FACTSHEET

大连商品交易所
DALIAN COMMODITY EXCHANGE

PVC Futures
PVC Options

Dalian Commodity Exchange (DCE) launched Polyvinyl Chloride (PVC) futures in 2009 and introduced PVC options in 2020. In 2025, these instruments were made accessible to Qualified Foreign Investors (QFI). Since listing, DCE PVC futures and options have operated in a stable and active manner, becoming essential tools for risk management and hedging for enterprises within the relevant industries.

Supply and Demand

Currently, the global annual production capacity of polyvinyl chloride (PVC) has exceeded 60 million tons. China is the largest producer and consumer of PVC, with an annual production capacity of over 27 million tons, accounting for more than 40% of the global total. The major PVC production regions worldwide include China, Japan, the United States, and India. Within China, PVC production capacity is primarily concentrated in regions such as Inner Mongolia, Xinjiang, Shandong, and Shaanxi, while the main consumption areas are the Yangtze River Delta and the Pearl River Delta.

Main Applications

Polyvinyl chloride (PVC) is a non-toxic, odorless white powder characterized by excellent plasticity. It is primarily used in the construction of doors and windows, drainage piping, electrical wiring, and cable insulation, among other applications.

Key Price Influence Factors

Upstream Raw Material

Polyvinyl chloride (PVC) can be produced through various processes, including the calcium carbide method and the ethylene-based method. Currently, the calcium carbide method remains the dominant production process in China, whereas the ethylene-based method, which is derived from crude oil, is more prevalent internationally. Consequently, the prices of raw materials such as coal, coke, electricity, calcium carbide, crude oil, and ethylene significantly influence the production cost and price trends of PVC.

For the calcium carbide method, China's industrial electricity supply is still predominantly generated by thermal power, and coke is mainly derived from coal. Producing one ton of PVC through this method typically requires approximately 7,000 kilowatt-hours of electricity and 3 tons of coal. Energy costs account for over 50% of total production costs; therefore, fluctuations in the prices of electricity, coal, and coke have a substantial impact on the overall cost of PVC production.

For the ethylene-based method, the prices of crude oil and ethylene directly affect the manufacturing cost of PVC. In addition, the price of raw salt, as one of the feedstocks, can influence PVC prices through its impact on the value of chlorine, further contributing to cost variations.

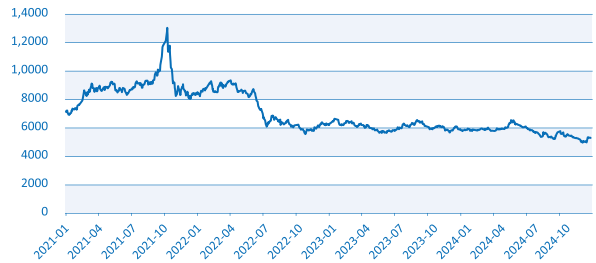
Downstream Demand

From an industry life cycle perspective, the polyvinyl chloride (PVC) sector has entered a mature stage, characterized by a pronounced buyer's market. As a result, downstream demand plays a particularly critical role in influencing PVC prices. The construction industry, especially the production of pipes and related materials, represents the largest consumption sector for PVC. Therefore, the performance and development trends of the real estate industry exert a significant impact on PVC pricing.

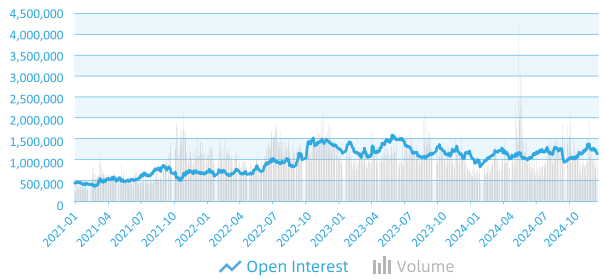
In addition to profiles and piping, PVC is also widely used in the production of plastic containers, toys, packaging for various products, and everyday consumer goods. Consequently, the export performance and demand for such products also influence PVC prices to a certain extent.

Trading Statistics

PVC Futures Daily Settlement Price (CNY/MT)



Volume and Open Interest of PVC Futures (in number of contracts)



Contract Specifications

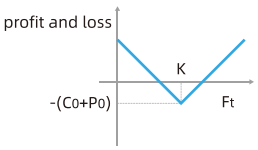
PVC Futures	
Product	Polyvinyl Chloride
Trading Unit	5 MT/ Lot
Price Quote Unit	CNY/MT
Minimum Tick Size	1 CNY/MT
Daily Price Limit Range	4% of last settlement price
Contract Months	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec
Trading Hours	9:00 - 11:30 a.m., 1:30 - 3:00 p.m., Beijing Time, and other trading hours announced by DCE
Last Trading Day	The 10th trading day of the contract month
Last Delivery Day	The 3rd trading day after the last trading day
Deliverable Grades	The SG5 Grade I products and high grade products satisfying the quality standards of the Suspension Polyvinyl Chloride Resins of General Purpose (GB/T 5761-200618) (no requirements for the powder flowability)
Delivery Point	The delivery warehouses of Polyvinyl Chloride designated by DCE
Minimum Trading Margin	5% of the contract value
Delivery Form	Physical delivery
Ticker Symbol	V

PVC Options	
Underlying Instrument	Polyvinyl chloride futures contract
Contract Type	Call option, put option
Trading Unit	One lot (5 MT) of polyvinyl chloride futures contract
Price Quote Unit	CNY/ MT
Minimum Tick Size	0.5 CNY/MT
Daily Price Limit Range	The same as the daily price limit range of underlying futures contract
Contract Months	January, February, March, April, May, June, July, August, September, October, November, December
Trading Hours	9:00 - 11:30 a.m., 1:30 - 3:00 p.m., Beijing Time, and other trading hours as announced by DCE
Last Trading Day	The 12th trading day of the month immediately preceding the delivery month of the underlying futures contract, DCE may adjust the last trading day according to national holidays
Expiration Date	The same as the last trading day
Exercise Price	The exercise price shall be in the range of the settlement price of the underlying futures on the immediately previous trading day ± (1.5 × daily price limit range of the same day) The option contracts corresponding to the immediate six calendar months: If exercise price ≤ 5,000 CNY/MT, exercise price interval = 50 CNY/MT; If 5,000 CNY/MT < exercise price ≤ 10,000 CNY/MT, exercise price interval = 100 CNY/MT; If exercise price > 10,000 CNY/MT, exercise price interval = 200 CNY/MT. The option contracts corresponding to the seventh and subsequent calendar months: If exercise price ≤ 5,000 CNY/MT, exercise price interval = 100 CNY/MT; If 5,000 CNY/MT < exercise price ≤ 10,000 CNY/MT , exercise price interval = 200 CNY/MT; If exercise price > 10,000 CNY/MT, exercise price interval = 400 CNY/MT.
Exercise Style	American style. The options buyer can apply to exercise the options in the trading hours of any trading day prior to the expiration date, and before 3:30 pm on the expiration date.
Contract Symbol	Call option：V - Contract Month - C - Exercise Price
	Put option：V - Contract Month - P - Exercise Price

Establishing Flexible Trading Strategies Through Futures and Options

Investors could establish flexible trading strategies through combining various futures and options contracts, which would better help with price risk mitigation. Meanwhile, DCE portfolio margin system already supported multiple trading strategies including straddles, strangles, spreads, etc.

Long Straddle



Investors could establish this strategy through buying one call option (premium= C_0) and one put option (premium = P_0) which are based on the same underlying futures contract and have the same exercise price (K).

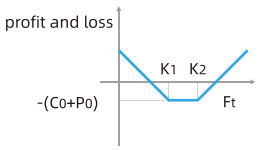
profit and loss：$max(F_t-K,0)-C_0+max(K-F_t)-P_0$

maximum profit：unlimited

maximum loss：$-(C_0+P_0)$

break-even price：$K+(C_0+P_0)$and $K-(C_0+P_0)$

Long Strangle



Investors could establish this strategy through buying one put (premium = P_0) and one call option (premium= C_0) which are based on the same underlying futures contract and have different exercise prices. The exercise price for the put option is K_1 while that for the call option is K_2.

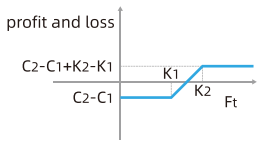
profit and loss：$max(F_t-K_2,0)+max(K_1-F_t,0)-C_0-P_0$

maximum profit：unlimited

maximum loss：$-(C_0+P_0)$

break-even price：$K_1-(C_0+P_0)$and $K_2+(C_0+P_0)$

Bull Call Spread



Investors could establish the bull spread through buying one call option (premium = C_1) with a relatively low strike price (K_1) while selling one call option (premium= C_2) with a relatively high strike price K_2, both options are based on the same underlying futures contract.

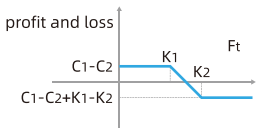
profit and loss：$max(F_t-K_1,0)-C_1+C_2-max(F_t-K_2,0)$

maximum profit：$C_2-C_1+K_2-K_1$

maximum loss：C_2-C_1

break-even price：$K_1+C_1-C_2$

Bear Call Spread



Investors could establish bear spread strategy through selling one call option (premium=C_1) with a relatively low exercise price (K_1) and buying one call option (premium=C_2) with a relatively high exercise price (K_2), both options should be based on the same underlying futures contract.

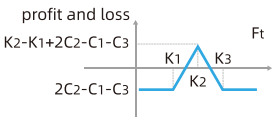
profit and loss：$C_1-C_2-max(F_t-K_1,0)+max(F_t-K_2,0)$

maximum profit：C_1-C_2

maximum loss：$C_1-C_2+K_1-K_2$

break-even price：$C_1-C_2+K_1$

Long Butterfly Spread



Investors could establish long butterfly spreads through buying one call option (premium=C_1) with low strike price (K_1), buying one call option (premium=C_3) with high strike price (K_3) and simultaneously selling 2 call options (premium=C_2) with middle strike price (K_2).

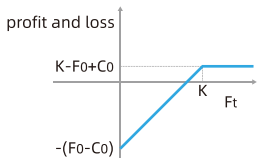
profit and loss：$max(F_t-K_1,0)+max(F_t-K_3,0)-2max(F_t-K_2,0)+2C_2-C_1-C_3$

maximum profit：$K_2-K_1+2C_2-C_1-C_3$

maximum loss：$2C_2-C_1-C_3$

break-even price：$K_1+(C_1+C_3-2C_2)$and $K_3-(C_1+C_3-2C_2)$

Covered Call



Investors could establish the covered call strategy via buying one futures contract (price = F_0) and simultaneously selling one call option (premium=C_0) based on the corresponding futures contract.

profit and loss：$(F_t-F_0)+C_0-max(F_t-K,0)$

maximum profit：$K-F_0+C_0$

maximum loss：$-(F_0-C_0)$

break-even price：F_0-C_0

For more information, please visit our official website **www.dce.com.cn**