Introduction to Callable Bull / Bear Contracts

Product factsheet | February 2025

What are callable bull / bear contracts (“CBBC”)?

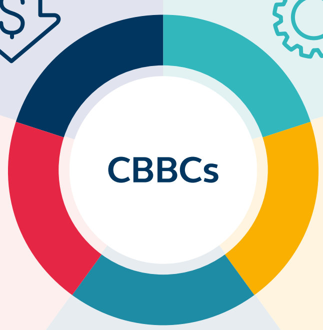
CBBCs are financial derivative instruments (contracts) that track the performance of an underlying asset and tends to mirror the movement in price of its underlying asset. CBBCs are issued either as bull CBBCs or bear CBBCs. Bull CBBCs cater to investors with an optimistic view on the underlying asset, anticipating an increase in its value, while bear CBBCs are designed for investors with a pessimistic view, expecting a decline in the asset’s value.

In Hong Kong, all CBBCs currently traded on HKEX can only be exercised at expiry (European style) and are settled in cash (no underlying assets will be delivered). CBBCs have a mandatory call feature that is determined by a specific call price or index level. If the call price is reached before expiry, a mandatory call event (“MCE”) is triggered. MCE prompts the early termination of the CBBC, and trading of the contract is ceased immediately.

There are two categories of CBBCs, namely category N and category R.

	Pricing	In the event of MCE
Category N CBBC	Call price = Strike price	No cash payment; Maximum net loss limited to the original investment amount
Category R CBBC	Call price ≠ Strike price	May receive small cash payment (residual value); No residual value in the worst-case scenario (refer to page 3)

Characteristics of CBBCs



Low entry cost

The price of CBBCs is only a fraction of the price of the underlying asset. Currently, trading of CBBCs is exempt from stamp duty in Hong Kong.

Gearing effect

A small change in the price of the underlying asset can result in a disproportionately large percentage change in the price of the CBBC, which could amplify gains or losses.

Flexible holding period

Although CBBCs in Hong Kong are issued with a life span ranging from three months to five years, investors have the flexibility to sell them at any point before expiry.

Capped losses

The maximum loss of a CBBC is limited to the initial investment and investors are not required to pay a margin deposit (i.e. margin calls are not applicable).

Access various asset classes

CBBCs can be issued against a diverse range of eligible underlying assets, including local stocks, local and overseas stock indices.

Common usages of CBBCs

- **Leverage:** To magnify returns on the price movements of underlying assets. However, leverage also heightens the risk of losses especially in volatile markets
- **Short term trading:** To hedge against short-term market volatility / potential losses in portfolio
- **Reduced investment cost:** To obtain a target level of exposure to the underlying asset with less capital investment

Risk involved in trading CBBCs

Trading in CBBCs involves high risks and may not be suitable for all investors. Prior to engaging in CBBC trading, investors should refer to the listing documents of specific CBBCs to understand the relevant risks. Below are some key risk factors for reference:

Mandatory call event

A CBBC is subject to an early call by the issuer when the price of the underlying asset reaches the call price. A residual payment may be received depending on the CBBC category and the difference of underlying and strike price, although there are instances where the CBBC has no residual value.

Limited life

Unlike stocks, CBBCs have an expiry date. The actual lifespan of a CBBC may be even shorter if an MCE occurs before the predetermined expiry date, potentially rendering the CBBC worthless either before or at expiration.

Funding costs

Funding costs are charged upfront, covering the period from launch to the expiry date. When a CBBC is called, the funding costs for the entire duration will be lost. Funding costs may fluctuate over the life of the CBBC.

Credit risk

CBBCs are not secured by any assets from the issuer or guarantor (if any), nor are they supported by collateral. In the case of any failure to pay due to credit issues, it may result in total loss of initial investment.

Gearing risk

The value of CBBCs may fluctuate to a much greater extent than the underlying asset. In the worst cases, the value of CBBCs may fall to zero, resulting in a total loss of the initial investment.

Market forces

The prices of CBBCs are also affected by demand and supply, particularly the case when the existing issuance of a single series of CBBCs are almost sold out and when there is further issuance of that single series.

Investor suitability

CBBCs involve a high degree of risk and investors must be comfortable with that risk before investing, including the possibility of substantial losses up to the principal investment amount within a very short timeframe. Investors should also have a strong understanding of the product and should possess a high level of knowledge and/or sufficient trading experience in evaluating concepts such as valuation, associated risks, costs and returns.

Investors can trade CBBCs using a securities trading account as they are traded on the exchange under the same method as securities trading system. CBBCs clearing and settlement arrangements are also aligned with the securities market (T+2 cycle) framework (T+3 if expired on expiry date). Investors can access delayed and real-time market data of CBBCs within the securities market data section.

Understanding how CBBCs work

Bull CBBCs without MCE prior to expiry

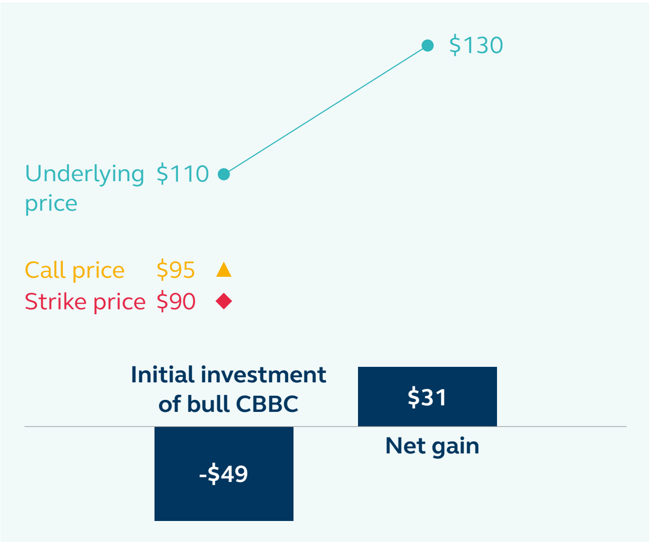
Investors who buy bull contracts typically have a bullish outlook on the price of the underlying asset.

Bull CBBC – illustrative purposes only

Underlying asset	Stock X
Spot price of stock X	$110
Call price	$95
Strike price	$90
Funding costs	$4.5
Entitlement ratio	50 to 1
Theoretical price at issuance*	$0.49
Number of units purchased	100
Initial investment	$49

* [($110 – $90) + $4.5] / 50 = $0.49

If no MCE occurs before the contract's expiry, the settlement amount for a category R bull contract will be the difference between the closing price of the underlying stock on the last trading day and the strike price of the CBBC, adjusted by the entitlement ratio and paid out in cash.



Net Profit = (Settlement amount – theoretical price at issuance) x Number of units purchased = [($130 – $90) / 50 – $0.49] x 100

Bear CBBCs with an MCE prior to expiry

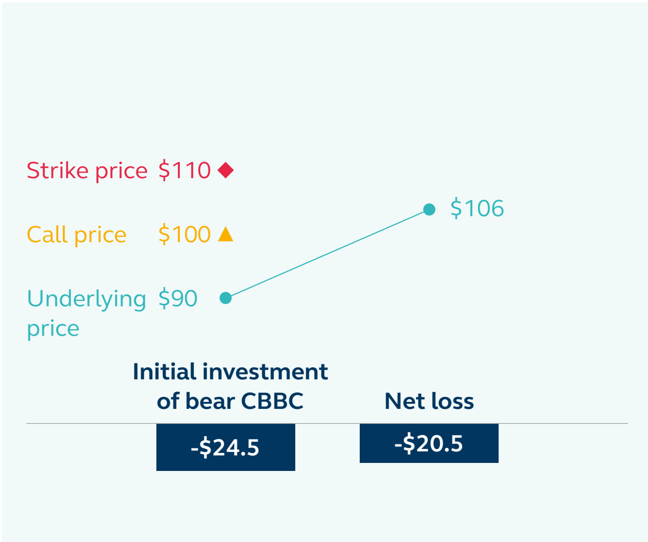
Investors who buy bear contracts typically have a bearish outlook on the price of the underlying asset.

Bear CBBC – illustrative purposes only

Underlying asset	Stock Y
Spot price of stock Y	$90
Call price	$100
Strike price	$110
Funding costs	$4.5
Entitlement ratio	100 to 1
Theoretical price at issuance*	$0.245
Number of units purchased	100
Initial investment	$24.5

* [($110 – $90) + $4.5] / 100 = $0.245

If an MCE occurs before expiry, the residual value for a category R bear contract will be the difference between the CBBC's strike price and the highest spot price of the underlying stock during the MCE valuation period (begins at the onset of a mandatory call event during a trading session and extends through the end of the following trading session), adjusted by the entitlement ratio and paid out in cash.



Net Loss = [Residual Value – theoretical price at issuance] x Number of units purchased = [($110 – $106) / 100 – $0.245] x 100

Factors affecting the price of CBBCs

The price of a CBBC generally depends on the price of the underlying asset. However, other factors also play a role during its term, such as likelihood of occurrence of MCE, funding costs, time remaining to expiry and more. Please refer to section 5 of the [FAQs on the Hong Kong listed structured products market] on HKEX's website for more information.

Can MCE be triggered outside of the continuous trading session?

CBBCs have different trading hours compared to their underlying stocks. They can be subject to MCE during the observation period, which spans the Pre-opening Session ("POS"), Continuous Trading Session ("CTS") and Closing Auction Session ("CAS"). Even though CBBCs can only be traded during the CTS – specifically from 9:30 am to 12:00 pm, and then from 1:00 pm to 4:00 pm – they can still be called if the underlying stock reaches the call price during the POS or CAS.

How does the pre-opening session and closing auction session impact the price of a bull CBBC?

CBBCs are not eligible for trading during CAS and close at 4:00 pm. In contrast, some underlying securities are eligible for trading during CAS, with the closing level determined after 4:10 pm (or 12:10 pm for half-day trading). Therefore, any movement in the closing price or level of the underlying securities during CAS is not reflected in the CBBCs' closing price, as investors cannot buy or sell related CBBCs during this time. This can result in a discrepancy between the CBBC price and the underlying stock price at market open. Please refer to the illustrative example.

		Underlying stock X	Stock X bull contract
T day	Price at the end of CTS (4:00 pm)	48.0	0.125 (closing price)
	Price at the end of CAS	47.7 (closing price)	–
T+1 day	Opening price	47.8	0.123
	Opening price vs. closing price of T day	+0.2%	-1.6%

How does leverage affects the price of CBBCs?

It is possible for two bull contracts, even when based on the same stock and sharing identical strike prices, call prices, and entitlement ratios, to exhibit different percentages in price change. This is illustrated in the following example.

The price movement in dollar terms for two bull contracts based on the same stock and the same contract terms are the same (+$0.064). As bull contract B has a lower price ($0.15) compared to bull contract A ($0.2), its leverage is naturally higher. Hence, when the underlying stock's price increases by 10%, the percentage change in price for bull contract B will surpass that of bull contract A.

	Stock X bull contract A	Stock X bull contract B
Bull contract price	$0.2	$0.15
Underlying price	$321.6	$321.6
Entitlement ratio	500:1	500:1
Strike price	$257.2	$257.2
Call price	$260	$260
Gearing	3.22x	4.29x
If underlying price increases by 10%		
Bull contract price movement	+$0.064	+$0.064
Bull contract price change %	+32.2%	+42.9%

Why did a bull contract's price decrease by HK$0.015 while the underlying stock only decreased by HK$0.01, despite the entitlement ratio being 1, when the stock was trading close to the call price?

When the underlying stock's price is trading close to the call price, the CBBC price may become more volatile, resulting in disproportionate change compared to the underlying stock's price. Additionally, the number of outstanding CBBCs in the market can influence this effect. A higher number of outstanding CBBCs can create more selling pressure as the underlying price approaches the call price, potentially exacerbating the volatility of the CBBC price.

Trading CBBCs on HKEX

In Hong Kong, all CBBCs are settled in cash when exercised at expiry. This means that instead of the physical delivery of the underlying asset, the CBBC holder receives or pays a cash amount based on the difference between the settlement price of the underlying asset and the strike price of the CBBC.

The stock short name of CBBCs indicates some basic information about the product only. While the naming conventions generally apply, there may be exceptions depending on the circumstances. Investors should refer to the relevant listing documents of the product and consult their brokers or investment advisers before trading.

Naming convention of CBBCs (English stock short name)

Z	Z	#	Q	Q	Q	Q	Q	N	C	Y	Y	M	M	A

or (traded in Renminbi)

Z	Z	#	Q	Q	Q	Q	Q	C	Y	Y	M	M	A	*

ZZ	Issuer's short name
#	CBBC indicator
Q	Up to 5 characters representing name of the underlying asset
N	N = No residual value; R = With residual value
C	C = Bull contract; P = Bear contract
YYMM	Expiry year and month
A	Serial number for additional issues by the same issuer on same underlying asset with same expiry year and month (A, B, C, …, Z and 1, 2, …, 9)
*****	Indicator for CBBCs traded in Renminbi ("RMB")

For example

A	B	#	H	S	I	R	C	2	5	0	2	G
Issuer		Product type	Underlying asset			Category	CBBC type	Expiry year and month				Serial number

Each CBBC is backed by one designated liquidity provider responsible for maintaining market liquidity. Their obligations are outlined in the listing documents, with certain conditions allowing for exemptions from these obligations. For more information about liquidity provision, please refer to section 4 of the FAQ on the Structured Product market in Hong Kong on HKEX's website.

Useful resources

HKEX website: Structured Product Overview
CBBCs FAQ: FAQ

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