000 | $(8,247,000)$ | 192,235,000 |
| 18-Apr-08 | 13426.26 | 13485.04 | 13323.74 | 13476.45 | 50.19 | 161.3 | 146,117,500 | (2,509,500) | 143,608,000 | 192,235,000 | (5,019,000) | 187,216,000 |
| 21-Apr-08 | 13639.85 | 13739.44 | 13639.77 | 13696.55 | 56.7 | 99.67 | 143,608,000 | (2,835,000) | 140,773,000 | 187,216,000 | (5,670,000) | 181,546,000 |
| 22-Apr-08 | 13587.51 | 13608.17 | 13519.12 | 13547.82 | -39.69 | 89.05 | 140,773,000 | 1,984,500 | 142,757,500 | 181,546,000 | 3,969,000 | 185,515,000 |
| 23-Apr-08 | 13455.56 | 13717.05 | 13449.04 | 13579.16 | 123.6 | 268.01 | 142,757,500 | $(6,180,000)$ | 136,577,500 | 185,515,000 | (12,360,000) | 173,155,000 |
| 24-Apr-08 | 13613.83 | 13654.78 | 13497.16 | 13540.87 | -72.96 | 157.62 | 136,577,500 | 3,648,000 | 140,225,500 | 173,155,000 | 7,296,000 | 180,451,000 |
| 25-Apr-08 | 13614.53 | 13886.37 | 13614.53 | 13863.47 | 248.94 | 271.84 | 140,225,500 | (12,447,000) | 127,778,500 | 180,451,000 | (24,894,000) | 155,557,000 |
| 28-Apr-08 | 13907.97 | 14003.28 | 13745.61 | 13894.37 | -13.6 | 257.67 | 127,778,500 | 680,000 | 128,458,500 | 155,557,000 | 1,360,000 | 156,917,000 |
| 30-Apr-08 | 13802.94 | 13976.1 | 13766.24 | 13849.99 | 47.05 | 209.86 | 128,458,500 | (2,352,500) | 126,106,000 | 156,917,000 | (4,705,000) | 152,212,000 |
| 1-May-08 | 13802.59 | 13884.63 | 13727.07 | 13766.86 | -35.73 | 157.56 | 126,106,000 | 1,786,500 | 127,892,500 | 152,212,000 | 3,573,000 | 155,785,000 |
| 2-May-08 | 13944.26 | 14072.92 | 13944.26 | 14049.26 | 105 | 128.66 | 127,892,500 | (5,250,000) | 122,642,500 | 155,785,000 | (10,500,000) | 145,285,000 |
| 7-May-08 | 14147.57 | 14208.67 | 14022.79 | 14102.48 | -45.09 | 185.88 | 122,642,500 | 2,254,500 | 124,897,000 | 145,285,000 | 4,509,000 | 149,794,000 |
| 8-May-08 | 14008.19 | 14036.31 | 13930.28 | 13943.26 | -64.93 | 106.03 | 124,897,000 | 3,246,500 | 128,143,500 | 149,794,000 | 6,493,000 | 156,287,000 |
| 9-May-08 | 13941.3 | 13946.51 | 13639.99 | 13655.34 | -285.96 | 306.52 | 128,143,500 | 14,298,000 | 142,441,500 | 156,287,000 | 28,596,000 | 184,883,000 |
| 12-May-08 | 13565.91 | 13793.41 | 13540.68 | 13743.36 | 177.45 | 252.73 | 142,441,500 | (8,872,500) | 133,569,000 | 184,883,000 | (17,745,000) | 167,138,000 |
| 13-May-08 | 13814.39 | 13976.92 | 13734.5 | 13953.73 | 139.34 | 242.42 | 133,569,000 | (6,967,000) | 126,602,000 | 167,138,000 | (13,934,000) | 153,204,000 |
| 14-May-08 | 13961.96 | 14121.94 | 13877.4 | 14118.55 | 156.59 | 244.54 | 126,602,000 | $(7,829,500)$ | 118,772,500 | 153,204,000 | (15,659,000) | 137,545,000 |
| 15-May-08 | 14167.02 | 14352.84 | 14167.02 | 14251.74 | 84.72 | 185.82 | 118,772,500 | $(4,236,000)$ | 114,536,500 | 137,545,000 | (8,472,000) | 129,073,000 |
| 16-May-08 | 14363.62 | 14392.53 | 14194.91 | 14219.48 | -144.14 | 197.62 | 114,536,500 | 7,207,000 | 121,743,500 | 129,073,000 | 14,414,000 | 143,487,000 |
| 19-May-08 | 14294.52 | 14343.19 | 14219.08 | 14269.61 | -24.91 | 124.11 | 121,743,500 | 1,245,500 | 122,989,000 | 143,487,000 | 2,491,000 | 145,978,000 |
| 20-May-08 | 14220.12 | 14286.67 | 14121.92 | 14160.09 | -60.03 | 164.75 | 122,989,000 | 3,001,500 | 125,990,500 | 145,978,000 | 6,003,000 | 151,981,000 |
| 21-May-08 | 14002.52 | 14041.24 | 13847.18 | 13926.3 | -76.22 | 194.06 | 125,990,500 | 3,811,000 | 129,801,500 | 151,981,000 | 7,622,000 | 159,603,000 |
| 22-May-08 | 13772.65 | 13984.81 | 13658.02 | 13978.46 | 205.81 | 326.79 | 129,801,500 | $(10,290,500)$ | 119,511,000 | 159,603,000 | $(20,581,000)$ | 139,022,000 |
| 23-May-08 | 13945.1 | 14157.24 | 13925.38 | 14012.2 | 67.1 | 231.86 | 119,511,000 | $(3,355,000)$ | 116,156,000 | 139,022,000 | (6,710,000) | 132,312,000 |
| 26-May-08 | 13875.98 | 13883.51 | 13670.92 | 13690.19 | -185.79 | 212.59 | 116,156,000 | 9,289,500 | 125,445,500 | 132,312,000 | 18,579,000 | 150,891,000 |
| 27-May-08 | 13750.82 | 13931.23 | 13750.82 | 13893.31 | 142.49 | 180.41 | 125,445,500 | (7,124,500) | 118,321,000 | 150,891,000 | (14,249,000) | 136,642,000 |
| 28-May-08 | 13937.14 | 13979.39 | 13665.57 | 13709.44 | -227.7 | 313.82 | 118,321,000 | 11,385,000 | 129,706,000 | 136,642,000 | 22,770,000 | 159,412,000 |


|  | NIKKEI |  |  |  |  |  | SELL 1 LOT NIKKEI (amount in IDR) |  |  | SELL 2 LOT NIKKEI (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low Range | Beginning Balance | Floating profit/loss | Ending Balance | Beginning Balance | Floating profit/loss | Ending Balance |
| 29-May-08 | 13832.65 | 14147.89 | 13832.65 | 14124.47 | 291.82 | 315.24 | 129,706,000 | (14,591,000) | 115,115,000 | 159,412,000 | (29,182,000) | 130,230,000 |
| 30-May-08 | 14195.66 | 14366.63 | 14192.17 | 14338.54 | 142.88 | 174.46 | 115,115,000 | (7,144,000) | 107,971,000 | 130,230,000 | $(14,288,000)$ | 115,942,000 |
| 2-Jun-08 | 14342.96 | 14461.03 | 14189.97 | 14440.14 | 97.18 | 271.06 | 107,971,000 | (4,859,000) | 103,112,000 | 115,942,000 | $(9,718,000)$ | 106,224,000 |
| 3-Jun-08 | 14275.61 | 14289.47 | 14127.75 | 14209.17 | -66.44 | 161.72 | 103,112,000 | 3,322,000 | 106,434,000 | 106,224,000 | 6,644,000 | 112,868,000 |
| 4-Jun-08 | 14270.07 | 14435.57 | 14250.11 | 14435.57 | 165.5 | 185.46 | 106,434,000 | $(8,275,000)$ | 98,159,000 | 112,868,000 | $(16,550,000)$ | 96,318,000 |
| 5-Jun-08 | 14392.59 | 14392.59 | 14262.02 | 14341.12 | -51.47 | 130.57 | 98,159,000 | 2,573,500 | 100,732,500 | 96,318,000 | 5,147,000 | 101,465,000 |
| 6-Jun-08 | 14530.36 | 14601.27 | 14489.44 | 14489.44 | -40.92 | 111.83 | 100,732,500 | 2,046,000 | 102,778,500 | 101,465,000 | 4,092,000 | 105,557,000 |
| 9-Jun-08 | 14275.34 | 14278.84 | 14117.79 | 14181.38 | -93.96 | 161.05 | 102,778,500 | 4,698,000 | 107,476,500 | 105,557,000 | 9,396,000 | 114,953,000 |
| 10-Jun-08 | 14281.36 | 14308.89 | 13983.56 | 14021.17 | -260.19 | 325.33 | 107,476,500 | 13,009,500 | 120,486,000 | 114,953,000 | 26,019,000 | 140,972,000 |
| 11-Jun-08 | 14137.54 | 14194.48 | 13993.57 | 14183.48 | 45.94 | 200.91 | 120,486,000 | (2,297,000) | 118,189,000 | 140,972,000 | (4,594,000) | 136,378,000 |
| 12-Jun-08 | 14010.32 | 14010.32 | 13826.07 | 13888.6 | -121.72 | 184.25 | 118,189,000 | 6,086,000 | 124,275,000 | 136,378,000 | 12,172,000 | 148,550,000 |
| 13-Jun-08 | 14011.12 | 14041.34 | 13810.38 | 13973.73 | -37.39 | 230.96 | 124,275,000 | 1,869,500 | 126,144,500 | 148,550,000 | 3,739,000 | 152,289,000 |
| 16-Jun-08 | 14118.23 | 14369.09 | 14103.5 | 14354.37 | 236.14 | 265.59 | 126,144,500 | (11,807,000) | 114,337,500 | 152,289,000 | (23,614,000) | 128,675,000 |
| 17-Jun-08 | 14387 | 14387 | 14299.67 | 14348.37 | -38.63 | 87.33 | 114,337,500 | 1,931,500 | 116,269,000 | 128,675,000 | 3,863,000 | 132,538,000 |
| 18-Jun-08 | 14301.36 | 14469.99 | 14301.36 | 14452.82 | 151.46 | 168.63 | 116,269,000 | (7,573,000) | 108,696,000 | 132,538,000 | (15,146,000) | 117,392,000 |
| 19-Jun-08 | 14324.71 | 14324.71 | 14069.16 | 14130.17 | -194.54 | 255.55 | 108,696,000 | 9,727,000 | 118,423,000 | 117,392,000 | 19,454,000 | 136,846,000 |
| 20-Jun-08 | 14171.02 | 14190 | 13903.21 | 13942.08 | -228.94 | 286.79 | 118,423,000 | 11,447,000 | 129,870,000 | 136,846,000 | 22,894,000 | 159,740,000 |
| 23-Jun-08 | 13769.44 | 13920.75 | 13667.84 | 13857.47 | 88.03 | 252.91 | 129,870,000 | (4,401,500) | 125,468,500 | 159,740,000 | $(8,803,000)$ | 150,937,000 |
| 24-Jun-08 | 13766.28 | 13877.49 | 13738.39 | 13849.56 | 83.28 | 139.1 | 125,468,500 | (4,164,000) | 121,304,500 | 150,937,000 | $(8,328,000)$ | 142,609,000 |
| 25-Jun-08 | 13820.78 | 13833.23 | 13635.68 | 13829.92 | 9.14 | 197.55 | 121,304,500 | $(457,000)$ | 120,847,500 | 142,609,000 | (914,000) | 141,695,000 |
| 26-Jun-08 | 13845.41 | 13950.56 | 13798.05 | 13822.32 | -23.09 | 152.51 | 120,847,500 | 1,154,500 | 122,002,000 | 141,695,000 | 2,309,000 | 144,004,000 |
| 27-Jun-08 | 13605.26 | 13605.56 | 13453.35 | 13544.36 | -60.9 | 152.21 | 122,002,000 | 3,045,000 | 125,047,000 | 144,004,000 | 6,090,000 | 150,094,000 |
| 30-Jun-08 | 13584.51 | 13598.48 | 13454.28 | 13481.38 | -103.13 | 144.2 | 125,047,000 | 5,156,500 | 130,203,500 | 150,094,000 | 10,313,000 | 160,407,000 |
| 1-Jul-08 | 13514.86 | 13576.41 | 13448.35 | 13463.2 | -51.66 | 128.06 | 130,203,500 | 2,583,000 | 132,786,500 | 160,407,000 | 5,166,000 | 165,573,000 |
| 2-Jul-08 | 13489.87 | 13489.87 | 13247.05 | 13286.37 | -203.5 | 242.82 | 132,786,500 | 10,175,000 | 142,961,500 | 165,573,000 | 20,350,000 | 185,923,000 |
| 3-Jul-08 | 13161.78 | 13326.95 | 13118.89 | 13265.4 | 103.62 | 208.06 | 142,961,500 | ( $5,181,000$ ) | 137,780,500 | 185,923,000 | (10,362,000) | 175,561,000 |
| 4-Jul-08 | 13285.49 | 13288.55 | 13135.46 | 13237.89 | -47.6 | 153.09 | 137,780,500 | 2,380,000 | 140,160,500 | 175,561,000 | 4,760,000 | 180,321,000 |
| 7-Jul-08 | 13212.8 | 13409.3 | 13169.55 | 13360.04 | 147.24 | 239.75 | 140,160,500 | (7,362,000) | 132,798,500 | 180,321,000 | (14,724,000) | 165,597,000 |
| 8-Jul-08 | 13286.5 | 13294.97 | 12984.54 | 13033.1 | -253.4 | 310.43 | 132,798,500 | 12,670,000 | 145,468,500 | 165,597,000 | 25,340,000 | 190,937,000 |
| 9-Jul-08 | 13169.89 | 13284.65 | 13038.77 | 13052.13 | -117.76 | 245.88 | 145,468,500 | 5,888,000 | 151,356,500 | 190,937,000 | 11,776,000 | 202,713,000 |
| 10-Jul-08 | 12934.31 | 13139.85 | 12930.32 | 13067.21 | 132.9 | 209.53 | 151,356,500 | (6,645,000) | 144,711,500 | 202,713,000 | (13,290,000) | 189,423,000 |
| 11-Jul-08 | 13063.5 | 13164.1 | 12918.22 | 13039.69 | -23.81 | 245.88 | 144,711,500 | 1,190,500 | 145,902,000 | 189,423,000 | 2,381,000 | 191,804,000 |
| 14-Jul-08 | 13022.29 | 13185.9 | 12969.93 | 13010.16 | -12.13 | 215.97 | 145,902,000 | 606,500 | 146,508,500 | 191,804,000 | 1,213,000 | 193,017,000 |
| 15-Jul-08 | 12902.13 | 12902.13 | 12715.81 | 12754.56 | -147.57 | 186.32 | 146,508,500 | 7,378,500 | 153,887,000 | 193,017,000 | 14,757,000 | 207,774,000 |
| 16-Jul-08 | 12725.12 | 12815.4 | 12671.34 | 12760.8 | 35.68 | 144.06 | 153,887,000 | (1,784,000) | 152,103,000 | 207,774,000 | (3,568,000) | 204,206,000 |
| 17-Jul-08 | 12889.8 | 12929.74 | 12852.93 | 12887.95 | -1.85 | 76.81 | 152,103,000 | 92,500 | 152,195,500 | 204,206,000 | 185,000 | 204,391,000 |
| 18-Jul-08 | 12976.22 | 12999.64 | 12762.33 | 12803.7 | -172.52 | 237.31 | 152,195,500 | 8,626,000 | 160,821,500 | 204,391,000 | 17,252,000 | 221,643,000 |
| 22-Jul-08 | 12944.56 | 13184.96 | 12921.02 | 13184.96 | 240.4 | 263.94 | 160,821,500 | (12,020,000) | 148,801,500 | 221,643,000 | $(24,040,000)$ | 197,603,000 |
| 23-Jul-08 | 13259.65 | 13388.63 | 13238.55 | 13312.93 | 53.28 | 150.08 | 148,801,500 | (2,664,000) | 146,137,500 | 197,603,000 | $(5,328,000)$ | 192,275,000 |
| 24-Jul-08 | 13411.28 | 13603.31 | 13393.57 | 13603.31 | 192.03 | 209.74 | 146,137,500 | (9,601,500) | 136,536,000 | 192,275,000 | (19,203,000) | 173,072,000 |
| 25-Jul-08 | 13452.37 | 13469.83 | 13324.22 | 13334.76 | -117.61 | 145.61 | 136,536,000 | 5,880,500 | 142,416,500 | 173,072,000 | 11,761,000 | 184,833,000 |
| 28-Jul-08 | 13407.36 | 13468.94 | 13327.12 | 13353.78 | -53.58 | 141.82 | 142,416,500 | 2,679,000 | 145,095,500 | 184,833,000 | 5,358,000 | 190,191,000 |
| 29-Jul-08 | 13220.33 | 13220.33 | 13018.22 | 13159.45 | -60.88 | 202.11 | 145,095,500 | 3,044,000 | 148,139,500 | 190,191,000 | 6,088,000 | 196,279,000 |
| 30-Jul-08 | 13267.37 | 13372.28 | 13264.08 | 13367.79 | 100.42 | 108.2 | 148,139,500 | (5,021,000) | 143,118,500 | 196,279,000 | (10,042,000) | 186,237,000 |
| 31-Jul-08 | 13410.4 | 13467.67 | 13256.38 | 13376.81 | -33.59 | 211.29 | 143,118,500 | 1,679,500 | 144,798,000 | 186,237,000 | 3,359,000 | 189,596,000 |
| 1-Aug-08 | 13276.57 | 13294.17 | 13039.21 | 13094.59 | -181.98 | 254.96 | 144,798,000 | 9,099,000 | 153,897,000 | 189,596,000 | 18,198,000 | 207,794,000 |
| 4-Aug-08 | 13083.28 | 13113.94 | 12910.17 | 12933.18 | -150.1 | 203.77 | 153,897,000 | 7,505,000 | 161,402,000 | 207,794,000 | 15,010,000 | 222,804,000 |
| 5-Aug-08 | 12957.01 | 13049.58 | 12893.34 | 12914.66 | -42.35 | 156.24 | 161,402,000 | 2,117,500 | 163,519,500 | 222,804,000 | 4,235,000 | 227,039,000 |
| 6-Aug-08 | 13059.43 | 13295.51 | 13048.97 | 13254.89 | 195.46 | 246.54 | 163,519,500 | (9,773,000) | 153,746,500 | 227,039,000 | (19,546,000) | 207,493,000 |
| 7-Aug-08 | 13257.99 | 13257.99 | 13034.15 | 13124.99 | -133 | 223.84 | 153,746,500 | 6,650,000 | 160,396,500 | 207,493,000 | 13,300,000 | 220,793,000 |


|  | NIKKEI |  |  |  |  |  | SELL 1 LOT NIKKEI (amount in IDR) |  |  | SELL 2 LOT NIKKEI (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low Range | Beginning Balance | Floating profit/loss | Ending Balance | Beginning Balance | Floating profit/loss | Ending Balance |
| 8-Aug-08 | 13026.53 | 13259.73 | 12962.82 | 13168.41 | 141.88 | 296.91 | 160,396,500 | (7,094,000) | 153,302,500 | 220,793,000 | (14,188,000) | 206,605,000 |
| 11-Aug-08 | 13259.46 | 13468.81 | 13259.46 | 13430.91 | 171.45 | 209.35 | 153,302,500 | $(8,572,500)$ | 144,730,000 | 206,605,000 | (17,145,000) | 189,460,000 |
| 12-Aug-08 | 13397.99 | 13420.1 | 13276.15 | 13303.6 | -94.39 | 143.95 | 144,730,000 | 4,719,500 | 149,449,500 | 189,460,000 | 9,439,000 | 198,899,000 |
| 13-Aug-08 | 13205.64 | 13205.64 | 12953.34 | 13023.05 | -182.59 | 252.3 | 149,449,500 | 9,129,500 | 158,579,000 | 198,899,000 | 18,259,000 | 217,158,000 |
| 14-Aug-08 | 12942.61 | 13090.68 | 12926.98 | 12956.8 | 14.19 | 163.7 | 158,579,000 | $(709,500)$ | 157,869,500 | 217,158,000 | $(1,419,000)$ | 215,739,000 |
| 15-Aug-08 | 12991.91 | 13029.58 | 12952.21 | 13019.41 | 27.5 | 77.37 | 157,869,500 | (1,375,000) | 156,494,500 | 215,739,000 | $(2,750,000)$ | 212,989,000 |
| 18-Aug-08 | 12971.49 | 13270.37 | 12934.22 | 13165.45 | 193.96 | 336.15 | 156,494,500 | $(9,698,000)$ | 146,796,500 | 212,989,000 | (19,396,000) | 193,593,000 |
| 19-Aug-08 | 13016.5 | 13016.5 | 12782.1 | 12865.05 | -151.45 | 234.4 | 146,796,500 | 7,572,500 | 154,369,000 | 193,593,000 | 15,145,000 | 208,738,000 |
| 20-Aug-08 | 12753.98 | 12923.66 | 12753.98 | 12851.69 | 97.71 | 169.68 | 154,369,000 | (4,885,500) | 149,483,500 | 208,738,000 | (9,771,000) | 198,967,000 |
| 21-Aug-08 | 12885.34 | 12885.34 | 12723.83 | 12752.21 | -133.13 | 161.51 | 149,483,500 | 6,656,500 | 156,140,000 | 198,967,000 | 13,313,000 | 212,280,000 |
| 22-Aug-08 | 12727.37 | 12732.69 | 12631.94 | 12666.04 | -61.33 | 100.75 | 156,140,000 | 3,066,500 | 159,206,500 | 212,280,000 | 6,133,000 | 218,413,000 |
| 25-Aug-08 | 12797.54 | 12949.33 | 12797.54 | 12878.66 | 81.12 | 151.79 | 159,206,500 | $(4,056,000)$ | 155,150,500 | 218,413,000 | (8,112,000) | 210,301,000 |
| 26-Aug-08 | 12711.03 | 12801.21 | 12656.09 | 12778.71 | 67.68 | 145.12 | 155,150,500 | ( $3,384,000$ ) | 151,766,500 | 210,301,000 | $(6,768,000)$ | 203,533,000 |
| 27-Aug-08 | 12734.39 | 12783.63 | 12681.98 | 12752.96 | 18.57 | 101.65 | 151,766,500 | $(928,500)$ | 150,838,000 | 203,533,000 | (1,857,000) | 201,676,000 |
| 28-Aug-08 | 12827.72 | 12847.46 | 12718.53 | 12768.25 | -59.47 | 128.93 | 150,838,000 | 2,973,500 | 153,811,500 | 201,676,000 | 5,947,000 | 207,623,000 |
| 29-Aug-08 | 12925.45 | 13079.37 | 12918.49 | 13072.87 | 147.42 | 160.88 | 153,811,500 | (7,371,000) | 146,440,500 | 207,623,000 | (14,742,000) | 192,881,000 |
| 1-Sep-08 | 12936.81 | 12940.55 | 12834.18 | 12834.18 | -102.63 | 106.37 | 146,440,500 | 5,131,500 | 151,572,000 | 192,881,000 | 10,263,000 | 203,144,000 |
| 2-Sep-08 | 12779.89 | 12920.52 | 12491.07 | 12609.47 | -170.42 | 429.45 | 151,572,000 | 8,521,000 | 160,093,000 | 203,144,000 | 17,042,000 | 220,186,000 |
| 3-Sep-08 | 12703.36 | 12767.5 | 12647.29 | 12689.59 | -13.77 | 120.21 | 160,093,000 | 688,500 | 160,781,500 | 220,186,000 | 1,377,000 | 221,563,000 |
| 4-Sep-08 | 12627.64 | 12660.57 | 12514.26 | 12557.66 | -69.98 | 146.31 | 160,781,500 | 3,499,000 | 164,280,500 | 221,563,000 | 6,998,000 | 228,561,000 |
| 5-Sep-08 | 12385.65 | 12385.65 | 12163.33 | 12212.23 | -173.42 | 222.32 | 164,280,500 | 8,671,000 | 172,951,500 | 228,561,000 | 17,342,000 | 245,903,000 |
| 8-Sep-08 | 12359.93 | 12671.76 | 12352.35 | 12624.46 | 264.53 | 319.41 | 172,951,500 | $(13,226,500)$ | 159,725,000 | 245,903,000 | (26,453,000) | 219,450,000 |
| 9-Sep-08 | 12529.96 | 12529.96 | 12335.74 | 12400.65 | -129.31 | 194.22 | 159,725,000 | 6,465,500 | 166,190,500 | 219,450,000 | 12,931,000 | 232,381,000 |
| 10-Sep-08 | 12249.14 | 12404.67 | 12159.97 | 12346.63 | 97.49 | 244.7 | 166,190,500 | (4,874,500) | 161,316,000 | 232,381,000 | (9,749,000) | 222,632,000 |
| 11-Sep-08 | 12237.52 | 12259.02 | 12081.51 | 12102.5 | -135.02 | 177.51 | 161,316,000 | 6,751,000 | 168,067,000 | 222,632,000 | 13,502,000 | 236,134,000 |
| 12-Sep-08 | 12256.78 | 12277.57 | 12059.09 | 12214.76 | -42.02 | 218.48 | 168,067,000 | 2,101,000 | 170,168,000 | 236,134,000 | 4,202,000 | 240,336,000 |
| 16-Sep-08 | 12028.45 | 12028.45 | 11551.4 | 11609.72 | -418.73 | 477.05 | 170,168,000 | 20,936,500 | 191,104,500 | 240,336,000 | 41,873,000 | 282,209,000 |
| 17-Sep-08 | 11737.62 | 11880.03 | 11708.7 | 11749.79 | 12.17 | 171.33 | 191,104,500 | $(608,500)$ | 190,496,000 | 282,209,000 | (1,217,000) | 280,992,000 |
| 18-Sep-08 | 11576.94 | 11577.88 | 11301.46 | 11489.3 | -87.64 | 276.42 | 190,496,000 | 4,382,000 | 194,878,000 | 280,992,000 | 8,764,000 | 289,756,000 |
| 19-Sep-08 | 11631.6 | 11920.86 | 11615.2 | 11920.86 | 289.26 | 305.66 | 194,878,000 | (14,463,000) | 180,415,000 | 289,756,000 | (28,926,000) | 260,830,000 |
| 22-Sep-08 | 12037.89 | 12263.95 | 12037.89 | 12090.59 | 52.7 | 226.06 | 180,415,000 | $(2,635,000)$ | 177,780,000 | 260,830,000 | $(5,270,000)$ | 255,560,000 |
| 24-Sep-08 | 12031.98 | 12115.03 | 11904.6 | 12115.03 | 83.05 | 210.43 | 177,780,000 | (4,152,500) | 173,627,500 | 255,560,000 | $(8,305,000)$ | 247,255,000 |
| 25-Sep-08 | 11925.71 | 12025.41 | 11835.28 | 12006.53 | 80.82 | 190.13 | 173,627,500 | (4,041,000) | 169,586,500 | 247,255,000 | $(8,082,000)$ | 239,173,000 |
| 26-Sep-08 | 12026.34 | 12082.64 | 11788.73 | 11893.16 | -133.18 | 293.91 | 169,586,500 | 6,659,000 | 176,245,500 | 239,173,000 | 13,318,000 | 252,491,000 |
| 29-Sep-08 | 11883.25 | 12062.67 | 11721.05 | 11743.61 | -139.64 | 341.62 | 176,245,500 | 6,982,000 | 183,227,500 | 252,491,000 | 13,964,000 | 266,455,000 |
| 30-Sep-08 | 11565.7 | 11565.7 | 11160.83 | 11259.86 | -305.84 | 404.87 | 183,227,500 | 15,292,000 | 198,519,500 | 266,455,000 | 30,584,000 | 297,039,000 |
| 1-Oct-08 | 11396.61 | 11456.64 | 11314.28 | 11368.26 | -28.35 | 142.36 | 198,519,500 | 1,417,500 | 199,937,000 | 297,039,000 | 2,835,000 | 299,874,000 |
| 2-Oct-08 | 11423.13 | 11452.39 | 11143.79 | 11154.76 | -268.37 | 308.6 | 199,937,000 | 13,418,500 | 213,355,500 | 299,874,000 | 26,837,000 | 326,711,000 |
| 3-Oct-08 | 11052.1 | 11099.73 | 10938.14 | 10938.14 | -113.96 | 161.59 | 213,355,500 | 5,698,000 | 219,053,500 | 326,711,000 | 11,396,000 | 338,107,000 |
| 6-Oct-08 | 10817.27 | 10839.5 | 10374.38 | 10473.09 | -344.18 | 465.12 | 219,053,500 | 17,209,000 | 236,262,500 | 338,107,000 | 34,418,000 | 372,525,000 |
| 7-Oct-08 | 10328.54 | 10363.14 | 9916.21 | 10155.9 | -172.64 | 446.93 | 236,262,500 | 8,632,000 | 244,894,500 | 372,525,000 | 17,264,000 | 389,789,000 |
| 8-Oct-08 | 10011.64 | 10011.64 | 9159.81 | 9203.32 | -808.32 | 851.83 | 244,894,500 | 40,416,000 | 285,310,500 | 389,789,000 | 80,832,000 | 470,621,000 |
| 9-Oct-08 | 9168.16 | 9443.45 | 9100.93 | 9157.49 | -10.67 | 342.52 | 285,310,500 | 533,500 | 285,844,000 | 470,621,000 | 1,067,000 | 471,688,000 |
| 10-Oct-08 | 9016.34 | 9016.34 | 8115.41 | 8276.43 | -739.91 | 900.93 | 285,844,000 | 36,995,500 | 322,839,500 | 471,688,000 | 73,991,000 | 545,679,000 |
| 14-Oct-08 | 8407.94 | 9455.62 | 8407.94 | 9447.57 | 1039.63 | 1047.68 | 322,839,500 | (51,981,500) | 270,858,000 | 545,679,000 | $(103,963,000)$ | 441,716,000 |
| 15-Oct-08 | 9390.5 | 9601.3 | 9269.49 | 9547.47 | 156.97 | 331.81 | 270,858,000 | (7,848,500) | 263,009,500 | 441,716,000 | (15,697,000) | 426,019,000 |
| 16-Oct-08 | 9400.85 | 9400.85 | 8458.45 | 8458.45 | -942.4 | 942.4 | 263,009,500 | 47,120,000 | 310,129,500 | 426,019,000 | 94,240,000 | 520,259,000 |
| 17-Oct-08 | 8579.57 | 8763.71 | 8539.51 | 8693.82 | 114.25 | 224.2 | 310,129,500 | $(5,712,500)$ | 304,417,000 | 520,259,000 | (11,425,000) | 508,834,000 |
| 20-Oct-08 | 8775.24 | 9038.45 | 8687.7 | 9005.59 | 230.35 | 350.75 | 304,417,000 | (11,517,500) | 292,899,500 | 508,834,000 | (23,035,000) | 485,799,000 |
| 21-Oct-08 | 9139.26 | 9358.51 | 9135.41 | 9306.25 | 166.99 | 223.1 | 292,899,500 | $(8,349,500)$ | 284,550,000 | 485,799,000 | (16,699,000) | 469,100,000 |


|  | NIKKEI |  |  |  |  |  | SELL 1 LOT NIKKEI (amount in IDR) |  |  | SELL 2 LOT NIKKEI (amount in IDR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Open | High | Low | Adj Close | Price Change | High-Low Range | Beginning Balance | Floating profit/loss | Ending Balance | Beginning Balance | Floating profit/loss | Ending Balance |
| 22-Oct-08 | 9198.14 | 9198.14 | 8674.69 | 8674.69 | -523.45 | 523.45 | 284,550,000 | 26,172,500 | 310,722,500 | 469,100,000 | 52,345,000 | 521,445,000 |
| 23-Oct-08 | 8547.79 | 8547.79 | 8016.61 | 8460.98 | -86.81 | 531.18 | 310,722,500 | 4,340,500 | 315,063,000 | 521,445,000 | 8,681,000 | 530,126,000 |
| 24-Oct-08 | 8391.04 | 8391.04 | 7647.07 | 7649.08 | -741.96 | 743.97 | 315,063,000 | 37,098,000 | -352,161,000 | 530,126,000 | 74,196,000 | 004,322,000 |
| 27-Oct-08 | 7568.36 | 7878.97 | 7141.27 | 7162.9 | -405.46 | 737.7 | 352,161,000 | 20,273, 000 | 372,434,000 | 604,322,000 | 40,546,000 | 644,868,000 |
| 28-Oct-08 | 7143.34 | 7626.42 | 6994.9 | 7621.92 | 478.58 | 631.52 | 372,434,000 | (23,929,000) | 348,505,000 | 644,868,000 | (47,858,000) | 597,010,000 |
| 29-Oct-08 | 7741.52 | 8211.9 | 7741.52 | 8211.9 | 470.38 | 470.38 | 348,505,000 | (23,519,000) | 324,986,000 | 597,010,000 | $(47,038,000)$ | 549,972,000 |
| 30-Oct-08 | 8269.71 | 9030.85 | 8269.71 | 9029.76 | 760.05 | 761.14 | 324,986,000 | $(38,002,500)$ | 286,983,500 | 549,972,000 | (76,005,000) | 473,967,000 |
| 31-Oct-08 | 8958.22 | 9012.31 | 8576.98 | 8576.98 | -381.24 | 435.33 | 286,983,500 | 19,062,000 | 306,045,500 | 473,967,000 | 38,124,000 | 512,091,000 |
| 4-Nov-08 | 8702.77 | 9142.29 | 8699.77 | 9114.6 | 411.83 | 442.52 | 306,045,500 | $(20,591,500)$ | 285,454,000 | 512,091,000 | $(41,183,000)$ | 470,908,000 |
| 5-Nov-08 | 9224.05 | 9521.24 | 9216.3 | 9521.24 | 297.19 | 304.94 | 285,454,000 | (14,859,500) | 270,594,500 | 470,908,000 | (29,719,000) | 441,189,000 |
| 6-Nov-08 | 9373.65 | 9380.3 | 8806.71 | 8899.14 | -474.51 | 573.59 | 270,594,500 | 23,725,500 | 294,320,000 | 441,189,000 | 47,451,000 | 488,640,000 |
| 7-Nov-08 | 8774.49 | 8868.1 | 8266.09 | 8583 | -191.49 | 602.01 | 294,320,000 | 9,574,500 | 303,894,500 | 488,640,000 | 19,149,000 | 507,789,000 |
| 10-Nov-08 | 8711.99 | 9106.29 | 8711.99 | 9081.43 | 369.44 | 394.3 | 303,894,500 | (18,472,000) | 285,422,500 | 507,789,000 | (36,944,000) | 470,845,000 |
| 11-Nov-08 | 8965.29 | 9056.31 | 8704.56 | 8809.3 | -155.99 | 351.75 | 285,422,500 | 7,799,500 | 293,222,000 | 470,845,000 | 15,599,000 | 486,444,000 |
| 12-Nov-08 | 8694.91 | 8782.48 | 8574.2 | 8695.51 | 0.6 | 208.28 | 293,222,000 | $(30,000)$ | 293,192,000 | 486,444,000 | $(60,000)$ | 486,384,000 |
| 13-Nov-08 | 8564.47 | 8564.47 | 8148.3 | 8238.64 | -325.83 | 416.17 | 293,192,000 | 16,291,500 | 309,483,500 | 486,384,000 | 32,583,000 | 518,967,000 |
| 14-Nov-08 | 8378.13 | 8689.85 | 8378.13 | 8462.39 | 84.26 | 311.72 | 309,483,500 | (4,213,000) | 305,270,500 | 518,967,000 | (8,426,000) | 510,541,000 |
| 17-Nov-08 | 8366.88 | 8767.98 | 8218.82 | 8522.58 | 155.7 | 549.16 | 305,270,500 | (7,785,000) | 297,485,500 | 510,541,000 | (15,570,000) | 494,971,000 |
| 18-Nov-08 | 8415.6 | 8440.41 | 8302.24 | 8328.41 | -87.19 | 138.17 | 297,485,500 | 4,359,500 | 301,845,000 | 494,971,000 | 8,719,000 | 503,690,000 |
| 19-Nov-08 | 8309.35 | 8370.09 | 8115.71 | 8273.22 | -36.13 | 254.38 | 301,845,000 | 1,806,500 | 303,651,500 | 503,690,000 | 3,613,000 | 507,303,000 |
| 20-Nov-08 | 8149.77 | 8149.79 | 7703.04 | 7703.04 | -446.73 | 446.75 | 303,651,500 | 22,336,500 | 325,988,000 | 507,303,000 | 44,673,000 | 551,976,000 |
| 21-Nov-08 | 7600.35 | 7994.68 | 7406.18 | 7910.79 | 310.44 | 588.5 | 325,988,000 | (15,522,000) | 310,466,000 | 551,976,000 | (31,044,000) | 520,932,000 |
| 25-Nov-08 | 8026.06 | 8356.83 | 8025.69 | 8323.93 | 297.87 | 331.14 | 310,466,000 | (14,893,500) | 295,572,500 | 520,932,000 | (29,787,000) | 491,145,000 |
| 26-Nov-08 | 8229.72 | 8317.83 | 8149.56 | 8213.22 | -16.5 | 168.27 | 295,572,500 | 825,000 | 296,397,500 | 491,145,000 | 1,650,000 | 492,795,000 |
| 27-Nov-08 | 8311.24 | 8458.68 | 8300.49 | 8373.39 | 62.15 | 158.19 | 296,397,500 | $(3,107,500)$ | 293,290,000 | 492,795,000 | $(6,215,000)$ | 486,580,000 |
| 28-Nov-08 | 8400.05 | 8518.13 | 8336.57 | 8512.27 | 112.22 | 181.56 | 293,290,000 | (5,611,000) | 287,679,000 | 486,580,000 | $(11,222,000)$ | 475,358,000 |
| 1-Dec-08 | 8464.36 | 8464.36 | 8307.28 | 8397.22 | -67.14 | 157.08 | 287,679,000 | 3,357,000 | 291,036,000 | 475,358,000 | 6,714,000 | 482,072,000 |
| 2-Dec-08 | 8266.32 | 8266.32 | 7863.69 | 7863.69 | -402.63 | 402.63 | 291,036,000 | 20,131,500 | 311,167,500 | 482,072,000 | 40,263,000 | 522,335,000 |
| 3-Dec-08 | 7965.31 | 8056.38 | 7889.82 | 8004.1 | 38.79 | 166.56 | 311,167,500 | $(1,939,500)$ | 309,228,000 | 522,335,000 | $(3,879,000)$ | 518,456,000 |
| 4-Dec-08 | 8030.2 | 8107.69 | 7849.84 | 7924.24 | -105.96 | 257.85 | 309,228,000 | 5,298,000 | 314,526,000 | 518,456,000 | 10,596,000 | 529,052,000 |
| 5-Dec-08 | 7975.05 | 8024.33 | 7908.65 | 7917.51 | -57.54 | 115.68 | 314,526,000 | 2,877,000 | 317,403,000 | 529,052,000 | 5,754,000 | 534,806,000 |
| 8-Dec-08 | 7970.69 | 8358.27 | 7959.01 | 8329.05 | 358.36 | 399.26 | 317,403,000 | (17,918,000) | 299,485,000 | 534,806,000 | $(35,836,000)$ | 498,970,000 |
| 9-Dec-08 | 8362.37 | 8499.6 | 8314.85 | 8395.87 | 33.5 | 184.75 | 299,485,000 | (1,675,000) | 297,810,000 | 498,970,000 | (3,350,000) | 495,620,000 |
| 10-Dec-08 | 8376 | 8704.92 | 8376 | 8660.24 | 284.24 | 328.92 | 297,810,000 | (14,212,000) | 283,598,000 | 495,620,000 | ( $28,424,000$ ) | 467,196,000 |
| 11-Dec-08 | 8642.26 | 8720.55 | 8519.11 | 8720.55 | 78.29 | 201.44 | 283,598,000 | (3,914,500) | 279,683,500 | 467,196,000 | $(7,829,000)$ | 459,367,000 |
| 12-Dec-08 | 8599.12 | 8610.73 | 8087.99 | 8235.87 | -363.25 | 522.74 | 279,683,500 | 18,162,500 | 297,846,000 | 459,367,000 | 36,325,000 | 495,692,000 |
| 15-Dec-08 | 8349.85 | 8700.17 | 8349.85 | 8664.66 | 314.81 | 350.32 | 297,846,000 | (15,740,500) | 282,105,500 | 495,692,000 | (31,481,000) | 464,211,000 |
| 16-Dec-08 | 8608.4 | 8634.26 | 8471.24 | 8568.02 | -40.38 | 163.02 | 282,105,500 | 2,019,000 | 284,124,500 | 464,211,000 | 4,038,000 | 468,249,000 |
| 17-Dec-08 | 8658.22 | 8741.24 | 8425.66 | 8612.52 | -45.7 | 315.58 | 284,124,500 | 2,285,000 | 286,409,500 | 468,249,000 | 4,570,000 | 472,819,000 |
| 18-Dec-08 | 8565.16 | 8728.36 | 8534.84 | 8667.23 | 102.07 | 193.52 | 286,409,500 | (5,103,500) | 281,306,000 | 472,819,000 | (10,207,000) | 462,612,000 |
| 19-Dec-08 | 8640.22 | 8743.22 | 8570.56 | 8588.52 | -51.7 | 172.66 | 281,306,000 | 2,585,000 | 283,891,000 | 462,612,000 | 5,170,000 | 467,782,000 |
| 22-Dec-08 | 8602.5 | 8751.18 | 8593.76 | 8723.78 | 121.28 | 157.42 | 283,891,000 | (6,064,000) | 277,827,000 | 467,782,000 | $(12,128,000)$ | 455,654,000 |
| 24-Dec-08 | 8630.25 | 8631.83 | 8476.69 | 8517.1 | -113.15 | 155.14 | 277,827,000 | 5,657,500 | 283,484,500 | 455,654,000 | 11,315,000 | 466,969,000 |
|  |  |  |  |  |  |  |  |  | 272,424,500 |  |  | 444,849,000 |

