

### Chapter 3 - Example 1

Assume the risk-free rates (rates given on annual basis) vary by maturity as follows: 1-year = 1.3%, 2-year = 1.9%, 3-year = 2.1%, 4-year = 2.3%, and 5-year = 2.4%.

Given the prices below, what set of transactions today will generate an arbitrage profit for you today. In your answer list all transactions required today and all individual and total cash flows today, a year from today, and two years from today. List also the transactions two years from today that will be required to close out all of your arbitrage trades. Use a “+” for inflows of cash and “-” for outflows of cash. Note: I recommend setting up a table like is in the notes.

<u>Security</u>	<u>Price</u>	<u>Payments in one year if economy is</u>		<u>Payments in two years if economy is</u>	
		<u>Weak</u>	<u>Strong</u>	<u>Weak</u>	<u>Strong</u>
Large Stock Index	\$117	\$20	\$30	\$110	\$140
Chocolate Treats	\$113	\$10	\$20	\$115	\$145