

### Solution 1.45

What is the weighted average cost of capital for a corporation that finances an expansion project using 40% retained earnings and 60% venture capital? Assume the interest rates are 10% for equity financing and 16% for debt financing.

Managers from different departments in Bensen Systems, a large multinational corporation, have offered seven projects for consideration by the corporate office. A staff member for the chief financial officer used key words to identify the projects and then listed them in order of projected rate of return as shown below. If the company wants to grow rapidly through high leverage and uses only 5% equity financing that has a cost of equity capital of 10% and 95% debt financing with a cost of debt capital of 19%, which projects should the company undertake?

Project ID	Projected ROR, % per year
Inventory	30.0
Technology	28.4
Warehouse	21.9
Maintenance	19.5
Products	13.1
Energy	9.6
Shipping	8.2

*Solution:*

$$WACC = 0.05(10\%) + 0.95(19\%) = 18.55\%$$

The company should undertake the inventory, technology, warehouse, and maintenance projects.