



## How to use historical volatility of coffee prices like Arabica and Robusta to estimate your cashflows

### Arabica and Robusta

As a category manager you are aware that volatility of coffee prices is high. But did you know that there is a difference in volatility of Arabica versus Robusta? Recent volatility of Arabica is around 30% whilst Robusta is trading around 20%.

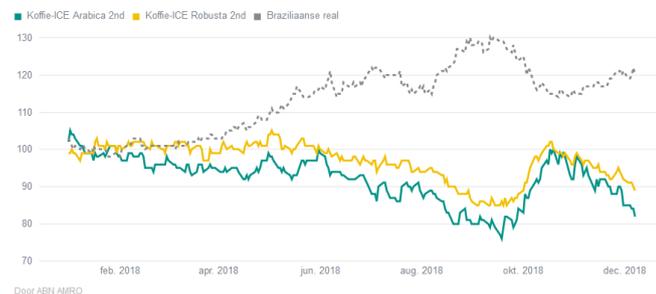


Figure 1 Price development coffee - Source ABN AMRO

Suppose you consume in 2019 an annual volume of 10,000MT (= Lbs 22,046,200) of both flavours. Your annual costs based upon current market prices would be around EUR 19.5 million for Arabica plus EUR 14.5 for Robusta. Total cashflow based upon current market prices: EUR 34.0 million

### What is the risk

If you do not hedge this “floating priced” position, your cashflow@risk (=CfaR) for 2019 can be presented as the potential cash flow difference between:

- Volume \* (current market prices versus simulated market prices)
- KYOS calculated the current CfaR at EUR 7.5 million

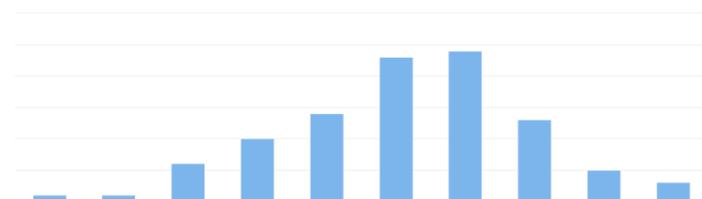


Figure 2 Distribution of cash flows - Source KYOS

Earnings at Risk   **Cash-flow at Risk**   Volumes at Risk

Cash-flow at Risk Summary	Currency	95% at Risk
Total	EUR	7 544 254

For your cash flow this means that:

- With 95% certainty your cashflow will be lower than EUR 41.5 million
- Be aware that EUR 41.5 million is not the maximum

### Short term versus Long term

KYOS software is used globally by procurement teams to calculate short- and long-term risks.

Short term risks can be calculated using stress tests or by using Value@Risk (=VaR) calculations. VaR can be calculated using different modelling techniques and depending on the underlying commodity, clients should apply a different technique.

### KYOS adds value

To help you understand these price risks and improve your cash flow prediction, KYOS has developed risk management software to effectively manage your commodity portfolio. This software is tailor-made to reflect your specific requirements. The KYOS commodity portfolio & risk management system captures years of industrial experience in managing budgets, commodity contracts, physical and/or financial hedging, market price analysis including sophisticated cash flow forecasting.

### For whom

Are you still using different spreadsheets to calculate your numbers? Whether you are in Procurement, Sales, Finance or Treasury – every department needs good, dependable figures. We at KYOS are confident a good cash flow forecast will make your life easier. Please do not hesitate to contact us so we can discuss how we can help you save time – and probably money too.

Interested to learn more? Contact us at [info@kyos.com](mailto:info@kyos.com)