



# IvyDB Asia

## Historical option pricing data, volatility, and analytics.

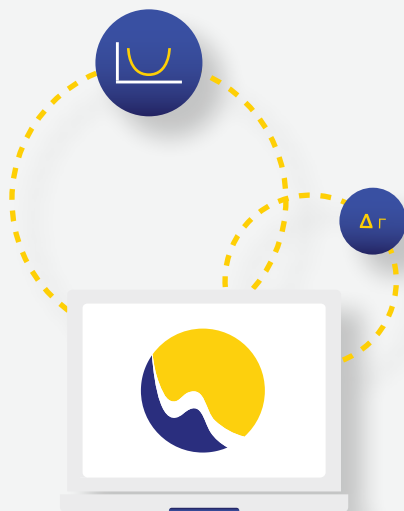
The first comprehensive database of historical option prices, implied volatility, and sensitivity calculations for the major listed Asian markets. Similar in design to our industry-leading IvyDB US database, IvyDB Asia provides data of the highest obtainable quality. IvyDB Asia comes ready to be used in empirical research and econometric studies as well as in development and testing of derivatives trading strategies.

### Updated daily.

IvyDB Asia provides last traded prices or last available bid and ask quotes for each option, every day. We time-synchronize those prices with the security price for accurate implied volatility and greeks calculations. We also publish daily settlement prices and their implied volatilities. Our own dividend projections ensure reliable inputs into our models. You will also receive information on historical distributions and corporate actions such as dividend payments, splits, mergers, and name changes.

#### Coverage:

- Nearly 900 optionable securities (equities and indices) from Australian, Hong Kong, Indian, Japanese, Korean and Taiwanese exchanges
- Historical data and daily updates beginning January 2004 (start date varies per security)



## Effortless software integration.



- Arranged as a set of flat text files, organized in a relational structure
- Easily incorporated into database management systems such as Microsoft SQL Server
- Access the data via MS Excel, MS Access, SAP Crystal Reports, MATLAB, or the programming language of your choice
- Nightly downloads of zipped files via FTP
- Corrections issued through patches

## Smoothed daily volatility surfaces.



In addition to the daily implied volatility values for each listed option, we also publish a smoothed and interpolated volatility surface for each security, each available currency, every day. You may now directly compute skew, term structure, and correlations.

- Expirations: 30, 60, 91, 122, 152, 182, 273, 365, 547, and 730 calendar days
- Deltas: 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, and 0.80 (negative deltas for puts)
- Implied strikes and premium

### Calculations and methodologies:

- Interest rate is calculated from a collection of continuously-compounded zero-coupon interest rates at various maturities for different currencies, collectively referred to as the zero curve
- European-style options are priced according to the Black-Scholes model
- American-style options are priced using a proprietary pricing algorithm that is based on the industry-standard Cox-Ross-Rubinstein model
- Dividend projections for equities use a proprietary predictive algorithm to project discrete payment dates, and interim and final dividends are also handled. For indices, continuous dividend payment is assumed