Question help essay

1)The Seattle Corporation has been presented with an investment opportunity that will yield cash flows of $30, 000 per year in Years 1 through 4, $35, 000 per year in Years 5 through 9, and $40, 000 in Year 10.

This investment will cost the firm $150, 000 today, and the firm’s cost of capital is 10 percent. What is the payback period for this investment? Payback period Using the even cash flow distribution assumption, the project will completely recover the initial investment after $30/$35 = 0. 86 of Year 5: Payback = 4 + = 4. 86 years.)As the director of capital budgeting for Denver Corporation, you are evaluating two mutually exclusive projects with the following net cash flows: Project X Project Z Year Cash Flow Cash Flow 0 -$100, 000 -$100, 000 1 50, 000 10, 000 2 40, 000 30, 000 3 30, 000 40, 000 4 10, 000 60, 000 If Denver’s cost of capital is 15 percent, which project would you choose? NPV Numerical solution: Financial calculator solution (in thousands): Project X: Inputs: CF0 = -100; CF1 = 50; CF2 = 40; CF3 = 30; CF4 = 10; I = 15.

Output: NPVX = -0. 833 = -$833. Project Z: Inputs: CF0 = -100; CF1 = 10; CF2 = 30; CF3 = 40; CF4 = 60; I = 15. Output: NPVZ = -8. 014 = -$8, 014.

At a cost of capital of 15%, both projects have negative NPVs and, thus, both would be rejected. 3)The capital budgeting director of Sparrow Corporation is evaluating a project that costs $200, 000, is expected to last for 10 years and produce after-tax cash flows, including depreciation, of $44, 503 per year. If the firm’s cost of capital is 14 percent and its tax rate is 40 percent, what is the project’s IRR? IRR Financial calculator solution: Inputs: CF0 = -200000; CF1 = 44503; Nj = 10. Output: IRR = 18%. 4)St. John’s Paper is

considering purchasing equipment today that has a depreciable cost of $1 million.

The equipment will be depreciated on a MACRS 5-year basis, which implies the following depreciation schedule: MACRS Depreciation Year Rates 1 0. 20 2 0. 32 3 0. 19 4 0. 12 5 0.

11 6 0. 06 Assume that the company sells the equipment after three years for $400, 000 and the company’s tax rate is 40 percent. What would be the tax consequences resulting from the sale of the equipment? Taxes on gain on saleWhen the machine is sold the total accumulated depreciation on it is: (0. 20 + 0.

32 + 0. 19) ? $1, 000, 000 = $710, 000. The book value of the equipment is: $1, 000, 000 – $710, 000 = $290, 000. The machine is sold for $400, 000, so the gain is $400, 000 – $290, 000 = $110, 000. Taxes are calculated as $110, 000 ? 0. 4 = $44, 000.

5)Ellison Products is considering a new project that develops a new laundry detergent, WOW. The company has estimated that the project’s NPV is $3 million, but this does not consider that the new laundry detergent will reduce the revenues received on its existing laundry detergent products. Specifically, the company estimates that if it develops WOW the company will lose $500, 000 in after-tax cash flows during each of the next 10 years because of the cannibalization of its existing products. Ellison’s WACC is 10 percent. What is the net present value (NPV) of undertaking WOW after considering externalities? NPV with externalities Step 1: Calculate the NPV of the negative externalities due to the cannibalization of existing projects:

Enter the following input data in the calculator: CF0 = 0; CF1-10 = -500000; I = 10; and then solve for NPV = $3, 072, 283.

5. Step 2: Recalculate the new project’s NPV after considering externalities: +$3, 000, 000 – $3, 072, 283. 55 = -$72, 283. 55.

6)If one Swiss franc can purchase $0. 71 U. S. dollar, how many Swiss francs can one U. S. dollar buy? Exchange rates Dollars should sell for 1/0.

71, or 1. 41 Swiss francs per dollar. 7)Currently, in the spot market $1 = 106. 45 Japanese yen, 1 Japanese yen = 0. 00966 euro, and 1 euro = 9.

0606 Mexican pesos. What is the exchange rate between the U. S. dollar and the Mexican peso? Exchange ratesFind the $ to peso rate: 106.

45 ? 0. 00966 ? 9. 0606 = 9. 3171.

$1. 00 = 9. 3171 pesos. 8)A telephone costs $50 in the United States. Today, in the currency markets you observe the following exchange rates: 1 U.

S. dollar = 1. 0279 euros 1 euro = 8. 1794 Norwegian krones Assume that the currency markets are efficient and that purchasing power parity holds worldwide. What should be the price of the same telephone in Norway? Purchasing power parity The cost of the telephone in Norway is 50 ? 1. 0279 ? 8.

1794 = 420. 3803 Norwegian krones.