Quiz: 1/18/12 Name & Class Time Key

Assume the risk-free interest rate is 3% and that a risk-free bond that pays $1000 one year from today trades for $980.

a. Calculate the no-arbitrage price for the bond.

b. What set of transactions today will generate an arbitrage profit today?

c. What individual and total cash flow will these transactions create today and a year from today?

d. What "events" will create the individual cash flows one year from today?

$PV(\text{Bond}) = \underbrace{1000/1.03}_{+10} = 970.87$

Transaction	CF_0	CF_1	Reason
+5 Short bond	+980 +5	−1000 +5	Buy back bond +2
+5 Lend @ 3%	−970.87 +5	+1000 +5	Loan repaid +2
Total	+9.13 +3	$\emptyset$ +3	