

Bank	The bank is the Luxembourg subsidiary of an international bank with European roots. The primary focus of the bank is private banking and corporate lending.
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Project Name	Implementation of a stress test in order to assess the interest rate risk arising from non-trading book activities
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Project Start Date	August 2008	Project End Date	August 2008
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Industry	<input checked="" type="checkbox"/> Commercial banking	<input type="checkbox"/> Insurance
	<input type="checkbox"/> Investment banking	
	<input checked="" type="checkbox"/> Private banking	<input type="checkbox"/> Asset and wealth management
	<input type="checkbox"/> Retail banking	
		<input type="checkbox"/> Corporate

Category of Service	<input type="checkbox"/> Performance measurement and monitoring	<input checked="" type="checkbox"/> Regulatory compliance and reporting
	<input type="checkbox"/> Portfolio risk management	<input type="checkbox"/> Business process improvement
	<input checked="" type="checkbox"/> Specialised risks	<input type="checkbox"/> Training and people change
	<input type="checkbox"/> Data Quality	<input type="checkbox"/> System selection and implementation

The Challenge	<p>In accordance with the requirements of Basel II, credit institutions incorporated under Luxembourg law must submit their non-trading book activities to a stress test on interest rate risk. Based on the results of this test, the Commission de Surveillance du Secteur Financier (CSSF) determines in particular to which extent the interest rate risk is likely to result in a decline in the economic value of an institution by more than 20% of their own funds.</p> <p>The initial challenge was to support the bank in developing a methodology to calculate and report the stress test on interest rate in accordance with the provisions of CSSF Circular 08/338.</p>
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Approach and Solution	<p>avantage’s approach and solution is based on the Basel Committee on Banking Supervision’s Principles for the Management and Supervision of Interest Rate Risk. The approach included the following steps:</p> <ul style="list-style-type: none"> • Agreeing the composition of the bank’s banking book with the bank, i.e. all assets and liabilities belonging to the banking book and all off-balance sheet items belonging to the banking book which are sensitive to changes in interest rates (including all interest rate derivatives); • Slotting the relevant balances into a maturity ladder comprising a number of time bands large enough to capture the nature of interest rate risk; • Using separate maturity ladders for each significant currency; • Offsetting the longs and shorts in each time band, resulting in a single short or long position in each time band; • Weighing these resulting short and long positions by a factor that is designed
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	<p>to reflect the sensitivity of the positions in the different time bands to an assumed change in interest rates. The set of weighting factors for each time band is calculated using the relevant modified duration;</p> <ul style="list-style-type: none"> • Summing these resulting weighted positions, offsetting longs and shorts, leading to the net short- or long-weighted position of the banking book in the given currency. • Calculating the weighted position of the whole banking book by summing the net short- and long-weighted positions calculated for different currencies; and • Relating the weighted position of the whole banking book to capital.
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<p>Results and Benefits</p>	<p>avantage Capita assisted the bank in developing a sound methodology, developed an excel-based tool implementing the stress test within the bank, assisted the bank in gathering the relevant source data to undertake the stress test, and assisted the bank in preparing the report in line with the requirements of CSSF Circular 08/338.</p>
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<p>Software used</p>	<p>Excel</p>
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