

#### 4. More interest rate determination

Morgan Motors has three-year bonds that currently yield 8.25%. The real risk-free rate ( $r^*$ ) is 2.50% and is expected to remain constant. Inflation is expected to be 3.0% per year for each of the next four years and 4.50% thereafter. The maturity risk premium (MRP) is determined from the formula:  $0.1(t - 1)\%$ , where  $t$  is the security's maturity. The default risk and liquidity premiums on all of Morgan's bonds are equal. What is the yield on a six-year bond issued by Morgan Motors? Disregard cross-product terms; that is, if averaging is required, use the arithmetic average.

- 8.97%
- 9.05%
- 8.69%
- 9.31%
- 9.13%