## Finance (Basic)

## Ludek Benada

Department of Finance
Office 533
75970@mail.muni.cz

## Time Value of Money

Why is a dollar tomorrow less worth than a dollar today?

- Opportunity costs
- Purchasing power of money


## Future Value

Is a value of an asset in a specific day in the future.

## Present Value

$P V=d f \times C F$

## Discount Factor

DF is the value today of $\$ 1$ received in the future.

## Net Present Value

NPV = PV - PV of Required investment

## Cumulative Net Present Value

$$
\mathrm{NPV}=\sum_{t=1}^{T} \frac{C F t}{(1+i)^{\wedge} t}-\mathrm{CF}_{0}
$$

Note: mostly $<0$, investment.

## Present Value of Perpetuity

$\mathrm{PVOP}=\frac{C F}{i}$

## Risk and Present Value

A safe dollar is worth more than a risky one.

Thank you for your attention

