

Financial Analysis

Supplement J



Future Value of an Investment

The value of an investment at the end of the period over which interest is compounded.

$$***F = P(1 + r)^n***$$

where

- F*** = future value of the investment at the end of *n* periods
- P*** = amount invested at the beginning, called the principal
- r*** = periodic interest rate
- n*** = number of time periods for which the interest compounds

Application J.1

Future Value of a \$500 Investment in 5 Years

$$F = P(1 + r)^n$$

$$P = \$500$$

$$r = 6\%$$

$$n = 5$$

$$F = 500(1 + .06)^5 =$$
$$500(1.338) = \$669.11$$