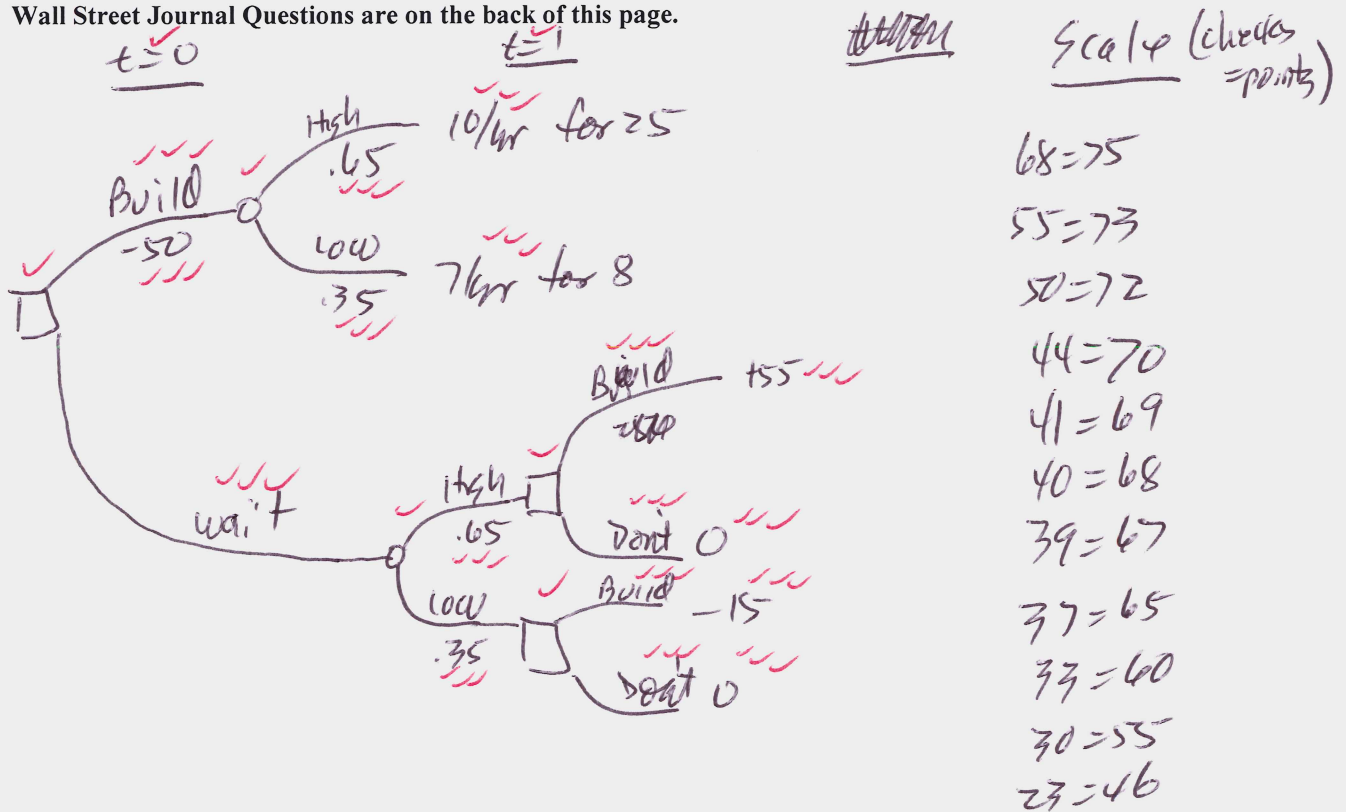


Bowl Bound 3 Inc. is considering whether to build a new plant today at a cost of \$50 million. There is a 65% chance that the plant will generate net cash flows of \$10 million per year for 25 years and a 35% chance that the factory will generate net cash flows of \$7 million per year for 8 years. In both cases, net cash flows would begin a year from today. However, rather than building today, Bowl Bound could wait a year to determine the size of the market for its product and thus will know whether net cash flows from the plant will equal \$10 million per year or \$7 million per year. If net cash flows equal \$10 million per year, then the net present value in one year will equal +\$55 million; and if net cash flows equal \$7 million per year, the net present value in one year will equal - \$15 million. Assume the cost of capital for the project equals 8%.

- Sketch a decision tree of this capital budgeting decision.
- Set up the calculations needed to determine the expected net present value today if Bowl Bound waits to build. How would you make a decision about whether to build today?

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



$$E(NPV|wait)_{t=1} = .65(55) + .35(0)$$

$$E(NPV)_{t=0} = \frac{E(NPV_{t=1})}{1.08}$$

→ Build now if $NPV(Now) > 0$ & $> NPV(wait)$