## Budgeting methods

1. Evaluate the following project using the NPV method when the alternative cost is $5 \%$ p.a .:

| Cash flows (USD) | $C_{0}$ | $C_{1}$ | $C_{2}$ | $C_{3}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | $-54,500$ | 25,000 | 25,000 | 5,000 |

2. Evaluate and assess the following projects using the NPV method if you know that the alternative cost is $8 \%$. Please comment on the results.

| Year | Project A | Project B |
| :--- | :--- | :--- |
| 2019 |  | $-50,000$ |
| 2020 | $-100,000$ | $-50,000$ |
| 2021 | 200,000 | 50,000 |
| 2022 |  | 50,000 |
| 2023 |  | 50,000 |
| 2024 |  | 10,000 |
| 2025 | 200,000 |  |

3. The project requires an investment of CZK 10,000 and will bring CZK 10,700 after a year. Use the IRR method to determine whether you will invest in a project if the interest rate on deposits redeemable at notice is $6 \%$ and $9 \%$ p.a.
4. Assess the project by the profitability index when alternative costs are $12 \%$ p.a .:

| Cash flows (GBP) | Project A | Project B |
| :---: | ---: | ---: |
| $C_{0}$ | -100000 | -100000 |
| $C_{1}$ | 50000 | 27000 |
| $C_{2}$ | 40000 | 55000 |
| $C_{3}$ | 26000 | 31000 |

5. Consider whether the following 4 -year project should be implemented when the cost of capital (discount rate) is $15 \%$. Make a decision based on the Pay Back Period method. Find out the exact maturity. Use the discounted maturity option as well. Please comment on the results.

|  | $C_{0}$ | $C_{1}$ | $C_{2}$ | $C_{3}$ | $C_{4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Cash flows (EUR) | -6000 | 3000 | 3000 | 3000 | 1000 |

6. According to the PBP method, evaluate two different projects alternative costs are $12 \%$ p.a.

| Hotovostní toky | Projekt A | Projekt B |
| :---: | ---: | ---: |
| $\mathrm{C}_{0}$ | -10000 | -10000 |
| $\mathrm{C}_{1}$ | 5000 | 7000 |
| $\mathrm{C}_{2}$ | 4000 | 5000 |
| $\mathrm{C}_{3}$ | 6000 | 1000 |

