

Optimizing the Price of Consumer Credit

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Lenders have developed increasingly sophisticated approaches to estimating the risk of consumer credit. However, they have generally been less sophisticated in understanding how their customers respond to the prices of their product offerings. This presentation describes recent experience in developing and applying an approach for optimizing consumer credit. The approach is based on estimating the price-sensitivity of different categories of customer for different credit products and utilizing that information to determine the set of prices that maximize total contribution (typically measured as economic value added) subject to various business constraints. The problem is made more complex by the need to incorporate the interaction between pricing and risk – especially the need to quantify the phenomenon of adverse selection.

The talk will outline the underlying methodologies used to optimize the price of consumer credit, discuss the differences in pricing among different types of credit market, and describe results from two real-world applications: unsecured consumer loans in the UK and sub-prime auto lending in the US.