Arbitrage Project #2: Bond Refunding

The project is to be completed by your study group of between 3-5 people. A report of no more than 10 typed pages is due in class on Thursday, May 29. You may include high quality, neat, and concise supporting material in an appendix that may get evaluated when we grade the reports (depending on the communication value of the material). We will pick two groups for each of the four projects to make short (about 7 minute) presentations during class on Tuesday, June 4. Your grade on the project will be 80% on the report and 20% on the presentation, if you are picked. It will be 100% on the report if you are not picked to present. You should submit an intermediate report of approximately one page in class on Tuesday May 6 so that we can give you feedback on the progress of your work. This project, along with the “grading cash” from the FTS labs, represents the main basis for your grade in this portion of FIN 434, so you should treat it as a serious assignment.

Situation

You are a financial analyst working for a corporation that issued $100 million of callable long-term debentures (maturing in 2010) in 1990 at a coupon rate of 9.5%. The call provision allows the company to repurchase the bonds at a call price of $105 per $100 of face value beginning July 1997. Current yields on bonds of similar quality and maturity are around 7.8%, but the Chief Financial Officer has been reading about the behavior of the Federal Reserve Board and is worried that long-term rates may rise substantially before the July call date arrives.
Your job is to evaluate the wisdom of calling the 1990 debentures and refinancing with similar bonds at current market rates. Estimate the net value gain from this transaction, including estimates of the cost of this refinancing.

Also, assuming that your boss (the CFO) wants to pursue the option to call these bonds, recommend a strategy for hedging the risk that interest rates might rise between now and July that would reduce the "profit" from calling these bonds. Include explicit recommendations about the types of securities that the firm should purchase and estimates of the costs (including taxes) associated with this risk reduction activity.