

Virtual Asset-related Products

Investor Education Basics

You are required to read through the education materials and disclosures below if you wish to trade in virtual asset (“**VA**”)-related products such as VA exchange traded funds (“**VA ETFs**”) and/or VA futures ETFs through your account with HSBC Broking Securities (Asia) Limited (“**HSBC Trading Advisory**”). The information below sets out the nature and risks of VAs, VA ETFs and VA futures ETFs.

It is important to maintain a [diversified investment portfolio](#) to manage investment risk. Investors with substantial investments in VA-related products, such as VA ETFs and VA futures ETFs, may be exposed to higher concentration risks in a single reference asset and/or single futures contract. VA-related products are highly speculative and prices can fluctuate greatly within a short period of time. When investing in VA-related products, investors may be subject to the price volatility of a single underlying VA or a single futures contract. A well-diversified portfolio can help mitigate asset concentration risks. If an investment is made in only one investment, the outcome tends to be more volatile and the risk is higher. Instead of focusing on one investment, investors can diversify their portfolio by allocating investments among various financial asset classes, currencies and geographies.

What are Virtual Assets?

VAs are digital representations of value which may be in the form of digital tokens, any other virtual commodities, crypto assets, or other assets of essentially the same nature. They exclude digital representations of fiat currencies issued by central banks (ie central bank digital currencies, CBDCs). VAs were developed based on emerging technology that is still evolving. Globally, the acceptance of VAs and cryptocurrencies remains uncertain. VAs may not confer the same level of legal rights and ownership rights as conferred through ownership of a traditional asset. They have not yet been widely accepted as a means of payment by merchants generally and their value tends to be highly speculative. VAs are a new type of asset and complex financial instruments. Investing in VA and VA-related products are high risk investments. VA transactions are irrevocable, and lost or stolen VAs may be irretrievable. In the worst case scenario, you may suffer a total loss of the investment amount.

What are the different types of VAs?

Examples of VAs include cryptocurrencies (such as bitcoin, ether and altcoins) and other types of digital tokens (for example, security tokens, stablecoins, utility tokens, non-fungible tokens or other asset-backed tokens).

Cryptocurrencies	In Hong Kong, they are considered to be virtual commodities and not legal tender. In contrast, bank notes or coins are generally regarded as legal tender. This means that cryptocurrencies are not regarded by law as valid and a legal means of payment to adequately and effectively fulfil payment obligations. Usage is limited as they are not widely accepted as a means of payment or recognised as a digital currency.
Types of cryptocurrencies	
Bitcoin	Bitcoin was the first cryptocurrency that was introduced. It does not physically exist, but is an electronic payment medium invented by a person or group of persons whose real identity remains unknown. Bitcoins can be transferred electronically and can be used as a means to “pay” or exchange for goods or services with merchants who accept them. Unlike traditional currencies, bitcoins are not backed by any bank or government, nor supported by any issuing institution, or tied to any tangible assets – there is nothing to guarantee their value. There are no physical bitcoins, only records of bitcoin transactions. It is operated under a peer-to-peer technology called blockchain, whereby every single bitcoin transaction that has ever been made is recorded in a shared public ledger.

Types of cryptocurrencies	
Ether	Ether is the transactional token used in the ethereum ecosystem. The major difference between the ethereum blockchain and the bitcoin blockchain is that ethereum allows people to create their own applications (“ decentralised apps ” or “ dapps ”) on top of its blockchain. Not only does it act as a ledger of transaction records, it also executes and keeps a record of “smart contracts” transactions in its blockchain. “Smart contracts” are codes that are triggered automatically to execute a transaction when it receives a certain input.
Altcoins	All other cryptocurrencies that are not bitcoin are generally referred to as altcoins.
Types of digital tokens	
Security Tokens	They are digital representations of ownership of assets (eg gold or real estate) or economic rights (eg a share of profits or revenue) utilising blockchain technology.
Stablecoins	They are VAs whose values are linked or referenced to an underlying asset, eg securities or fiat currencies, and aim to maintain a stable value relative to a specific asset, or a pool or basket of assets. Depending on the assets being referenced, stablecoins may be used for investment (eg if the underlying value is linked to a security) or payment purposes (eg if the underlying value is linked to a fiat currency).
Non-fungible Tokens	They are digital representations of ownership rights to a unique copy of an underlying asset, such as a digital image, music or video, or real-world asset, such as artwork. They cannot be divided (ie non-fungible), and are priced, bought and sold in cryptocurrencies.
Utility Tokens	Unlike typical cryptocurrencies they are not mineable and are generally issued by developers to provide access to a specific service or product, or to allow users to perform certain action on a specific blockchain ecosystem.

How are VA transactions recorded?

Blockchain technology is the underlying foundation of VAs. It acts as a decentralised ledger shared and synchronised among a network of contributing computers known as *nodes* – it verifies and records VA transactions. Every single transaction that takes place of a particular type of VA in its network is recorded in a shared public ledger. Each transaction is also timestamped and embedded into the ledger. Information on VA transactions are held in groups, called *blocks*. When the blocks are filled with information and closed, they are chained together with the previously filled block forming a chain of data known as the *blockchain*. All new information that follows will be recorded on a new block and will also be added to the chain. Each block is timestamped when being added to the chain. This means that the blockchain contains a chronological record of transactions and nobody can manipulate or delete the information stored on the blockchain.

Blockchain uses cryptographic methods to encrypt the information recorded on the ledger.

Certain blockchains are public and permissionless. Anyone can review all the transactions ever made on those blockchains and anyone can use those blockchains. The bitcoin and ethereum blockchains are examples of public blockchains.

How are VAs accessed, stored and transferred?

Digital wallet is a software that provides a means of holding, storing and transferring VAs. Each wallet is associated with (i) an alphanumeric identifier (an address), representing the destination for the transfer of a VA, thereby allowing a user to receive VAs; and (ii) private keys, allowing the user to transfer VAs. VAs can be stored in a “hot” wallet, a “cold” wallet, or a combination of the two.

- A **hot wallet** is a storage platform that is connected to the internet. Examples include web-based wallets, mobile wallets or desktop wallets. They are easy to use as the private keys to the VAs are kept online. They are also more susceptible to cyberattacks, which could lead to VAs being stolen.
- A **cold wallet** is a storage platform that is typically not connected to the internet. Examples include paper wallets or hardware wallets (eg programmed in USB sticks). Cold wallets are more secure as stealing from a cold wallet would require physical possession or access to the cold wallet (and the passwords used to access the offline private key to the VAs).

Please note that the following section explains some of the principal risks of investing in VAs but it is not an exhaustive list of all possible risks. Before entering into a transaction, you should read the Risk Disclosure Statement and be satisfied that you fully understand the precise nature of the transaction, how it works, the extent of your exposure to risks and the potential losses that you could incur.

What are the risks of investing in VAs?

VAs are high risk products and may not be suitable for everyone. Understanding the product features and risks before making any investment decisions is essential. If you do not fully understand VAs and cannot bear the potential losses, you should refrain from investing in this asset class. The key risks you may be exposed to include:

- **Ownership, valuation, price volatility, liquidity risks and loss of investment** – VAs are generally not backed by physical assets or guaranteed by the government or any issuing institution. As such, they have no intrinsic value. VAs may not confer the same level of legal rights as ownership of a traditional asset, and there exists legal uncertainty on whether VAs can be regarded as “property” under the law. This may have an impact on claims over ownership of VAs. There are additional risks relating to difficulties in verifying the ownership of VAs. There are currently no generally accepted valuation principles governing certain types of VAs. VA prices on the secondary market are driven by supply and demand and are short-term and volatile by nature. The volatility faced by investors may be further magnified where liquidity pools for VAs are small and fragmented. This means that investors may not always be able to liquidate a position. VAs were developed based on emerging technology that is still evolving. Technical issues, regulatory activities beyond the blockchain operator's control or other factors causing inexplicable price volatility may also affect market liquidity for VAs. There is an additional risk that VAs may be lost if a blockchain network collapses, or VA issuers and/or managers go bankrupt or if the bubble bursts. In such cases, the underlying VAs you invest in could lose most or all of their value.
- **Regulatory uncertainty and counterparty risk** – Service providers for VA-related products, including custodians, fund administrators, VA trading platform operators and index providers are private companies which may be unregulated or only subject to light-touch regulation (eg for payment purposes). As such, they may not be subject to the same robust regulation and transparent rules as service providers or products in traditional financial markets, posing additional counterparty risks for VA-related products. Legal and regulatory changes beyond the control of the VA service providers may restrict or otherwise impact the trade of VAs.
- **Risk of market manipulation** – Spot markets for VAs and VA trading, lending or other dealing platforms are largely unregulated at present. Some VAs may be held by a small number of holders. VA dealing platforms may therefore be more exposed to theft, fraud, failure, security breaches, lack of pricing transparency, market manipulation and insider dealing, compared to established, regulated exchanges for securities, derivatives and other currencies.
- **Potential conflict of interest** – VA trading platform operators may act as agent for clients as well as principal. They may facilitate the initial distribution of VAs (eg initial coin offerings, ICO), and facilitate secondary market trading, or both, as in a traditional exchange, alternative trading system, or securities broker. If these operators are not under the purview of any regulator, it would be difficult to detect, monitor and manage conflicts of interest.
- **Technology-related risk** – As a result of the decentralised and open-source nature of VAs and its underlying technology, it is possible that sudden, unexpected changes (“Forks”) can be made to any VA that may change the usability, functions, compatibility, value or even name of a given VA. Forks may result in multiple versions of a VA, which could lead to the dominance of one or more versions of such VA, and the partial or total abandonment or loss of value of any other versions of such VA. Blockchain networks may also go offline as a result of bugs, Forks, or other unforeseeable circumstances. Further, unlike securities prices of traditional exchanges, the prices of VAs change continuously throughout the day. Outages may occur, and investors may not be able to execute a trade on VAs when the market price of VAs continues to change.

- **Hacking and risks relating to custody of assets** – VA trading platform operators and portfolio managers may store clients' assets in hot wallets (ie online environments which provide an interface with the internet). These can be prone to hacking. Cyber-attacks resulting in the hacking of VA trading platforms and theft of VAs are common. Investors may have difficulty recovering losses from hackers or trading platform operators, or may not recover any of their VAs.
- **Money-laundering risk** – VAs are generally transacted or held on an anonymous basis. In particular, VA trading platforms which allow conversions between VAs and fiat currencies are inherently susceptible to higher risks of money laundering and terrorist financing. VA investments may be the subject of law enforcement action as a result of criminal activities and investors may not be able to recover any of their investments as a result.
- **Accounting and auditing risk** – There are currently no agreed standards and practices for how an auditor can perform assurance procedures to obtain sufficient audit evidence for the existence and ownership of VAs, and ascertain the reasonableness of the valuations of VAs.
- **Risk of fraud** – VAs may be used as a means to defraud investors. VA trading platform operators may not have conducted sufficient product due diligence before allowing a VA to be traded on their platforms, or investing in a VA for their portfolios. As a result, investors may become victims of fraud and may lose all or a part of their investments.

What are VA ETFs and VA futures ETFs?

VA ETFs and VA futures ETFs are VA-related products which means they:

- have a principal investment objective or strategy to invest in VAs;
- derive their value principally from the value and characteristics of VAs; or
- track or replicate the investment results or returns which closely match or correspond to VAs.

Both VA ETFs and VA futures ETFs are traded on conventional regulated exchanges, and the differences between the two are:

- VA ETFs are backed by the underlying VAs and track the price of the VAs; they allow investors to profit from the movement of the spot price of the underlying VAs.
- VA futures ETFs track the price of futures contracts of the underlying VAs (ie derivatives of the VAs), and allow investors to gain investment exposure to the VAs without the need to hold the underlying VAs.

A VA futures contract is a type of derivative trading instrument and is a commitment to buy or sell a predefined amount of VAs at a predetermined price on a specified future date.

When investing in VA ETFs, investors will be directly exposed to additional risks related to VAs, such as risks relating to custody of assets, platform, market manipulation and fraud – mentioned in the section “What are the risks of investing in VAs?” above.

What are the risks of investing in VA ETFs and VA futures ETFs?

Apart from the risks related to the underlying VA (see section headed “What are the risks of investing in VAs?” above), investors should also be aware of risks associated with VA ETFs and VA futures ETFs. These are relatively new investments and are subject to unique and substantial risks. The key additional risks include:

Risks related to VA ETFs

- **Lack of secondary market risk** – Even if VA ETFs are tradeable in a secondary market, there may not be enough active buyers and sellers. Investors may not be able to liquidate their investments easily.
- **Risk of legal and regulatory uncertainty** – Laws and regulations of VAs and VA-related products are unsettled and rapidly changing, which may adversely affect the value of VA-related products, including VA ETFs.

- **Risk of assets received or held outside of Hong Kong** – VA ETFs may be received or held by entities outside Hong Kong, who may or may not be licenced or registered in accordance with the applicable laws and regulations of the relevant overseas jurisdictions.
- **Risks relating to the lack of statutory protection** – VA ETFs may not be covered by any statutory investor compensation, customer asset protection, deposit protection schemes or other similar schemes.
- **Risks relating to dealing with unregulated products** – VA ETFs offered in overseas markets may not be authorised by the Hong Kong Securities and Futures Commission (“SFC”), which means they may not be subject to the regulation of the SFC. As such, their structures, operations and offering documents may not be governed by any rules or regulations in Hong Kong. Although, investors should note that SFC authorisation is not a recommendation or endorsement of a product nor does it guarantee the commercial merits of a product or its performance.
- **Unknown risks** – VAs and VA ETFs are a relatively new asset class. As such, there may be additional risks relating to VAs and VA ETFs which have not been identified.

Additional risks specific to VA futures ETFs

- **VA futures risks** – Trading in VA futures is inherently risky as the underlying VAs are speculative in nature and leverage is used in futures trading. Historically, VAs have been subject to significant price volatility. Investors may sustain losses greater than their principal investment.
- **Pricing difference** – VA futures contract prices differ from the spot price of VAs, which makes it difficult to value VA futures contracts.
- **Liquidity risk** – Investors may be exposed to periods of illiquidity as the VA futures market is still developing and may be more volatile than futures markets that are more established. The large size of the positions which the VA futures ETF may acquire increases the risk of illiquidity, may make its positions more difficult to liquidate, and increase the losses incurred while trying to do so. The rolling strategy of the VA futures ETF and the ability of the ETF to diversify its futures position may also be adversely affected.
- **Risk of rolling futures contracts** – A futures-based ETF needs to “roll over” the futures contracts to maintain the exposure to the VA (ie selling existing futures contracts that are about to expire and replacing them with a futures contract that will expire at a later date). If the prices of the longer-term contracts are higher than those of the expiring contracts, also commonly known as a “contango” market, the proceeds from selling the expiring contracts will not be sufficient to buy the same number of longer-term contracts. A loss may therefore occur (ie a roll cost or a negative roll yield), and would adversely affect the net asset value of the ETF.
- **Volatility of single asset or single futures contract** – Unlike conventional ETFs that track equity indices which are typically diversified, VA futures ETFs are subject to the price volatility of the single underlying VA only. Such volatility may be extremely high and substantially higher than the volatility experienced by equity indices or a commodity index which is made up of multiple types of commodities. For VA futures ETFs which only hold a single futures contract, investors will be exposed to high concentration risk.
- **Operational risk** – Mandatory measures may be imposed by other parties (eg brokers, participating dealers or futures exchanges) due to extreme market conditions, including limiting the size and number of ETF futures positions and/or mandatory liquidation. The corresponding actions taken by the ETF manager may have an adverse impact on the operation, secondary market trading, and the NAV of the VA futures ETF.
- **Margin risk** – If the market moves against the futures position, the VA futures ETF may be required to pay additional margins to maintain the trading positions on short notice. A VA futures ETF may need to liquidate its assets at unfavourable prices in order to meet these margin calls and suffer substantial losses.

- **Position limit risk** – There is a statutory position limit restricting the holding of bitcoin or ether futures contracts traded on the Chicago Mercantile Exchange to no more than a specific number of such futures contracts. If the holding of such futures contracts of a VA futures ETF grows to the limit, this may prevent the creation of units of the ETF due to the inability to acquire further futures contracts. This may lead to differences between the trading price and the net asset value of the VA futures ETF units listed on the Stock Exchange of Hong Kong Limited.

What are VA futures inverse products?

VA futures inverse products are inverse products, which invest in VA futures with an aim to deliver a daily return equivalent to an inverse return of the specified VA futures index, also known as the underlying index. VA futures inverse products are derivative products and are different from conventional ETFs as they seek inverse investment results relative to the underlying index on a daily basis.

Risks related to VA futures inverse products

When investing in VA futures inverse products, investors will be exposed to the risks related to the underlying VA (see section headed “What are the risks of investing in VAs?” above) and VA futures. Investors should be aware of and understand the additional risks associated with inverse products. The key additional risks include:

- **Nature of inverse products** – Inverse products aim to deliver the opposite of the daily return of the underlying index. The inverse product goes down when the underlying index moves upwards, and the inverse product goes up when the underlying index moves downwards.
- **Not intended for long-term holding** – Inverse products are not intended for holding for longer than the rebalancing interval, typically, one day, as their return over a longer period may deviate from and may be the opposite of the return of the underlying index over the period.
- **Unconventional return pattern risk** – If the value of the underlying index increases for extended periods, or where the exchange rate of the underlying index denominated in a currency other than the inverse product’s base currency rises for an extended period, inverse products can lose most or all of their value.
- **Increased volatility risks** – Prices of inverse products may be more volatile than conventional ETFs because of using leverage and the rebalancing activities. Further, given the extreme price volatility of VA futures, the value of VA futures inverse products may decline significantly in one day and the product may encounter challenges in rebalancing its futures holdings at day-end. Therefore, its daily tracking difference may be higher than those of leveraged and inverse products with conventional underlying assets.
- **Risk of rolling futures contracts** – VA futures inverse products may “roll over” futures contracts to achieve their investment objective by covering the current short positions in existing expiring future contracts and shorting the longer-term futures contracts. If the futures market is in backwardation (ie the price of near-term contracts is higher than the price of longer-term contracts), a negative roll yield may be realized over time and reflected in the net asset value of the VA futures inverse product when the VA futures inverse product repeatedly covers the short positions in the near-term contracts at a price higher than the price of the longer-term contracts. As such, the net asset value of the VA futures inverse product may be adversely affected.

For further information, investors should refer to the information on [VAs](#), [VA futures ETF and inverse product](#) and [VA spot ETFs](#) provided by the Investor and Financial Education Council, a subsidiary of the Securities and Futures Commission of Hong Kong.

Trading with HSBC Trading Advisory

HSBC Trading Advisory offer access to selected Virtual Asset-related products trading. **Please feel free to contact our Trading advisors for more details.**

IMPORTANT NOTES FOR JOINT ACCOUNTS

Please be reminded that for Joint Accounts, all account holders need to read and understand the educational materials and risk disclosures in our Virtual Asset Investor Education Centre before investing in any Virtual Asset-related products.

IMPORTANT NOTES

Before you trade, please read the Terms of Business which had been provided to you by HSBC Trading Advisory when you opened your HSBC Trading Advisory investment or securities account. In case of discrepancy between the Terms of Business and this document, the Terms of Business shall prevail.

In the event of conflict or inconsistency between the English and Chinese versions of this document, the English language version of this document shall prevail for all purposes.

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