

Lyons document storage corporation: bond math case solution essay sample

[Business](#), [Company](#)



Lyon had issued long-term bonds about a decade ago. The prevailing interest rate at the time of issuance was higher than the current interest rate.

Therefore, the company is considering replacing its outstanding higher coupon bonds with new lower coupon bonds. The executives of the company are under the impression that the new bonds will be beneficial to the company because of its lower coupon payments. However, the interest savings from lower coupon are theoretically offset by the premium that might be paid for redeeming the higher coupon bonds. Theoretically, the refinancing transaction should not add any value to the company. However, the transaction could have income statement implications. The company is expected to realize a large loss in the year in which the transaction occurs, while the earnings are expected to be higher in subsequent years. Questions

Covered

1. Explain what is meant by the terms ' premium' and ' discount' as they relate to bonds. Compute exactly how much the company received from its 8% bonds if the rate prevailing at the time of issue was 9%. Also, re-compute the amounts shown in the balance sheet at December 31, 2006 and December 31, 2007, for Long-Term Debt. What is the current market value of the bonds outstanding at the current effective interest rate of 6%?
2. If you were Rene Cook, would you recommend issuing \$10 million, 6% bonds on January 2, 2009 and using the proceeds and other cash to refund the existing \$10 million, 8% bonds? Will it cost more, in terms of principal and interest payments, to keep the existing bonds or to issue the new ones

at a lower rate? Be prepared to discuss the impact of a bond refunding on the following areas:

- o Cash flows

- o Current year's earnings

- o Future years' earnings

Note: For purposes of your computations, assume that refunding, if selected, occurs effective January 2, 2009, at a price of \$1154.15 per bond. Ignore the effects of income tax. How many new \$1000 bonds will Lyons have to issue to refund the old 9% bonds?

3. Assume 6% bonds could be issued and the proceeds used to refund the existing bonds. Compare the effects of these transactions with those calculated in Question 2. If you were Rene Cook, what amount of new bonds would you recommend and why?

Question No 2 and 3 are almsot same