Options pricing using OBV method

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# Difference between Black-Scholes theory and ObV theory

Mr. Black and Mr. Scholes assume Winner process and as a consequence Normal distribution of returns.
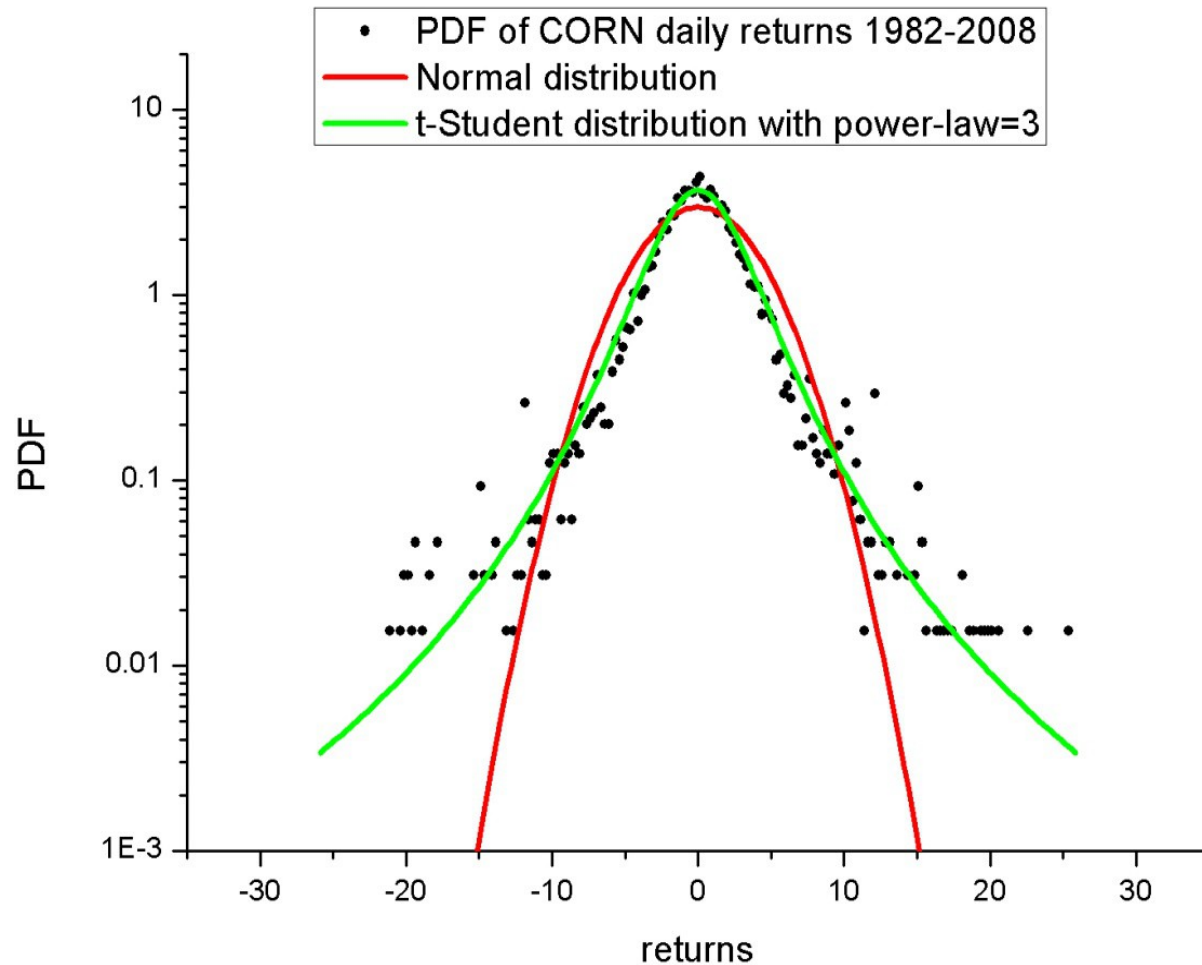We assume more general form of Winner process and as a consequence Power-Law Distribution.

In next slides we show difference in used distributions.

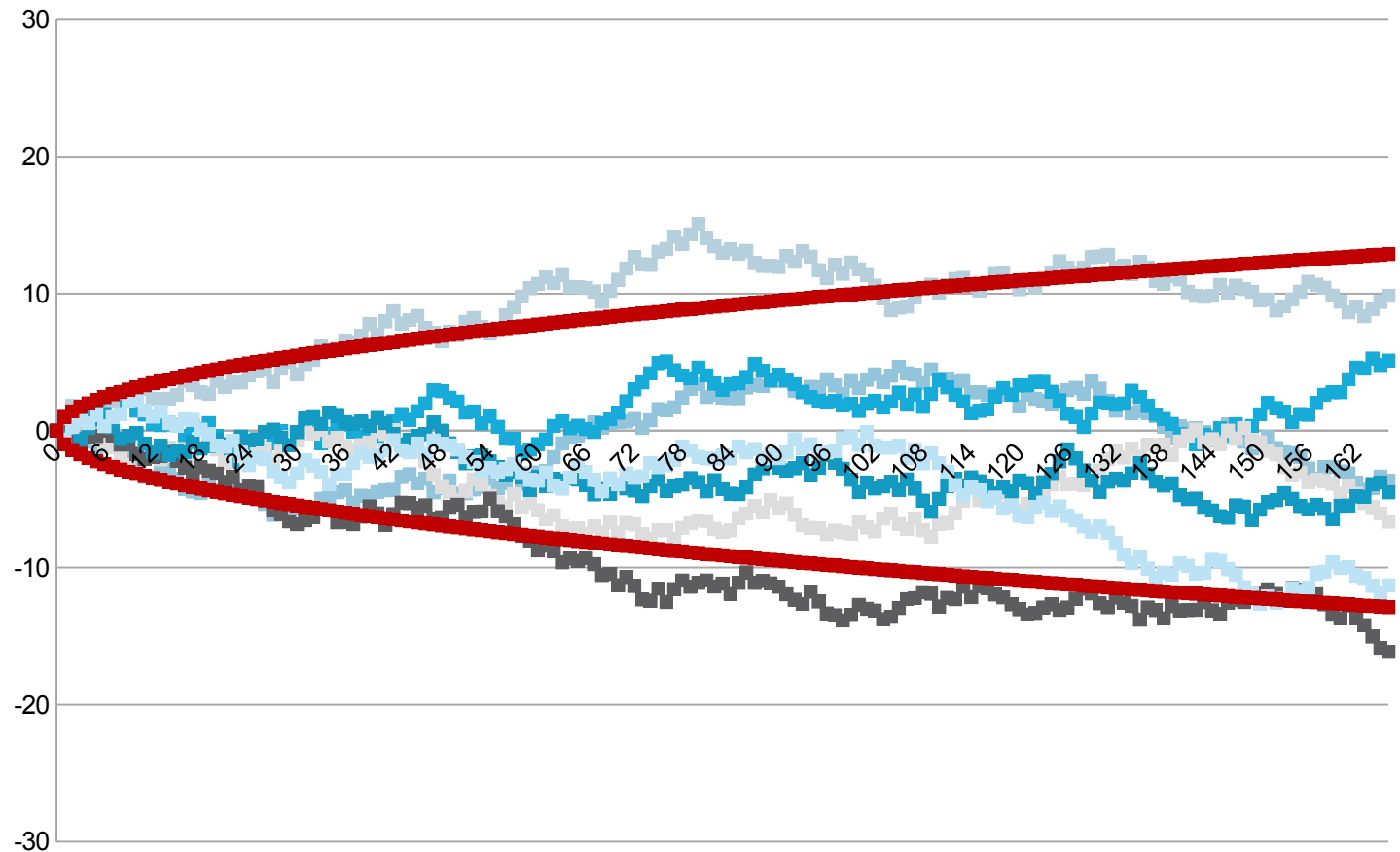# Probability Density Distributions – Normal Distribution

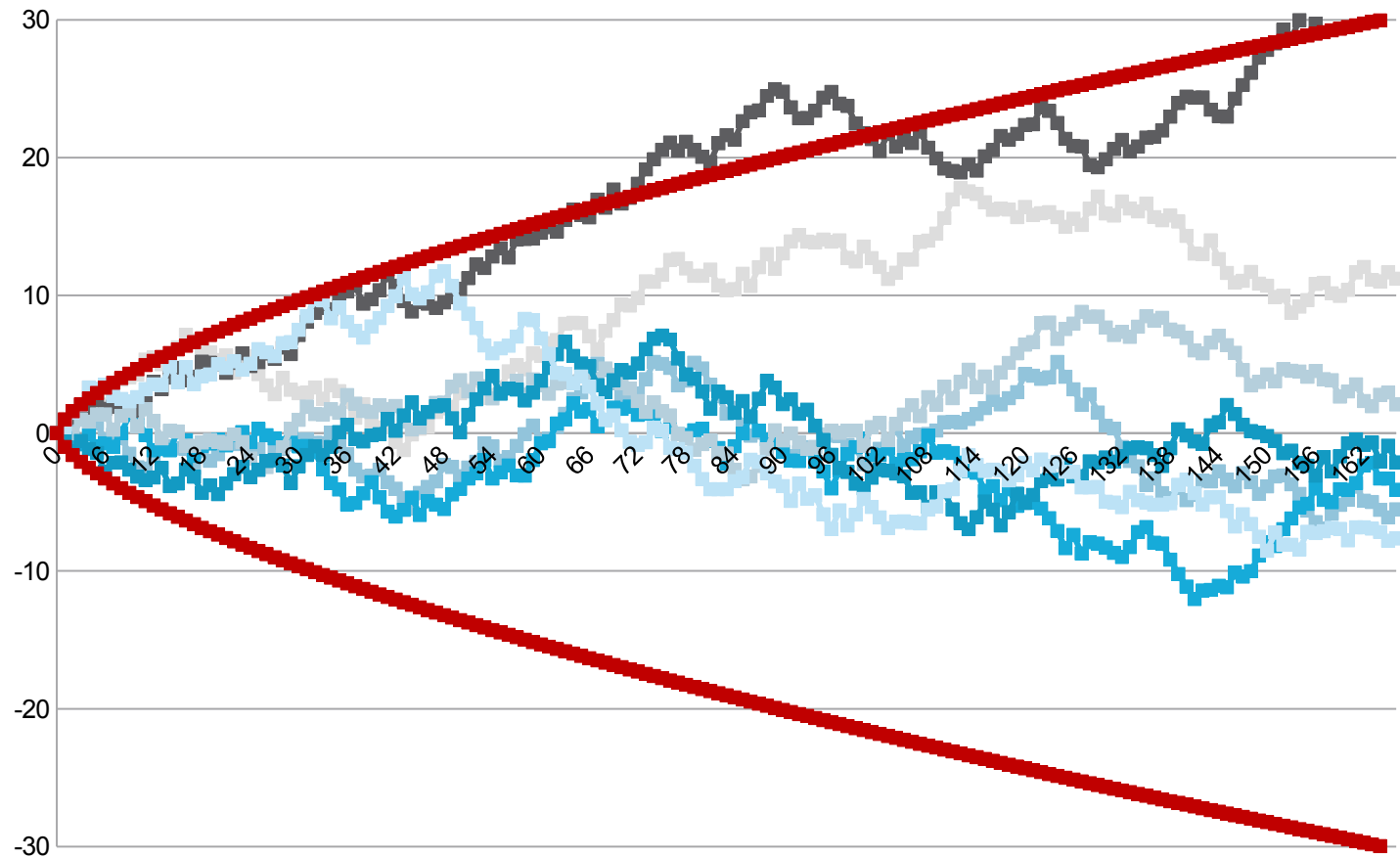# Probability Density Distributions – Power-Law Distribution
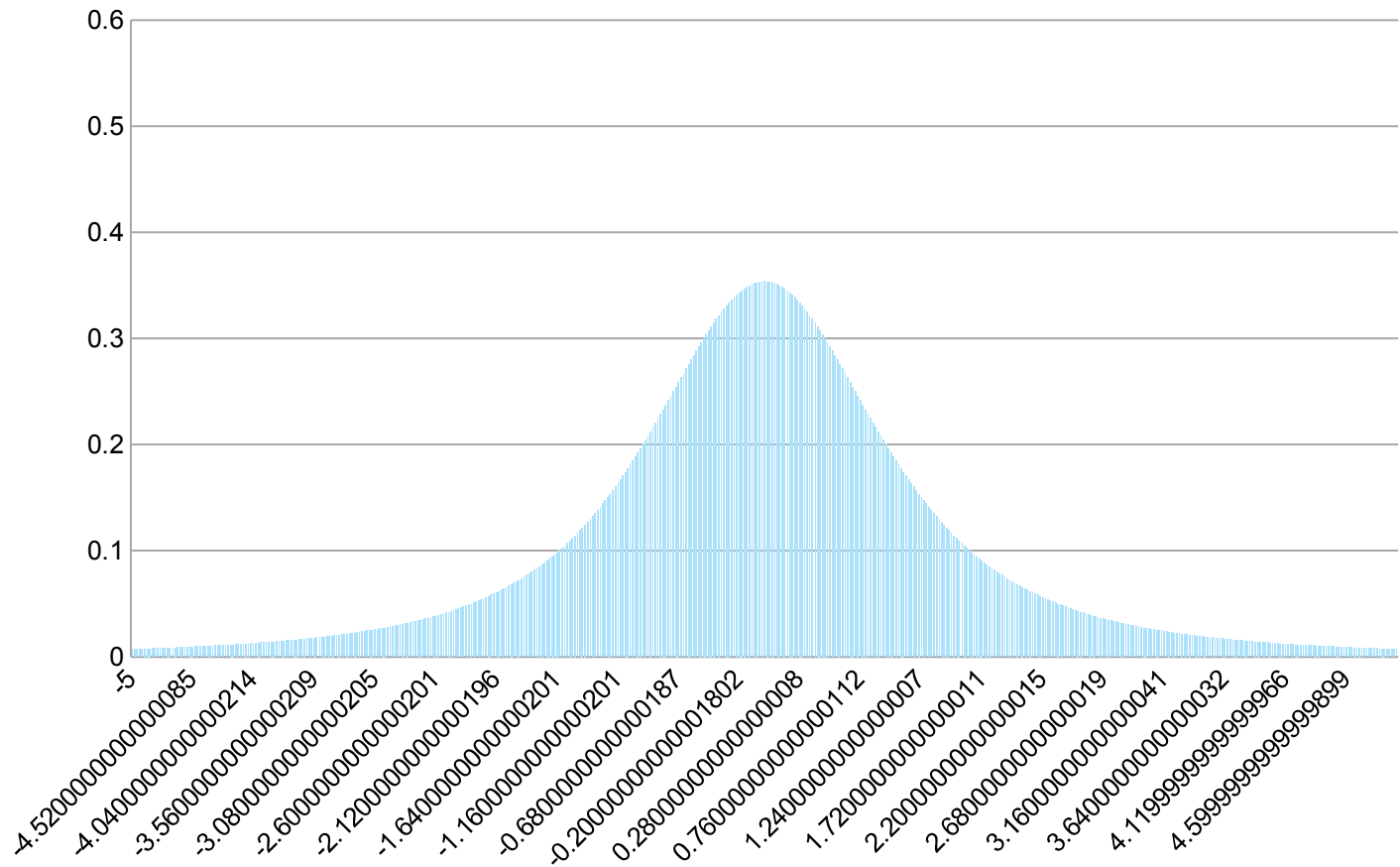
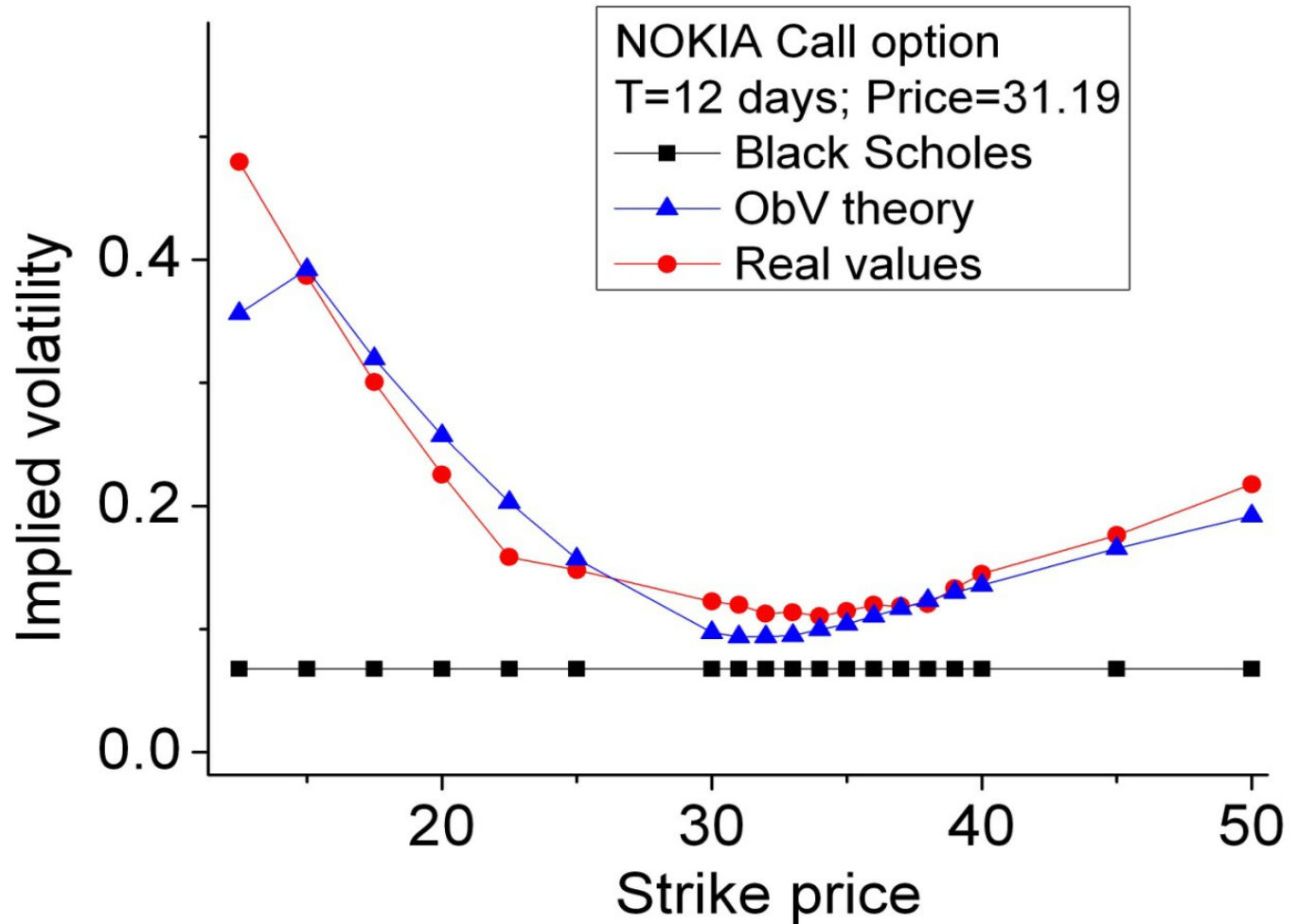# Probability Density Function (PDF) – fit to reality

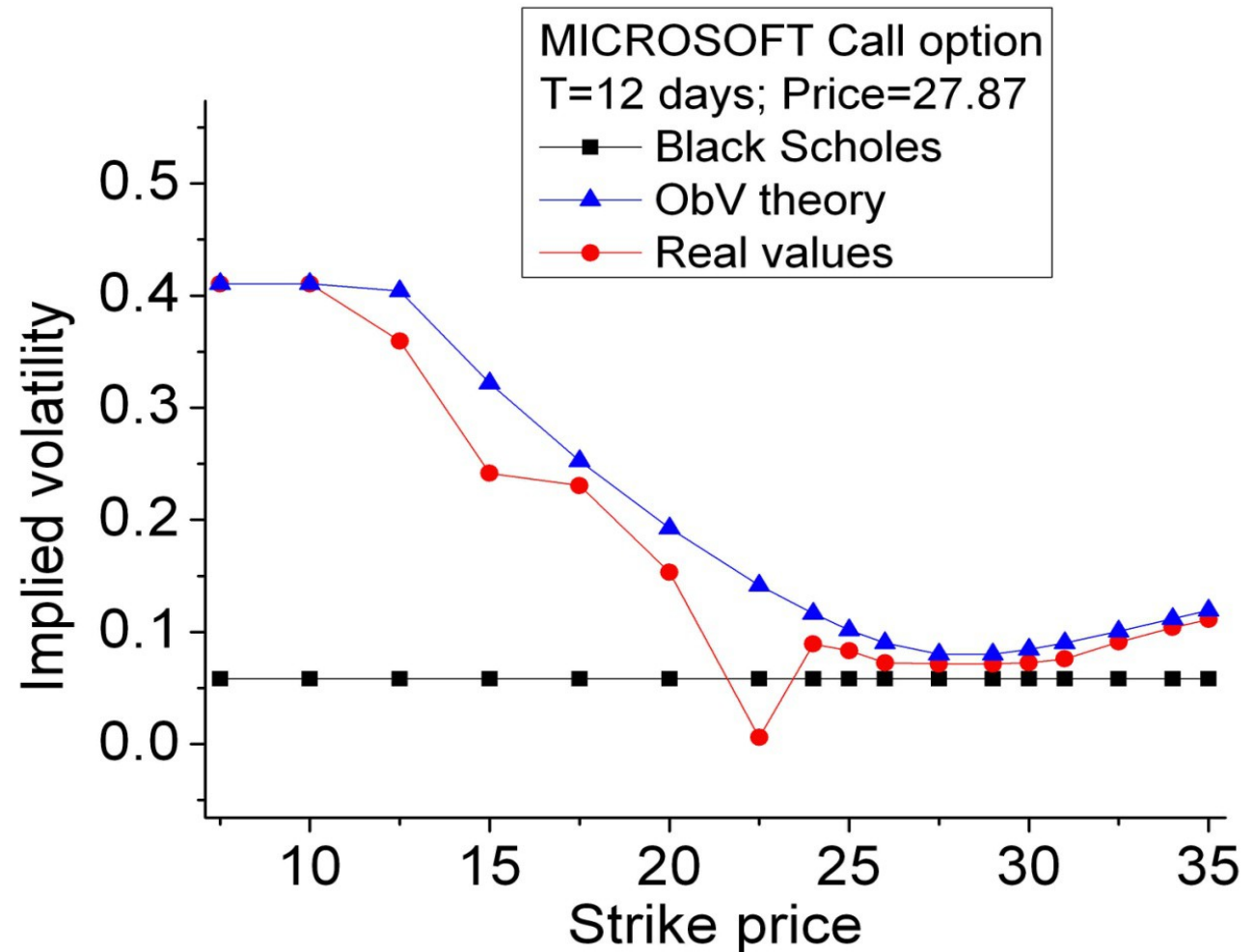# Black-Scholes theory – behaviour of probable future prices in time

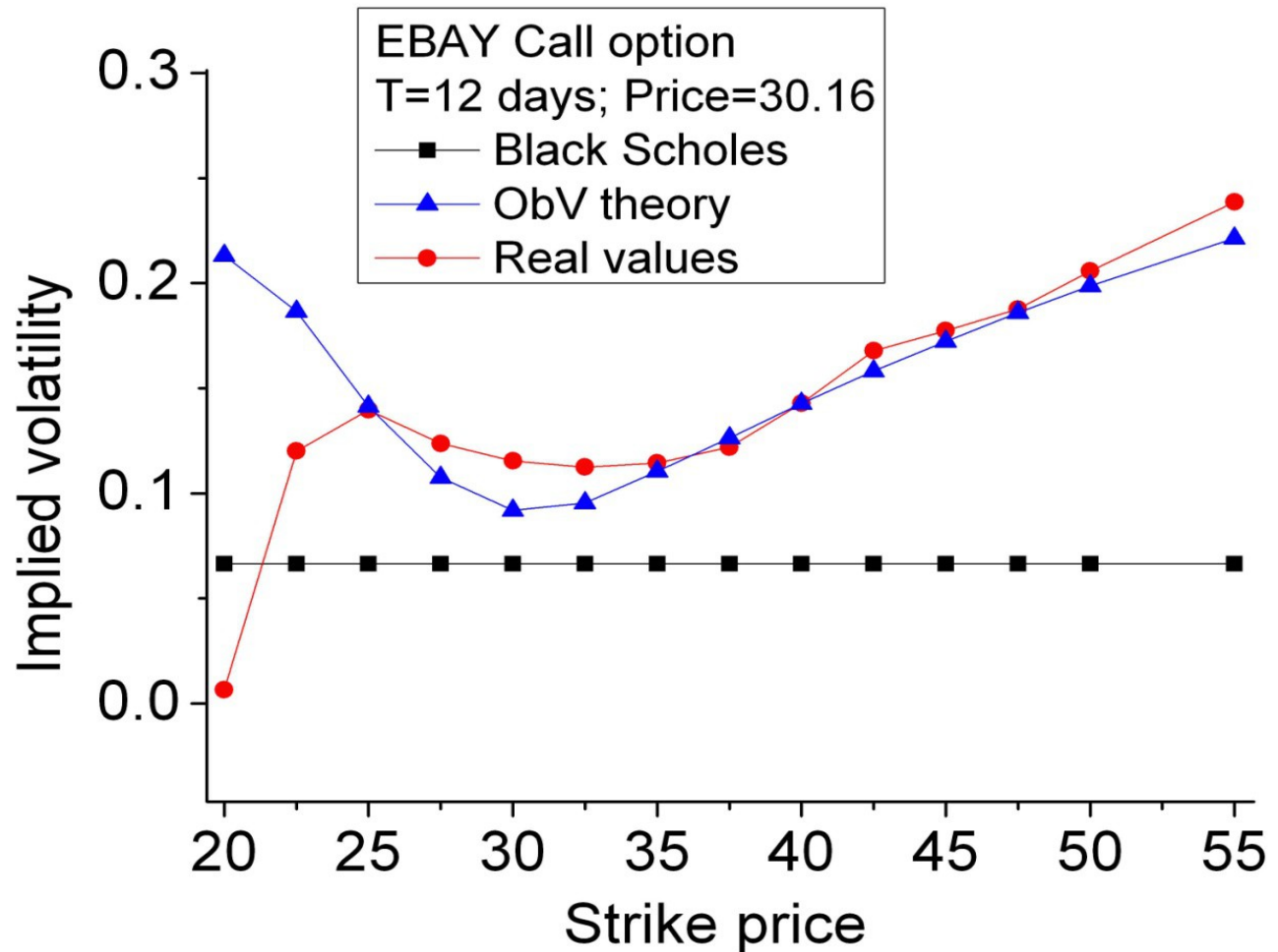# ObV theory – behaviour of probable future prices in time
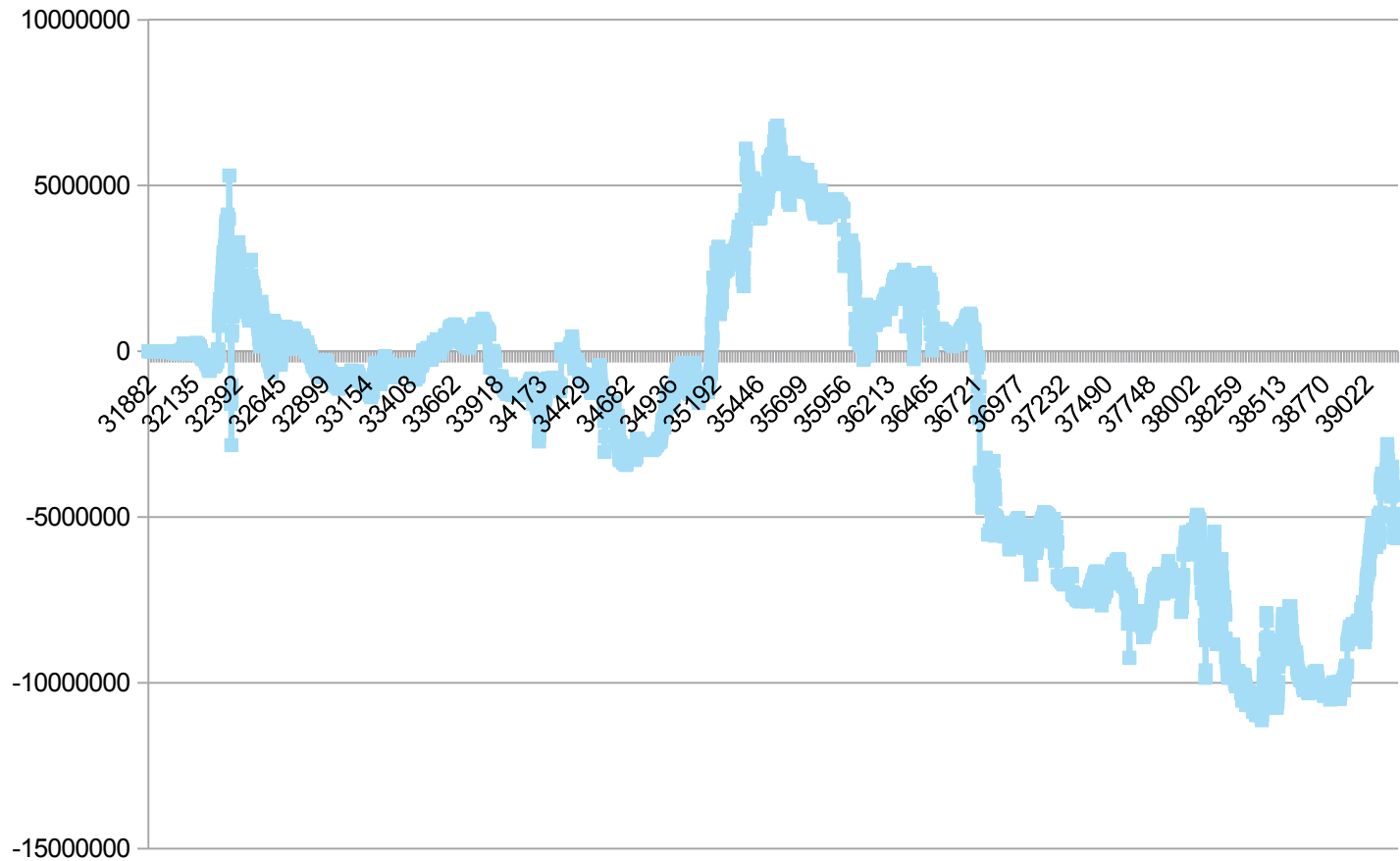
ObV options pricing – Volatility Smile

NOKIA Call option
T=12 days; Price=31.19
- Black Scholes
- ObV theory
- Real values

ObV options pricing – Volatility Smile

ObV options pricing – Volatility Smile

EBAY Call option
T=12 days; Price=30.16
Black Scholes
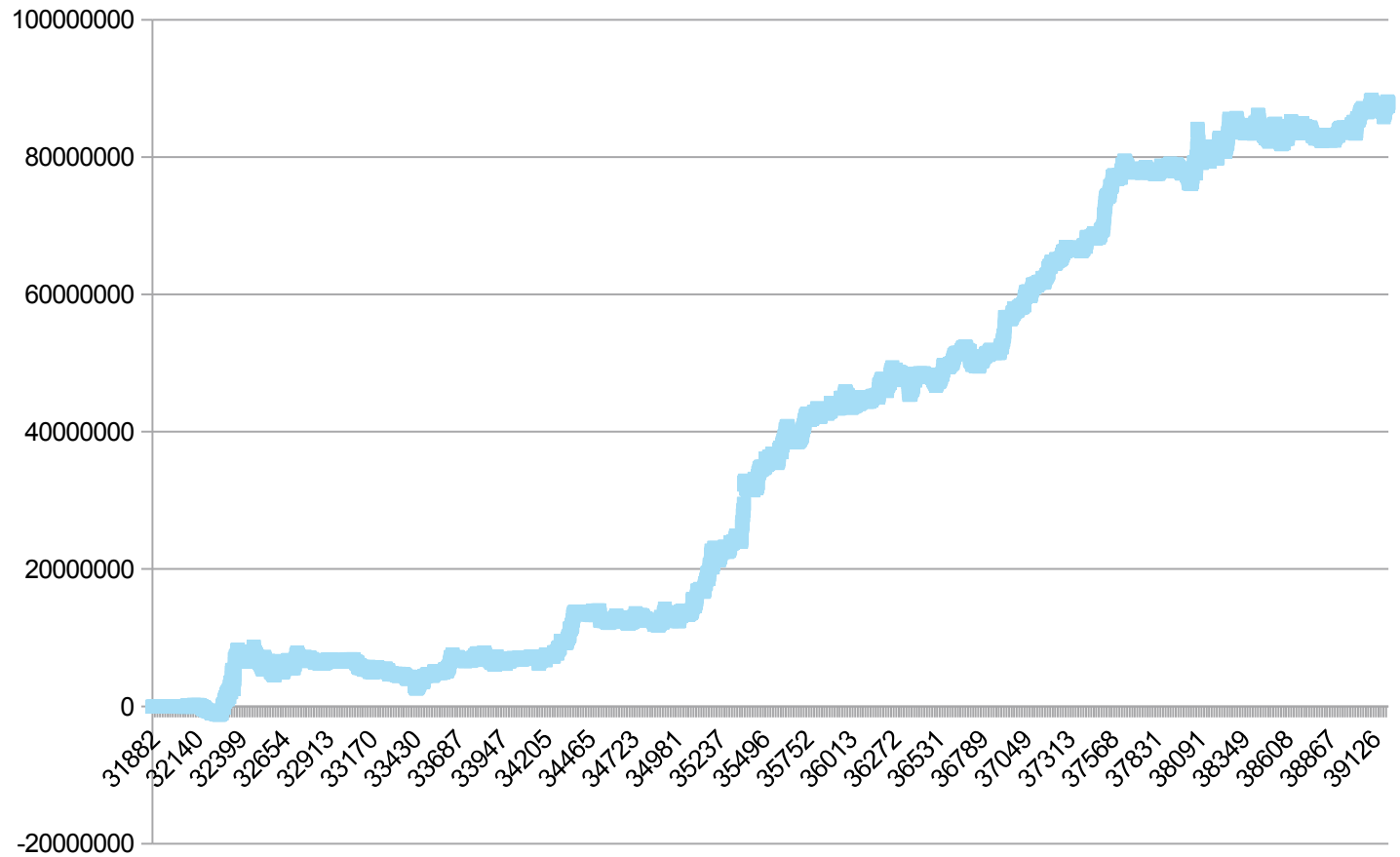ObV theory
Real values

Result of **Delta Hedge** Strategy based on Black-Scholes Model

Result of **Delta Hedge** Strategy based on ObV Model

Result of **Delta Hedge** Strategy based on ObV Model

Results of backtest
http://www.wonabru.com/options/backtest

Thank you.
Further details http://www.wonabru.com