Assume you own all of the stock in an unlevered firm with a market value of $\$ 100,000$. The firm is considering whether or not it should issue $\$ 40,000$ of risk-free debt paying an interest rate of $3 \%$ and use the proceeds to repurchase $\$ 40,000$ of your shares. Note: Some calculations are necessary to answer each of the following.
a. Assume that markets are perfect. What is the value of your stock after the debt issue/share repurchase? How much has your wealth changed because of the debt issue/share repurchase? What key issue drives this result?
b. Assume that instead of markets being perfect, the corporate tax rate is $30 \%$. What is the value of your stock after the debt issue/share repurchase? How much has your wealth changed as a result of the debt issue/share repurchase? What key issue drives the difference between your answers in a. and b.?
c. Assume (as in part b) that the corporate tax rate is $30 \%$, but also assume that the personal tax rate on interest income is $40 \%$ and that the personal tax on equity income is $25 \%$. What is the value of your stock after the debt issue/share repurchase? How has your wealth changed as a result of the debt issue/share repurchase (relative to if the firm does not have a debt issue/share repurchase)? What key issue drives the difference between your answers in b. and c.?

## Wall Street Journal Questions are on the back of this page.

