

Assume that you can borrow or lend at a risk-free interest rate of 2.5% per year. Assume also that the bid and ask prices for a risk-free bond that matures one year from today for \$9000 are as follows: Bid = \$8799, Ask = \$8801. What set of transactions today will generate an arbitrage profit for you today. In your answer list all transactions required today and a year from today and all individual and total cash flows today and a year from today. Use a "+" for an inflow of cash and a "-" for an outflow of cash. Note: I recommend setting up a table like is in the notes, but this is not required.

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

$$PV = \frac{9000}{1.025} = 8780.49$$

<u>Trans(t=0)</u>	<u>CF<sub>0</sub></u>	<u>CF<sub>1</sub></u>	<u>Trans(t=1)</u>
<sup>+b</sup> Short bond	<sup>+b</sup> +8799	<sup>+b</sup> -9000	<sup>+b</sup> Buy back bond
<sup>+b</sup> Loan PV of \$9000	<sup>+b</sup> -8780.49	<sup>+b</sup> +9000	<sup>+b</sup> Loan pays off
<u>Total</u>	<sup>+b</sup> +18.51	<sup>+b</sup> 0	<u>Total</u>