

## EXPECTED DISCOUNTED LOSS FOR A SPECTRALLY NEGATIVE RISK PROCESS

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We consider a spectrally negative risk where upon ruin event the deficit is immediately paid, and the process restarts from level 0. We consider risk processes with and without dividend barrier. In a risk process with a dividend barrier  $b$ , all the surplus above  $b$  is paid as dividend. We find the expected discounted deficit (loss) and the expected discounted dividends in terms of the scale function of the process. We also obtain the average loss rate and the expected dividends per time unit.