

Executive Summary

Problem

An autocall feature causes the immediate termination and repayment of the product if a pre-defined condition is met. Such a feature can be attached to common payout structures with relative ease which partly accounts for their popularity. Autocallable structured products have constantly gained popularity over recent years and today account for a sizable share of the structured products market (Guillaume (2015)). In many cases, investors seem attracted by autocallable structures because they tend to pay a higher coupon than an otherwise identical product without this feature (Sherif (2019)).

Given their popularity, there is surprisingly little literature trying to quantify the impact of an autocall feature on a product's value or maturity. Conversely, most literature is concerned with the pricing of such structures per-se but sheds little if any light on the difference an autocall feature makes. A notable exception is Deng et al. (2011) but even this paper only examines a single product and primarily focuses on the technicalities of their finite-difference pricing model.

Method

This paper attempts to close this gap by performing a cross-sectional study devoted entirely to the impact of autocall features on valuation, expected maturity and risk. Our sample consists of thousands of actual structured products outstanding as of the end of March, April or May 2019. We will first explore the various payout types contained in this dataset in chapter 2. We shall then establish the value of the autocall feature both as a fraction of notional as well as in terms of fair coupon. Chapter 4 will then focus on the probability of an autocall event and the closely related topic of expected maturity. The findings obtained thus far are then combined for an analysis in the return-maturity space. We then turn to the topic of risk where we look at the impact on the popular risk measures Value-at-Risk and Expected Shortfall. We finally sum up our findings and suggest areas for future research in the final chapter 7.