Single Stock Futures

Standard Bank

Ver. 5 – Oct 2006

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Executive Summary

Futures contracts can be hard-working additions to almost any portfolio. They provide a way to *hedge* the risk to which shares expose a portfolio and to *speculate* when the belief is that prices of shares will change. Futures offer *gearing* on money and *avoid many of the costs* of trading in actual shares. *Long* or *short* trades can be executed cost-effectively and without complications.

A simplified example of how to make money with SSF's:

Investor A

- Investor A is confident that Anglo American Plc shares are set to rise.
- He has R15 000 cash available.
- The share price is R150, so he buys 100 shares.
- Two months later, the price is R170. The investor sells and so makes R2 000 profit (R20 per share multiplied by 100 shares).

Investor B

Investor B takes the same view but invests his money in SSF's. His R15 000 makes a profit of R14 000 over that same two months, *seven times the profit* made by Investor *A*. Discover how and why this startling performance can be achieved by reading through this booklet.

Standard Bank is the first South African bank to offer the opportunity of enjoying all the sophisticated features of SSF's, previously only available to large institutions, using the Online Share Trading from the Standard website, which is managed by Standard Financial Markets (Pty) Ltd, ("OST").

This booklet focuses solely on SSF's and explains how they operate and the procedure to get started. In short, SSF's are an exciting and cost-effective alternative to direct share investment.

At the outset it should be noted that trading in SSF's is more advanced than normal share trading and should only be attempted by individuals who are already familiar with the share

market and are comfortable with the concept of gearing.

Gearing can increase profits; it can also increase losses. Standard Bank Online Share Trading will only offer Standard Bank's SSF prices and will not seek to find prices from other sources. This is because SSF's trade off-market rather than directly on the JSE's Automated Trading System. However, Standard Bank will always endeavour to offer liquidity on all the SSF's it makes a market in. Stop-loss techniques are an integral part of SSF trading and should be studied before trading as they can assist in limiting losses in volatile market conditions.

Introduction to SSF's

Brief History of Futures

At first, futures were merely a way for suppliers of commodities (corn, maize etc) to achieve a level of price predictability. A farmer, for example, could at the start of the season agree the price at which he would sell his corn after the harvest. He would thus protect himself from a price slump in the event of an oversupplied market. Of course, he would also sacrifice the chance of making higher returns in a shortage, but for many suppliers this was preferable to the risk of selling at cost, or worse.

Over the years, futures contracts have become available on more than just commodities. The futures market embraces shares, currencies, commodities and even non-deliverables such as share indices.

This booklet concerns futures contracts in which individual equities, or single shares, are to be traded.

Definition of a Futures Contract

A futures contract is:

1. a standardised contract
2. that is listed on the JSE
3. of a standard quantity of a specific underlying asset
4. that expires on a predetermined future date and
5. at a price agreed in the future.

1. Standardised contract

SSF contracts have standard terms and conditions as determined by the JSE.

2. Exchange traded

Trading in an exchange-listed product removes counter-party risk (the risk associated to the person or entity with whom the initial transaction was concluded) because the exchange becomes the counter-party to every futures position after trade. By this mechanism the market participants are protected from potential default by any other counter-parties.

3. Standard quantity of a specific underlying asset

Each SSF contract is for a specific quantity of the underlying asset. For SSF's, this quantity is 100 shares. The purchaser of one SSF contract is agreeing to buy 100 shares when the contract expires.

4. Expiry on a predetermined future date

The JSE determines the expiry dates for each SSF. SSF contracts expire on the third Thursday of March, June, September and December. For example, the AGLQ Dec-06 contract will expire on the 21st of December 2006.

5. Agreed price / SSF Price

The price of a SSF is the price made by Standard Bank, based on the corresponding bid and offer of the underlying share (refer to Appendix 1). The levels at which Standard Bank is a buyer and a seller of SSF's is published real-time on the OST website and SSF prices change as the price of the underlying share changes.

How a SSF Works

A SSF is a contract to trade 100 shares in a specific JSE-listed share. The contract specifies the underlying share, the price at which it will trade and the date on which the future trade is to take place. The date of the future trade is known as the expiry date.

Given that the holder of a SSF position does not pay for the full value of the SSF upfront, but

still has full exposure to any movements in the underlying share price, there is increased risk. To minimize this risk, the SSF contract holder's post a form of deposit, known as initial margin.[1]

The initial margin, which is deposited by both buyer and seller, represents the statistical highest loss that is possible on a normal day of trading, as determined from the history of the share price.

The initial margin is much less than the value of the contract (only around 15% - 30%), yet the SSF contract exposes the holder to the full risk of the underlying shares. This is what accounts for the gearing.

A review of the June 2006 SSF contract on Anglo American Plc:
The contract has the following reference: AGLQ Dec-06. The letters AGL describe that the shares underlying the contract are in Anglo American Plc, the Q indicates that it's a SSF and the Dec-06 indicates the date (21 December 2006 [2]) on which the contract expires (and the shares have to be traded).

Assume the SSF price is R150 and a potential buyer believes it will rise over the short term. The buyer therefore decides to buy one AGLQ Dec-06 contract. Every AGLQ Dec-06 contract is equivalent to 100 AGL shares. OST, who manage client's SSF's positions, set the initial margin at R2 100 a contract. The contract therefore requires an initial margin of R2 100, which is taken from the trader's Standard Bank Online Share Trading account and deposited in trust with the JSE. The exposure is now 1 contract — 100 Anglo shares in all — which the holder will contract to buy on 21 December 2006. The trader has been geared approximately 7 times, i.e.
(R2 100/R15 000).

Assume the SSF price moves steadily upwards and reaches R170. The trader now believes it has peaked and decides to close out the position. The trader therefore *sells* one AGLQ Dec-06 contract. The initial margin is refunded along with the difference in the value of the underlying shares, which is 100 shares x (R170-R150) = R2 000.

The R2 100 initial capital outlay has increased to R4 100 — a return of 95% during a period in which the share price only increased by 13%, approximately seven-fold.

[1] OST requires traders to deposit an additional percentage of the initial margin required by the JSE. This percentage is displayed on the OST website.

[2] Contracts expire on the third Thursday of March, June, September and December. The third Thursday in December 2006 is the 21st.

Benefits of trading SSF's

SSF's have a number of significant benefits.

Exploit the market whether it's rising or falling

Use SSF's to short the market without having to face the complications and costs associated with borrowing stock for settlement when trading the underlying share.

Save money

Trading costs for SSF's are significantly lower than those for trading the underlying shares, as shown in the table:

Details	SSF	Underlying share
Instrument & price traded	10 AGLQ Dec-06 contracts @ R150	1,000 AGL shares @ R150
Exposure	1,000 AGL shares = R150 000	1,000 AGL shares = R150 000
Costs [1]		
Market maker's commission [2]	R525,00	R0
OST Brokerage	R99,00	R1 200,00
UST	R0,00	R375,00
STRATE	R0,00	R10,92
Total costs	R624,00	R1 585,92
% costs / exposure	0,42%	1,06%

[1] Refer to the OST website for the latest costs which may be different to the costs used in the example above. All costs excluded VAT.

[2] This commission is charged by the market maker to compensate them for the cost of making SSF prices to OST clients. The percentage is available on request.

Note – The initial cash that is needed to invest is also significantly lower on a SSF, thus implying a reduced interest cost to finance the SSF versus the underlying share purchase.

Leverage or gear funds

SSF's give exposure to share prices without having to buy or sell the actual shares (unless the contract is allowed to expire). Initial margin is between 10% and 25% of the underlying share value (depending on which underlying share is traded and its volatility), thus gearing funds by as much as 10 times. Leverage enables the holder to only place a small percentage of funds in the SSF (as initial margin), and allows the remaining funds to be invested elsewhere.

Reduce risk of existing share portolfio

Due to the volatile nature of the share market, the need to hedge risk is increased. By selling short, the holder can protect the value of an existing share portfolio at a moment's notice, without having to sell any of the shares.

Engage in pairs trading

SSF's allow trade in 'pairs' of stocks when the belief is one will outperform the other. For example, sell the Goldfields SSF and buy the Harmony SSF (in the correct ratio) if the belief is Harmony will outperform Goldfields.

Risks of trading SSF's

The old adage "High risk for high return" is appropriate to SSF trading. No investment / trading product can offer the returns offered without the investor having to assume some risk.

Leveraged (geared) investment

The main risk associated with SSF trading is attributable to the effect that gearing has on a SSF position. Gearing can cause significant losses in a short period of time on a SSF position because the effect of any losses on the underlying share can be up to ten times more on the SSF. Even though leverage is also referred to as a benefit, the risk is equal & opposite to any profit that could be earned from a SSF trade.

Corporate events

Corporate events are any actions by a company (e.g. Anglo American Plc) as an issuer of an underlying instrument (ordinary shares), which affect the holder of those shares entitlement to

the benefits relating to that share. These include, but are not limited to, takeovers, capital reductions, rights issues, share conversions, scrip or cash dividends and share redemptions. Corporate events may have an effect on the price and/or quantity of a SSF position. Investors are urged to keep in touch with all corporate events on underlying shares and ascertain the effect thereof on a SSF prior the Last-Day-to-Trade (LDT) date of the event.

Investors are urged to use the techniques described in "How to minimise losses" section to managed the risk associated with trading SSF's.

The Four Main Reasons for Using SSF's

SSF's are used mainly by hedgers to reduce risk and speculators to gain exposure to shares they don't own. SSF's are also suitable for investment purposes and offer good opportunities for arbitrage.

Hedge risk

Assume a share portfolio includes 100 Anglo American Plc shares, and the belief is that the share price of R150 is set to take a knock but should recover later. The hedger wants to avoid the costs of selling and re-buying the shares, but needs to protect the overall value of the portfolio.

What needs to be done? Sell (go short) one Anglo American Plc SSF contract at R150. The contract is for 100 shares. The belief was correct and the price of Anglo American Plc drops to R135. The short position is closed out by buying one Anglo American Plc SSF contract at R135. The net gain is 100 shares multiplied by the R15 fall, which is R1 500.

In the meantime, the Anglo American Plc shares in the portfolio have lost R1 500 in value.

The profit on the SSF contract therefore squares the loss on the shares. The hedger effectively and efficiently hedged the portfolio.

Hedging helps to:

* reduce the exposure to the market while avoiding the transaction costs of selling the

shares and

* lock in a return on the underlying shares without having to sell them.

Speculate

The trader's studies of the market may lead to the belief that Anglo American Plc shares are set to rise sharply from their current R150. The trader decides to secure one Anglo American Plc SSF contract. The initial margin per contract is R2 100. The exposure is now 100 shares or R15 000. Four weeks later, the share price is R170. The trader therefore closes out the position by selling the one contract. The trader has thus made R2 000 (100 shares x (R170 - R150)) in four weeks. The trader has turned R2 100 into R4 100, a return of 95%, while the underlying share price increased by 13%.

This speculative success illustrates *gearing*.

Speculate that share prices will fall by *selling* SSF's short. The example used in 'Hedge risk' illustrates this concept.

Invest

Unlike a speculator, an investor tends to have a longer time frame when undertaking a transaction. Investors use SSF's to establish what are known as 'synthetic' positions in an underlying share. The advantages are that the investor can benefit from all the price movements of the share, but with a lower capital outlay and at lower trading costs.

There is never a need to fulfill any obligations in terms of the positions held in a SSF, since the investor can close out or wind up at any time before the expiry date, simultaneously renewing the position with more contracts of a later expiry date.

Engage in arbitrage

Arbitrage is aimed at making profits without risk. The idea is to buy shares that are underpriced in one market while selling (shorting) the same shares that are overpriced in a different market. Whichever way the market moves, when the prices undergo correction, the technique, if implemented correctly, results in a profit.

The usefulness of SSF's in this strategy is found in the heavy gearing, which amplifies the

effect of the price corrections when they come.

Liquidity — a vital factor

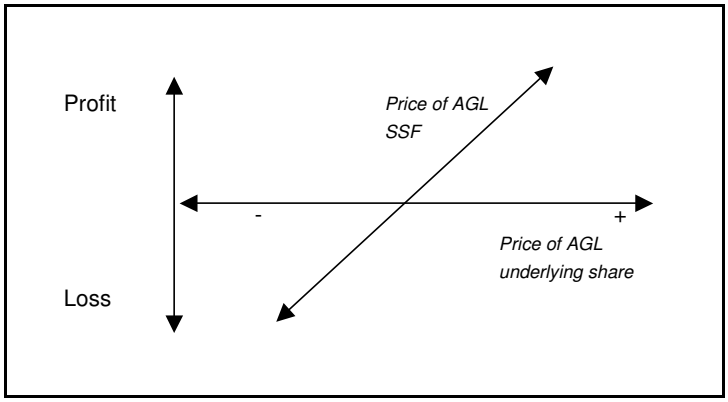
In all four ways to use SSF's, one point is clear. For the techniques to work, the holder needs to be reasonably sure that a position can be opened and closed on demand. Standard Bank will endeavour to make the market for its range of SSF's. Standard Bank is both a buyer and a seller at all times, so long as there are bids and offers in the underlying share that will allow them to hedge themselves. Liquidity in SSF's will depend on the liquidity in the underlying share.

Risk Profile of a SSF Contract

The risk profile of a SSF contract is the same as the risk profile of the underlying share; if the underlying share price increases, then the SSF price will also increase. The percentage gain or loss on the capital invested can be much higher on the SSF because the trader is only required to deposit the initial margin and not the full value of the position.

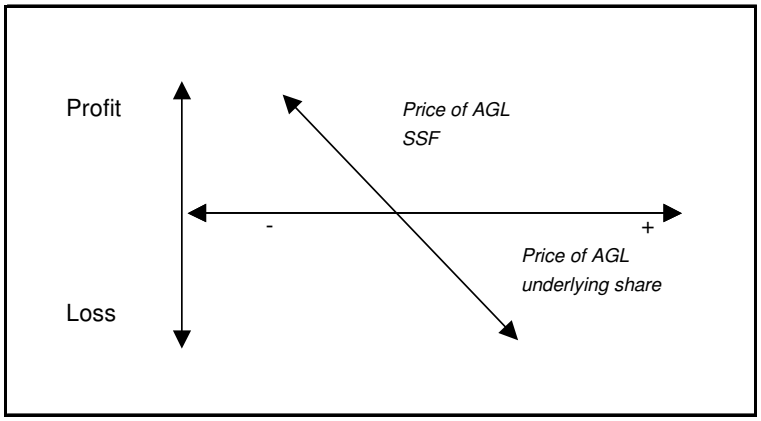
Long positions

In the graph, a SSF on Anglo American Plc makes a profit as the share price of AGL increases. As the share price falls, the SSF contract loses money.



Short positions

In the graph, the SSF on Anglo American Plc makes a profit as the share price of AGL falls. As the share price increases, the SSF contract makes a loss.



How to minimise losses

Monitor positions carefully

SSF trading can be a challenge, so regular checking of positions should be the most important part of the holder's risk management tactics. OST will help by sending the holder SMS alerts as the market moves and the cash balance is reduced to nil.

Effect of certain corporate events

Certain corporate events, including, but not limited to special dividends and capital reductions, can have a material effect on the quantity of the holder's SSF positions and thus on the value of the portfolio.

Special dividends and capital reductions do not form part of SSF pricing so the effect of these events are managed by the JSE who adjust the SSF quantity held by a factor of the underlying price to the value of the special dividend / capital reduction. Rounding of positions to whole numbers can cause the effect of the corporate event to be compounded in the SSF portfolio.

It may be prudent to close out a position prior to the last day to trade (LDT) or contact OST for more information.

Stop-loss triggers

As seen in the examples, SSF trading can give spectacular returns. But it can be very risky! OST's stop-loss functions will help manage the risks during those times when the holder cannot actively keeping an eye on positions during the trading day.

Fixed stop-loss trigger

The holder sets the price at which to close out the position. OST cannot guarantee to do so, however if the next best price available in the market is below the price set, OST will attempt to close out the position at that level. If there are not enough contracts available, the position may not be completely closed out.

Trailing stop-loss trigger

A detailed description of this functionality appears on the OST web site. In short, the trigger increases as the price of the SSF increases. If the price begins to fall, the trader will be closed out at a higher level than first set, leaving a profit, rather than closing out below the initial trade price.

Automatic close out

In a fast moving market, a day's losses can be more than the initial margin held by the JSE. To help protect the holder and to prevent the trading account from becoming overdrawn, all the positions will be automatically closed out if:

1. The mark-to-market value of the positions at any time during the trading day is a loss, and this loss is greater than the sum of the available trade balance (prior to deducting this loss) and the additional initial margin that OST requires[1], or

2. at 14:00, two business days prior to the expiry of a SSF contract, the holder has not

elected to roll the position into a longer dated SSF.

[1] Refer to the detailed example later in this document.

Prevent automatic close out by:

* keeping enough cash in the trading account at all times and
* monitoring the status and value of positions closely (several times during each trading day).

Opening a SSF Trading Account

Go to www.securities.co.za to open a futures account. Supply the required information, submit the necessary documentation and transfer cash into the trading account.

Cash up-front

OST does not extend trading credit. The trading account therefore has to have sufficient cash (initial margin) before trade will be allowed. The trading account should also have enough additional cash to cover any losses that may occur.

Cash can be transferred in real-time to the trading account using Standard Bank Internet Banking. Bank accounts can be linked to the trading account when it is opened, so that cash transfers can be made without delay.

Margin

There the two types of margin requirements in SSF trades — the initial margin and the variation margin.

Initial margin

The main benefit of trading SSF's is gearing. The holder does not have to pay for the full value of the exposure that the SSF affords. The JSE, however, insists that both buyer and seller are always able to meet their obligations in terms of the SSF contract. The initial margin is the money deposited against this possibility.

The initial margin for each SSF is determined by the JSE and is published on the OST website. Initial margin can be between 10% to 25% of the value of the exposure of the SSF. The percentage depends on the volatility and liquidity of the underlying shares and is meant to equal the highest loss that might occur in a normal day's trading. OST requires an additional percentage (50%) over and above the initial margin requirement of the JSE. This additional percentage assists in managing the holder's risk. This is clearly illustrated in Appendix 2.

Variation margin (Daily profit / loss)

At the end of each trading day, the JSE determines the profit or loss on each position, based on the mark-to-market (closing price) of the current day less the mark-to-market price of the previous business day.

This profit or loss is referred to as the variation margin and is settled the next business day. This means that holders receive realised profits *and pay realised losses* on each position every day.

A simplified example:

Initial margin of R2 100 was deposited when purchasing one AGLQ Dec-06 SSF contract at R150. The initial margin is held in trust by the JSE.

The SSF price rises to R153. The movement is favourable, and (R153 - R150) x 100 = R300 is received in the trading account as variation margin. (This value is made available immediately for trading; the actual cash only settles the next business day.)

The SSF price then drops to R147. The movement is now unfavourable, and a loss of (R153 - R147) x 100 = R600 is withdrawn from the trading account.

In other words, money flows into and out of the trading account as the price of the SSF position moves up and down.

Contract expiry and physical delivery

If the holder is long a SSF contract at the close of business on the expiry date of the SSF, the holder may take delivery of the underlying shares (exercise the future). The underlying shares

will be credited to the trading account on the following business day and the payment amount for the shares will be determined by using the mark-to-market price of the SSF from the previous day (expiry date).

OST will **ONLY** allow the physical exercise of the SSF with prior agreement.

By 14:00, two business days prior to the expiry date of a SSF, the holder is required to specify whether to be rolled into the next dated SSF in the same underlying share or to close out the position. By default, all open positions at 14:00, two business days before the expiry date will be closed out. (Please read the section on automatic close-out in the section 'How to prevent losses.')

What variables are used to price SSF's

Appendix 1 gives a detailed calculation of how Standard Bank prices its SSF's. It is however important to note the main variables that influence SSF pricing.

Underlying share price
This is the main determinant of the SSF price. The commission and interest rate calculation use it as their basis of their respective calculations.

Interest
Interest is calculated on the value of the underlying share exposure for the remaing period to expiry of the contract.

Dividends
Long SSF positions do not earn ordinary dividends and short SSF positions are not liable to pay ordinary dividends, thus the SSF bid and offer prices are adjusted accordingly to compensate the holder of the SSF position.

NB – Generally ONLY ordinary dividends are priced into the SSF prices. Special dividends and capital reductions are managed by the JSE by means of an adjustment to the quantity of the holders SSF position based on a factor of the special dividend /

capital reduction in relation to the underlying share price on the last day to trade. This could have a material effect on your portfolio value. Exercise caution when trading in SSF's where these types of corporate events are likely to occur.

Commission

Charged at a percentage of the underlying trade value.

Dividend protection – ordinary dividends

Ordinary dividends (prior to announcement by the company) that are priced into the SSF bids and offer prices are the only estimated variable used in SSF price making. The price making counterparty uses the specific underlying share's dividend history to estimate the expected ordinary dividend to use in the SSF pricing.

From time to time the assumption may change or the actual ordinary dividend that is declared may differ from the estimated amount used in the SSF price calculation. Dividend protection calculations will be made with the difference either debited or credited against the trading cash amount of the client as follows:

1. If the client holds a long position and:

    a. The dividend change increases then add an amount equal to the amount of the dividend increase multiplied by the number of contracts multiplied by 100;

    b. The dividend change decreases then deduct an amount equal to the amount of the dividend decrease multiplied by the number of contracts multiplied by 100.

2. If the client holds a short position and:

    a. The dividend change increases then deduct an amount equal to the amount of the dividend decrease multiplied by the number of contracts multiplied by 100;

    b. The dividend change decreases then add an amount equal to the amount of the dividend increase multiplied by the number of contracts multiplied by 100.

Summary

1. SSF's are agreements between two parties, where one commits to buy shares and one to sell shares at a given price and on a specified date.
2. They're considered to be derivatives. Like any futures contract, their value is *derived* from another instrument.
3. The price movement of the SSF is based on the price movement of the underlying share. As the share price goes up and down, so too does the SSF price.
4. Unlike shares, profits and losses on SSF's are realised and settled daily.
5. In order to trade a SSF, both buyer and seller must deposit funds, known as initial margin, into their trading accounts prior to trade.
6. SSF's have no voting rights
7. Most investors do not hold SSF contracts until expiry in order to make or receive delivery of the underlying share. They usually offset (close out) the position before that time and take a new position in a longer dated SSF.
8. A SSF position does *not* entitle the holder to any dividends declared on the underlying share. To compensate the holder, the market makers will adjust their bids /offers by the expected value of any dividend that is due to be paid on any contract.
9. Initial margin is required on long or short positions.
10. OST requires an additional percentage initial margin over and above the amount required by the JSE.
11. Unmatched SSF trade orders expire at the end of each business day.
12. Corporate events on the underlying shares can have a material effect on the price and/or quantity of the SSF holding. Be aware of special dividends and capital reductions as they affect the quantity held and could be subject to rounding which have an additional effect on the portfolio.

Appendix 1: How Standard Bank Prices SSF's

The cost-of-carry pricing model

For a start, the values of SSF's and the underlying stock are influenced by the same factors, including market sentiment, industry trends, changes to the management of the company and so on.

However, the actual prices are slightly different. A SSF requires less cash to trade, which means there is a cost (interest) to holding the underlying shares because the holder has to pay for the full value of the shares upfront. The holder of a SSF does not receive dividends declared on the underlying share although the pricing of the SSF will compensate the holder for this. Admittedly, holders will probably not want to spend much time calculating the 'fair values' of SSF's, as the direction in which their prices are moving is what should be governing trades. Even so, it's worth understanding how to reach a fair value.

The method begins with the price of the underlying share, which is then adjusted. In its simplest expression, the fair price of a SSF is:

- the future value of the underlying share price (adjusted for the cost of carrying the underlying share), less
- the future value of the dividends.

SSF price = Share price x (1 + (i x t 1 /360)) – Dividend x (1 + (i x t 2 /360))
i = short- term interest rate
t 1 = days remaining until expiration
t 2 = days between dividend payment and contract expiration.

Sometimes, where the share generates a very large dividend, investors will price the SSF at a discount. The discount compensates the holder for not receiving the dividend.

Fair value is a theoretical price and the actual price may differ. These differences in pricing are due to factors such as transaction costs and interest rates.

SSF's expire quarterly in March, June, September and December each year. Standard Bank thus modifies the cost-of-carry model to pro-rata the financing costs and dividends generated for the period until expiry for the particular SSF contract. Additional costs also included are commission and share borrowing.

The Bid – Offer spread is calculated as follows:[1]

SSFBid = SBid*(1-c)*(1 + r) t/365-d*(1 + r)t2/365

SSFOffer = SOffer*(1+c)*(1 + r) t/365-d*(1 + r)t2/365

Where:

SSFBid	=	SSF bid
SSFOffer	=	SSF offer
SBid	=	bid price of underlying
Soffer	=	offer price of underlying
r	=	risk free rate (e.g. R153 government bond rate)
d	=	underlying asset's projected dividend
t	=	number of days to expiry of particular SSF
t2	=	number of days between the dividend date and SSF expiry date
c	=	Standard Bank's commission

Example using the Anglo American (AGL) futures contract given the following parameters (brokerage charges excluded):

AGL bid	=	R150
AGL offer	=	R151
Interest rate	=	8%
Projected dividend	=	R2
Number of days to expiry	=	70
Number of days from dividend date to expiry	=	35
Commission	=	0.35%

1 Please note: For the sake of simplicity this example assumes no interest rate spread, no dividend hype and no stock borrow.

SSFBid = 150*(1-0.35%)*(1+ 8%)70/365-2* (1+8%)35/365

= 150*(0.9965)*(1.08)0.19178-2*(1.08)0.09589

= 150.24

SSFOffer = 151*(1+0.35%)*(1 + 8%)70/365-2*(1 + 8)35/365

= 151*(1.0035)*(1.08)0.19178-2*(1.08)0.09589

= 151.76

Giving the quoted bid/offer of the SSF as:

R150.24 - R151.76

Thus for a client looking to enter into a long SSF position when AGL is offered at R151.00 the offer price of the SSF would be 151.76

Whilst for a client looking to close out an existing long SSF position or to open a short when AGL is bid at R150.00, the SSF position in AGL would be bid at 150.24

Standard Bank is transparent in the way it prices its SSF doubles (bids & offers). A pricing matrix will be available on the OST website which will show the bid/offer prices for all SSF's in which it makes prices. Please note that where there is uncertainty regarding a company's dividends, Standard Bank will also make use of a dividend hype, being a percentage of the uncertain dividend to protect itself against these uncertainties.

Appendix 2: Detailed Examples

The examples below are intended to give the trader a complete view of how a portfolio will change intra-day as the price of a SSF changes.*

*Note – the examples exclude any brokerage and VAT charges

Simple example – Trading and related cash flows

1 – Prior to any SSF trade

Cash balance

Available trading funds	R100 000

2 – Purchase 16 AGLQ Dec-06 SSF contracts

Initial margin required is R2 100 per contract (R1 400 as per JSE and R700 extra as per OST)
Standard Bank's offer price for this SSF is R150

Portfolio

Instrument & expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
AGLQ Dec-06	16	R150		R150	R0	R240 000
						R150x16x100

Cash balance

Cash	R66 400	R100 000-R33 600
Intra-day MTM	R0	
Available for trade	**R66 400**	

Initial margin balance	R33 600	R2 100x16

3 – Later the same day

Standard Bank's bid price for this SSF is R148
Intra-day loss deducted from available trading cash

Portfolio

Instrument & Expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
AGLQ Dec-06	16	R150		R148	(R3 200)	R236 800
					R2x16x100	R148x16x100

Cash balance

Cash	R66 400	R100 000-R33 600
Intra-day loss	(R3,200	
Available trading funds	**R63 200**	

Initial margin balance	R33 600	R2 100x16

4 – End of day

JSE determines MTM price to be R145
MTM loss deducted from available trading cash

Portfolio

Instrument & Expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
AGLQ Dec-06	16	R150	R145	R145	(R8 000)	R232 000
					R5x16x100	R145x16x100

Cash balance

Cash	R66 400	R100 000-R33 600
Intra-day loss	(R8 000)	
Available trading funds	**R58 400**	

Initial margin balance	R33 600	R2 100x16

5 –Beginning of next day

The previous business day's cash movements (initial margin and MTM losses) are deducted from the trading cash balance.
The initial margin balance remains unchanged.

Portfolio

Instrument & expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
AGLQ Dec-06	16	R150	R145	R145	R0	R232 000
					R5x16x100	R145x16x100

Cash balance

Cash	R58 400
Intra-day loss	R0
Available trading funds	**R58 400**

Initial margin balance	R33 600	R2 100x16

Automatic close-out example

Automatic close out by OST is designed to assist the trader in managing the risk of SSF positions. It occurs automatically if the sum of the available trading cash, before deducting the intra-day losses, plus the additional 50% initial margin does not cover the intra-day losses at any point during the day. It prevents traders from incurring excessive losses.

1 – Beginning of day

Portfolio

Instrument & expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
DDTQ Dec-06	500	R7,50	R6,80	R6,80	R0	R340 000
						R6,80x500x100

Cash balance

Cash	R2 400
Intra-day loss	R0
Available trading funds	**R2 400**

Initial margin balance	R60 000	R120x500 (R20 000 of this is the 50% additional amount)

2 – Later the same day

Standard Bank's bid price for this SSF drops to R6,60
The intra-day loss of R10 000 is deducted from available trading cash to show a shortfall
The R7 600 shortfall is covered by the additional R20 000 initial margin

Portfolio

Instrument & expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
DDTQ Dec-06	500	R750	R680	R660	(R10 000)	R340 000
					R020x500x100	R680x500x100

Cash balance

Cash	R2 400
Intra-day loss	(R10 000)
Shortfall	**(R7 600)**

Initial margin balance	R60 000	R120x500 (R20 000 of this is the 50% additional amount)

3 – Even later the same day

Standard Bank's bid price for this SSF drops to R6,35
Intra-day loss is deducted from available trading cash to show a shortfall of R20 100 which uses up the R20 000 additional Initial margin.

Portfolio

Instrument & Expiry date	Contract quantity	Cost price	Prev. day MtM price	Ruling price	Intra-day profit/(loss)	Underlying exposure
DDTQ Dec-06	500	R7,50	R6,80	R6,35	(R22 500)	R340 000
					R0,45x500x100	R6,80x500x100

Cash balance

Cash	R2 400
Intra-day MTM	(R22 500)
Shortfall	**(R20 100)**

Initial margin balance	R60 000	R120x500 (R20 000 of this is the 50% additional amount)

4 – Position automatically closed out

Deal is done at R6,35 or the closest price at that time.
Initial margin returned to the trading cash for trade purposes.

Cash balance

Cash	R62 400
Intra-day MTM	(R22 500)
Available trading funds	**R39 900**

R2 400+R60 000

Initial margin balance	R0

Appendix 3: Glossary of terms

Close out

A long position is closed out if the holding is sold; a short position is closed out if the holding is bought. The effect of a close out is that there is no exposure to the underlying share.

Derivative

A financial instrument that derives it value from another instrument. SSF's are derivative instruments. Other Standard Bank derivative instruments include warrants and instalment warrants. Trading SSF's, implies trading in futures; warrants are options on underlying shares.

Single Stock Future (SSF)

A standardised derivative instrument listed on the JSE, based on shares listed on the JSE, in which two parties agree to transact for future delivery of the underlying share at a specified price.

Initial margin

The initial deposit required prior to trading an SSF. Also referred to as a 'good faith deposit.' Calculated to cover the highest possible loss that a position can incur in one trading day. OST requires an additional percentage over and above the JSE's initial margin requirement. This additional percentage assists OST in managing client's risk.

Intraday profit/loss

The sum of the profit or loss of each SSF in a portfolio at any point in time during the day (intraday).

Long position

A long position exists when a trader buys and holds any security in the belief that it will increase in value. A long SSF position implies that the holder wants the price of the underlying share to increase.

Mark-to-market (MTM) - Variation margin

The daily process whereby the value of a SSF position is compared to the previous day's close

and the daily profit or loss is calculated.

The change in the MTM each day (either up or down) has a cash value and is referred to as variation margin. Variation-margin profits are added to the trading balance and variation-margin losses are deducted.

Stop loss

The price, set by the holder, at which the position is to be automatically closed out. It limits potential losses on any single trade. OST's stop-loss functionality is designed to assist the holders to decide at what point a position will be closed out.

Setting a stop-loss order at 10% below the entry point sets the minimum loss (excluding trading costs) to 10% of the value of the underlying shares.

OST automatically closes out all SSF positions without the holder's intervention if the cash in the trading account becomes insufficient to cover the potential losses of the positions.

Short position

If the belief is that the price of an underlying share is likely to fall, then sell an SSF, thus 'going short.' Selling short is the term for selling shares that the trader does not possess, intending to buy them at the lower price on or before the delivery date. It is the opposite of going long (buying a share). Short sellers make money when the price of the underlying share falls.

Rolling of a position

The process whereby a holder replaces a soon-to-be-expiring SSF with a new SSF that has a later expiry date. The holder closes out the position in the nearer dated SSF and purchases a longer dated position on the same underlying instrument, thus keeping the same exposure without having to exercise the contract.

Underlying instrument

SSF's are derivatives that derive their value from the share that underlies the SSF - the share that has to be delivered if the contract is allowed to expire. The underlying asset is the base for the price determination of the SSF.

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