EXCHANGE TRADED FUND (ETF) SHARES INFORMATION SHEET

1. What is an Exchange Traded Fund (ETF)?

An ETF is a basket of securities that are listed and traded on a stock exchange. ETFs usually aim to track or replicate the performance of an underlying index, sector or asset.

Passive ETFs vs Active ETFs

Passive ETFs

Passive ETFs track their reference index which can be a broad-based market index or an index for a specific sector. Traditionally, Passive ETFs do not seek to beat the market so they usually have lower fees as compared to active ETFs. To replicate its reference index, passive ETFs may purchase all or a representative sample of the securities making up the index. As compared to Active ETFs, Passive ETFs tend to have a lower expense ratio because lesser fund managers are required and with less trading activities, lower brokerage fees are incurred.

Active ETFs

Active ETFs are ETFs that are actively managed by its fund managers. Even though actively managed ETFs may have an underlying benchmark index, the percentage exposure to a specific security making up the ETF are based on the fund manager's discretion. Hence Active ETFs can potentially outperform the market, providing greater returns, but on the flipside they may also underperform the benchmark index too.

ETFs vs Mutual Funds

Both ETFs and mutual funds are professionally managed and both enjoy the benefit of being diversified and thus are less risky compared to investing in individual stocks or bonds.

	ETFs	**Mutual Funds**
Transacting method	Bought on an exchange like a stock.	Bought directly from a fund company.
Minimum investment	As small as 1 share.	Mutual funds may require a minimum investment which could vary between USD100 to USD5,000.
Trading costs	Regardless of the performance, investors must pay brokerage, annual fees, management fees and other expenses.	Regardless of the performance, investors must pay the sales charges, annual fees, management fees and other expenses.
Price transparency	Prices are determined by market forces and can fluctuate throughout the trading session.	Mutual funds value their NAV (net asset value) once a day. Purchasing or selling shares of a mutual fund will be executed at the next available NAV which is calculated after the close of the respective market.

Position transparency	A quarterly disclosure of holdings is required by the Securities and Exchange Commission (SEC). However, most funds disclose their public holdings daily.	A quarterly disclosure of holdings is required by the SEC.
Dividend pay-outs	Yes	Yes

Types of ETFs

a) Equity ETFs

Equity ETFs track an index by holding a portfolio of equities or stocks similar to its reference index. Equity ETFs can allow exposure to an entire stock market, geographic regions or even specific sectors.

b) Bonds/Fixed Income ETFs

Bonds and fixed income are generally less liquid and are not actively traded in the secondary market. Bonds and fixed income ETFs give investors exposure to corporate to government bonds and are typically less volatile than equity ETFs.

c) Commodity ETFs

Commodity ETFs often use futures or other derivatives to offer exposure to commodities such as gold, silver and oil. Commodity ETFs may incur higher expenses due to the need to constantly roll over the underlying Futures.

d) Currency ETFs

Currency ETFs tracks specific foreign currencies or a basket of currencies through cash deposits, money market securities and derivatives such as Forward currency contracts and swaps.

e) Inverse ETFs

Inverse ETFs, designed to profit from a decline in value from a correlating benchmark, are constructed using various derivatives such as Futures. Inverse ETFs can therefore be used as a hedge for an investment portfolio. Theoretically, shorting an asset contains unlimited risks but the maximum loss on an inverse ETF will be the amount paid for the ETF.

Inverse ETFs are traditionally not long term investments as the underlying derivatives are typically sold and bought back daily. As a result of daily adjustment and more frequent monitoring, higher management fees are often incurred. Moreover, markets typically have an upside bias over the long term, reducing its viability over the long run.

f) Leveraged ETFs

Leverage ETFs uses derivatives and debt to amplify movements of its reference index, either positively or negatively.

Understanding ETF Families

The most popular ETF families include iShares, Vanguard and SPDRs (S&P Depository Receipts). These brands are owned by mutual fund companies. For example, iShares ETFs are marketed and managed by BlackRock, while SPDR ETFs are managed by State Street Global Advisors.

An ETF family can offer funds in various asset classes. For example, iShares Core U.S. Aggregate Bond ETF offer exposure to investment grade U.S bonds. iShares Core S&P 500 ETF tracks the S&P 500 index, offering exposure to large cap U.S equities. And iShares Gold Trust was designed to track the spot price of gold on the London bullion market.

2. Key Risks of ETFs Trading

Trading of ETFs and other investment products can carry a high level of risk, and is more suitable for customers with medium to high risk profile. It is important you understand the possible risks involved in trading ETFs, which include but are not limited to the following:

Market Risks

While ETFs may be diversified, they are still affected by volatility. It is important to understand the underlying benchmark which the ETF tracks and the associated risks of it.

Tracking Error

The price of an ETF can diverge from the value of the index or the asset it was designed to replicate. Tracking error is the relative risk of the ETF compared to its reference index. High trading costs can negatively impact a fund's performance. Limitations of positions/shares that can be taken may prevent a fund from achieving full replication, thus causing tracking error.

Foreign Exchange Risks

ETFs can provide exposure to international securities and assets which can lead to foreign currency risks.

Liquidity Risks

The primary factor to liquidity risk is if an ETF invests in less liquid securities such as emerging market bonds or small-cap companies, it may impact the market marker's ability to create or redeem units which impacts the liquidity of the portfolio. The secondary factor would be the trading volume on the secondary market as ETFs are traded like stocks. If demand of an ETF outpaces its supply, prices will rise, and vice versa.

3. Extended-Hours Trading Sessions for US ETFs

Extended-hours trading sessions include pre and post-market sessions[1].

Pre-market trading of US ETFs occurs between 0400 to 0930 Eastern Standard Time (ET), before the regular trading session. Pre-market trading is available for NASDAQ, NYSE and AMEX. Unlike regular trading sessions which represents the best available price consolidated from all trading venues, pre-market trades via an Electronic Communication Networks (ECN). It is also important to note that prices

[1] Post-market session is currently not available for trading on Phillip Nova.

displayed on 2 different systems on the same security may be different if they are on separate ECNs. Orders on separate ECNs will not be matched against each other.

Price movement and trading volume during pre-market trading may be used as an indicator of the strength and direction in the later regular trading session.

Economic indicators, news stories and corporate actions announced before the regular trading session may cause price volatility resulting in price gaps from the prior session's closing price. Therefore, access to the pre-market can better enable traders to manage price risk or take advantage of price volatility.

4. Key Risks of Trading US ETFs During Extended-Hours Sessions

Lower Liquidity
During extended-hours trading, there may be a lower trading volume as compared to regular trading hours. Some ETFs may not trade at all during extended-hours trading. Poorer liquidity could also mean wider spreads on the bid and ask prices. Hence, the lack of liquidity could result in inferior prices and a higher possibility of orders being only partially executed or not at all.

Greater Price Volatility
Price volatility may be exacerbated during extended-hours trading. Economic indicators, news and corporate actions may have a greater impact on prices.

Price uncertainty
Trades executed during extended-hours trading may not reflect the actual price of the same security during regular trading hours.

5. Example of Profit and Loss Calculation for ETFs

Please see the examples below to understand how profit and loss for ETFs contracts are calculated.

Profit Illustration

S/N	Description	Calculation
A	Purchase 500 shares on XYZ ETF at USD50.00	Equity required: 500 x USD50.00 = USD25,000
B	Commission on purchase of XYZ ETF shares	Commission payable: USD25,000 x 0.05% = USD12.50
C	Sale of 500 shares on XYZ ETF at USD55.00	Profit: 500 x (USD55.00 – USD50.0) = USD2,500
D	Commission on sale of XYZ ETF shares	Commission payable: 500 x USD55.00 x 0.05% = USD13.75
E	Net Profit	C – B – D = USD2,500 – USD12.50 – USD13.75 = USD2,473.75

Loss Illustration

S/N	Description	Calculation
A	Purchase 500 shares on XYZ ETF at USD50.00	Equity required: 500 x USD50.00 = USD25,000
B	Commission on purchase of XYZ ETF shares	Commission payable: USD25,000 x 0.05% = USD12.50
C	Sale of 300 shares on XYZ ETF at USD48.00	Loss: 300 x (USD50.00 – USD48.00) = USD600
D	Commission on sale of 300 XYZ ETF shares	Commission payable: 300 x USD48.00 x 0.05% = USD7.20
E	Sale of 200 shares on XYZ ETF at USD46.00	Loss: 200 x (SGD 50.00 – USD46.00) = USD800
F	Commission on sale of 300 XYZ ETF shares	Commission payable: 200 x USD46.00 x 0.05% = USD4.60
G	Net Loss	B + C + D + E + F = USD12.50 + USD600 + USD7.20 + USD800 + USD4.60 = USD1,424.30

6. Placing Orders

Trade orders can be placed using the following methods:

a) Self-execution via Phillip Nova trading platform
b) Call-in service: Phillip Nova Dealing Desk at (65) 6535 1155 or through your Account Manager. Applicable administrative charges may apply.

OTHER IMPORTANT INFORMATION

1. Fees and Charges

Commission Rates
For enquiry on the respective rates, contact our Client Service Desk at (65) 6538 0500 or refer to our latest commission list.

Multi-Currency Account Charges[2]
Based on customers' funds in excess of those utilised towards the required margin (margin excess), a credit balance in some currency accounts will accrue a competitive interest[3]. Similarly, a deficit in any currency will incur a debit interest.

The latest interest rates can be obtained through the Client Portal (https://myaccount.phillipnova.com.sg) under Trading Information.

Or you can contact our Client Service Desk at (65) 6538 0500 or email nova@phillip.com.sg for details on the interest rates for respective currencies. Please note that rates will change from time to time. Phillip Nova will not do any currency conversion to cover the deficit without the customer's consent or instructions. An exception is made when customers' accounts are in danger of going into over loss due to exchange rate fluctuations. Phillip Nova reserves the right to do an auto-conversion of the deficit amount to maintain a positive account balance.

2. Fund Transfer Methods

Deposit or Top up[4]
For customers who wish to deposit or top up their Phillip Nova account, they may do so through the following methods:

1) PayNow – SGD only
2) Fast and Secure Transfer (FAST) – SGD only
3) DBS/POSB Bill Payment – SGD only
4) eNETS[5] – SGD only
5) Credit/Debit Card[6] – SGD/USD
6) Telegraphic Transfer[7]
7) Internal Transfer within PhillipCapital Group

Please note that only selected currencies may apply for some transfer methods. For more information on transfer methods, contact your account manager or the Client Service Desk at (65) 6538 0500.

[2] Not applicable to MT5
[3] Not all positive currency balances will be accrued interest. Log in to https://myaccount.phillipnova.com.sg to check the interest-earning currencies. Credit and Debit Interest are not applicable to MT5 account.
[4] Phillip Nova only accepts deposits made from bank accounts bearing the account holder's name. Supporting document(s) may be required to ascertain the source of funds.
[5] Available on Client Portal. Log in to https://myaccount.phillipnova.com.sg to make funds transfer via eNETS.
[6] Available on Client Portal. Log in to https://myaccount.phillipnova.com.sg to make funds transfer via Credit/Debit Card. Applicable to Singapore, Malaysia and Indonesia issued cards. Admin fees apply, refer to www.phillipnova.com.sg for details.
[7] Funds received via telegraphic transfer will be charged a USD10 processing fee.

Withdrawal[8]
For customers who wish to withdraw funds from their Phillip Nova account, they may do so through the following 2 methods:

Client Portal: Log in to https://myaccount.phillipnova.com.sg > Fund Withdrawal.

Physical form[9]: Customers may download and fill up the physical form at www.phillipnova.com.sg > Support > Forms & Downloads, and send it back to us via email at nova@phillip.com.sg or fax to (65) 6536 7367.

3. Phillip Nova's Currency Conversion Policy[10]

Phillip Nova does not generally perform currency conversion to cover the deficits in your account without your consent or instruction. An exception is made when we deem that your account is in danger of going into over loss after being evaluated*.

At such circumstances, the following action may take place:

(1) We will attempt to contact you by phone to seek your instructions to convert the deficit for you. If you wish to convert the deficit by yourself, or top up the account, please do so by 4pm on the day when we had contacted you.

We will proceed with the conversion if you do not complete the conversion or top up your account by 4pm.

(2) In the event we are not able to contact you by phone, we will email you to inform of your deficit and the actions that you need to take by 4pm on the same day.

We will proceed with the conversion if you do not complete the conversion or top up your account by 4pm.

An illustration as shown below:

	Actual Account Status	**Account Status Based on 3% Movement in Exchange Rate**
SGD	50,000	50,000
USD	-36,000	-36,000
Exchange Rate to SGD	1.3700	1.4111
Total Net Equity in SGD Based	50,000 – (36,000 X 1.3700) = 50,000 – 49,320 = 680	50,000 – (36,000 X 1.4111) = 50,000 – 50,799.60 = -799.60
		Under such circumstances, Phillip Nova will contact you for necessary actions.

[8] Phillip Nova proposes no additional fees or charges through the abovementioned methods. However please take note for Telegraphic Transfer, banks' remittance charges are applicable and will be borne by customers.
[9] Not applicable to customer who applied for account online, fund withdrawal request has to be submitted through Client Portal.
[10] Not applicable to MT5.

Note:

*The evaluation is based on the assumption that the daily exchange rate moved **3%** against your account. This percentage is taken by Phillip Nova as a benchmark for the daily exchange rate movement. It may be changed based on Phillip Nova's discretion.

Please note that Phillip Nova reserves the right to do an auto-conversion of the deficit amount to maintain a positive account balance.