## Corporate Finance, Module 17

## Homework Assignment

(The attached PDF file has better formatting.)
A project with an indefinite life has an initial investment is $\$ 10$ million.
The opportunity cost of capital is $12 \%$ with all-equity financing, the borrowing rate is $8 \%$, and the firm borrows $\$ 4$ million against the project.

- The debt is perpetual; it is refinanced each year.
- The corporate tax rate is $35 \%$.
A. What is the interest paid in each year?
B. What is the present value of the debt tax shields if the debt is fixed at $\$ 4$ million?
C. If the debt is re-balanced each year to a fixed percentage of the project's value, is the present value of the debt tax shield higher or lower? Explain why.

