



University of
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The Mispricing in the Structured Products Market - An Empirical Analysis for Switzerland

MASTER'S THESIS

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Executive Summary

In this thesis I examine the mispricing in the secondary market for Swiss structured products. Liquidity in the secondary market is mainly provided by the issuers themselves. This gives incentives for issuers to set prices for their own benefits. Since structured products provide the possibility to invest in leveraged products with low capital requirements, they mainly attract retail investors. Due to their complex structure which require profound knowledge of option pricing models, retail investors who often lack financial knowledge, are not able to evaluate the fairness of quoted prices. In addition, it is not possible to sell structured products short. This offers issuers the possibility to sell their products with a premium.

To examine if issuers exploit their power to price products at their own discretion, I analyse the last best bid offered on the SIX structured products exchange of 1'927 products from four different product types over the period from January 2021 until June 2022. The quoted price is compared to a theoretical fair model price. The model price is calculated by replicating the payoff structure with investments in basic components such as stocks, bonds or options. For products that incorporate an option component where no available option is traded on EUREX, the price is calculated using the Black-Scholes model with implied volatilities. I find that on average structured products are overpriced compared to the theoretical fair value. Warrants incorporate on average a premium of 19.65%, mini-futures 3.12% and warrants with knock-out 5.35%. Discount certificates are on average underpriced by 2.90%.

In a next step I analyze the influence of certain product characteristics on the degree of mispricing. I find statistical evidence that single stock underlyings incorporate a higher premium compared to index underlyings. Showing that the type of underlying has an effect on issuers pricing strategies. Further can be shown that competition lowers the amount of the premium. Lastly, the complexity to replicate a structured product type has an influence on the incorporated premium on the secondary market. The more complex a product type, the higher the mispricing. This finding holds only within the same product category.

In a last step, I test if the life cycle hypothesis from Stoimenov and Wilkens (2005) can be observed in the Swiss market. The life cycle hypothesis says that the premium decreases with approaching

maturity. This is done by issuers to convert the premium they incorporated in the pricing after issuance to profit when they buy back products on the market from investors. I find evidence that issuers in the Swiss market for structured products follow this pricing strategy.