SZÉCHENYI ISTVÁN UNIVERSITY
KAUTZ GYULA FACULTY OF ECONOMICS

Financial Services and Decisions

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Széchenyi István University
Kautz Gyula Faculty of Economics

Seminar 8

Cash Flow of Loans

Lecturer
Gábor Kovács PhD dr.

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Cash Flow of Loans

- **General meaning**
  - Amount of loan = Principal
  - Instalments = Loan servicing
- **How to set?**
  - Derived from loan contract
  - General terms and conditions

What determines instalments?

- **The amount of loan = P**
- **Interest rate = i**
- **Term = T**
- **Type of loan construction:**
  - Principal is repaid in equal instalments
  - Annuity loan

What determines instalments?

- **Instalment = C_t (*t*-th period)**
- **Instalment consists of two payments**
  - Repayment (principal repayment) = R_t
  - I_t = Payment of interest
- **(Time distribution of) repayment depends on ...**

What determines instalments?

- **Payment of interest depends on …**
  - Rate of interest (i)
  - Redeemable amount (P_t)
- **Redeemable amount = Size of outstanding loan**
  - The balance you owe on a loan
  - Interest is calculated over the outstanding loan

Basic concepts

- **Instalment:**
  - $C_t = R_t + I_t$
- **Repayment:**
  - $\sum R_t = P$
- **Interest payment**
  - $I_t = P_t \cdot I$
- **Redeemable amount:**
  - $P_t = P_{(t-1)} - R_{(t-1)}$

Loan Constructions

- **Basic types of loan construction:**
  - Principal is repaid in equal instalments
  - Annuity loan
- **Principal is repaid in equal instalments**
  - $R_1 = R_2 = \ldots = R_t$
- **Annuity loan:**
  - $C_1 = C_2 = \ldots = C_t$

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Thank you for your attention

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