

# CALL OPTION ON BOND FUTURES

Key Information Document

2018

## Key Information Document: Call Option on Bond Futures

### Purpose:

This document provides key information about this investment product. It is not marketing material. The information is required by law to help you understand the nature, risks, costs, potential gains and losses of this product and to help you compare it with other products

### Product

Name of Product:	<b>Call Option on Bond Futures</b>
PRIP manufacturer:	Johannesburg Stock Exchange
Website for PRIP manufacturer:	<a href="https://www.jse.co.za">https://www.jse.co.za</a>
Contact details of PRIP manufacturer:	Email <a href="mailto:info@jse.co.za">info@jse.co.za</a> or call +27 11 520 7000
Competent authority:	Financial Services Board FSB
Date of Production:	January 2018

**Alert: You are about to purchase a product that is not simple and may be difficult to understand**

### What is this product?

**Type:** Derivative based contract. A derivative is a financial contract which derives its value based on the value of an underlying instrument

### Objectives

A **Call Option** is an agreement that **gives the buyer (long position) the right but not the obligation to buy** an underlying asset at a certain price (strike price) on or before a certain date in the future. The **seller (short position) has sold this right and may be obligated to sell the underlying asset** at the strike price on or before the certain date in the future. The buyer of an option needs to pay a **premium** to the seller for this right. However, in futures-style options, no premium is physically paid, but rather both the buyer and the seller have to place margin to secure the position's exposure. The premium is considered in the pay-off at expiration of the contract. The option price can vary with various factors including but not limited to the price of the underlying asset, the volatility of the underlying asset, interest rates, time to expiry, etc. The difference between the contract's value at expiration and the contract's value at initiation of the transaction will result in the profit or loss of the contract. The buyer realises a profit if the value of the contract has increased at the future's expiration and a loss if it has decreased. The seller realises a profit if the value of the underlying has decreased at future's expiration and a loss if it has increased. .

In the case of **Call Options on Bond Futures**, the underlying asset is a Bond future which is quoted as an interest rate (termed a yield-to-maturity ytm). Hence the option strike price is also quoted as an interest rate. **The price of the bond future is calculated using a bond pricing formula, and results in the bond price moving inversely to the interest rate level.** Thus falling interest rates imply rising bond prices while rising interest rates imply falling bond prices.



The **buyer of a Call Option on Bond Futures has the expectation of falling interest rates** and thus, due to the inverse relationship to bond prices, increasing bond prices. Thus the buyer expects that the underlying asset price at expiration will be higher than the sum of the option strike price plus the option premium, in which case the buyer will make a profit.

A **seller of a Call Option on Bond Futures has the expectation of rising interest rates** and thus, due to the inverse relationship to bond prices, falling bond prices. Thus the seller expects that the underlying asset price will be lower than the sum of the option strike price plus the option premium, in which case the seller will make a profit. The payoff profile at expiration is asymmetric and shown in the “Performance Scenario”

### Intended retail investor

An exchange provides a platform for various market participants to interact. It is not meant specifically for retail investors. A retail investor should become familiar with the product characteristics to make an informed decision on whether or not this product fits their investment needs. A retail investor should contact their broker or investment adviser to obtain investment advice.

### What are the risks and what could I get in return?

#### Risk Indicator:

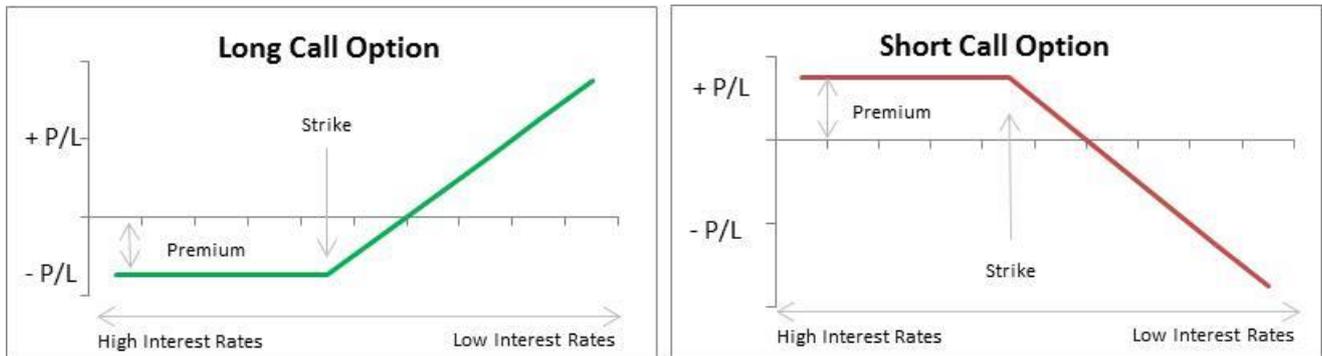
The summary risk indicator is a guide to the level of risk of this product compared to other products. It shows how likely it is that the product will lose money because of movements in the markets.

1	2	3	4	5	6	7	
Lower risk		←-----→				Higher risk	

This product is classified as 7 out of 7, which is the highest risk class. This rates the potential losses from future performance at a very high level. Derivatives are leveraged products; initial costs of a customer, e.g. execution fees, and amounts deposited to secure the contract’s exposure, account for only a small percentage of the traded contract’s overall value. Small changes in the contract’s price can result in huge gains or losses. The total loss incurred may be significant and larger than the initial outlay.

### Performance Scenarios:

These graphs illustrate how your investment could perform. The horizontal axis shows the range of possible prices of the underlying asset on the expiry date and the vertical axis shows the profit or loss of the contract.



The payoff profile of the option is asymmetrical as shown above.

**A Buyer enters into a long position on the call option in expectation of rising market prices (falling interest rates).**

As the market level closes on expiry, the P/L is represented by the position of green line at that market level.

**A Seller enters into a short position on the call option in expectation of falling market prices (rising interest rates).**

As the market level closes on expiry, the P/L is represented by the position of red line at that market level.

The profit or loss is calculated by taking the closing value of the contract and subtracting the initial value of the contract at initiation of the transaction. If the result is positive, the buyer makes a profit and if it is negative, the seller makes a profit.

### What happens if JSE is unable to pay out?

The JSE is an exchange approved under South African law. Any derivative transaction traded on the JSE is cleared by JSE Clear (Pty) Ltd. Further information can be obtained at <https://www.jse.co.za/services/post-trade-services/clearing-and-settlement/derivatives>

### What are the costs?

The JSE charges fees to its trading members via their clearing members. The full fee schedule is available on the website at <https://www.jse.co.za/services/technologies/price-list>.

The broker or intermediary with whom the investor has a contractual relationship may also charge other transaction and related costs, and will be able to provide further information with regard to all these costs.

**How long should I hold it and can I take money out early?**

There is no recommended holding period for these products. The optimal holding period depends upon the retail investor's individual strategy and risk profile. A derivative position can be traded and closed out on any trading day until expiration. In particular, a long position can be closed by entering a sell order in the market on any day up to and including the expiration date of the contract, and a short position can be closed by entering a buy order in the market on any day up to and including the expiration date of the contract.

**How can I complain?**

Retail investors should address complaints to the broker or intermediary with whom the investor has a contractual relationship. Furthermore, the retail investor can address complaints to the JSE at [info@jse.co.za](mailto:info@jse.co.za)

**Other relevant information**

Further information is available here:

<https://www.jse.co.za/trade/derivative-market/bond-derivatives/single-bond-derivatives/bond-options>