

## Title: On the Determination of Capital Charges in a Discounted Cash Flow Model

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**Abstract:** We derive formulas for calculating the premiums that should be charged on policies in a discounted cash flow model with tax reserves and required assets that are determined by regulation. We also determine the unique division of required assets into “reserves” and “capital” that allows the product profitability to be correctly evaluated. That is, the profit after capital charges is zero if the product achieves the return assumed in pricing. We illustrate the concepts using whole life insurance and guaranteed minimum death benefit examples.