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Chapter 4 - The Banking Services of Financial Institutions

Learning Objectives

1. Analyze factors that affect the selection and use of financial services
2. Compare the types of financial institutions
3. Compare the costs and benefits to various savings plans
4. Identify factors used to evaluate different savings plans
5. Compare the costs and benefits of different types of chequing accounts

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Meeting Daily Money Needs

Common Payment Choices

- Cash
- Cheque
- Credit / Debit Card
- E-Transfers
- Mobile Apps

Common Mistakes in Managing Cash

- Overspending as a result of impulse buying and using credit cards
- Not having enough liquid assets to pay current bills
- Using savings or borrowing to pay current expenses
- Failing to put unneeded funds in an investment plan

Opportunity Costs of Financial Services

- Higher rate of return may be obtained at the cost of lower liquidity
- Convenience of a 25-hour ATM must be weighed against service fees
- The “no fee” chequing account that requires a $4,000 non-interest-bearing minimum balance means lost interest of nearly $1,375 at 3% over 10 years

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Types of Savings Plans

Type of Alternative	Benefits	Drawbacks
Regular Savings Accounts	→ Low minimum balance → Ease of withdrawal → Insured up to $\$100,000$ per financial institution	→ Low rate of return
Guaranteed Investment Certificates (GICs)	→ Guaranteed rate of return	→ Possible penalty for early withdrawal → Minimum deposit
Interest-earning Chequing Accounts	→ Chequing privileges → Interest earned → Insured up to $\$100,000$	→ Possible service charge for going below minimum balance → Very low if any rate of return → Cost for printing cheques → Other fees may apply
Money Market Accounts	→ Favourable rate of return (based on current interest rates) → Allows some cheque writing	→ Higher minimum balance than regular savings accounts → No interest or service (if below a certain balance)
Money Market Funds	→ Favorable rate of interest (based on current interest rates)	→ Minimum balance → Not guaranteed and fees not insured
High Interest Savings Accounts	→ Online daily interest savings account → Offers accessible money at a favorable rate	→ Possible transaction fees → Not designed for daily activities

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Key Words

Rate of Return: The percentage increase in the value of savings. Increases with the frequency of compounding

Inflation: Higher consumer prices result in lower buying power of interest earned on savings

Taxes: Taxable interest reduces amount of earnings

Liquidity: Ease with which savings can be withdrawn

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Safety: The availability of deposit insurance as well as the risk of loss of savings or interest

Restrictions, Fees: Extra charges or limitations such as minimum balance, or fees for additional transactions

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Evaluating Savings Plans

Rate of Return (Yield): Percentage increase in value due to interest

Compounding: Interest on interest

Annual Percentage Rate (APR): Percentage cost of credit on a yearly basis
- May be compounded more frequently
- EAR may be higher than APR

Effective Annual Rate (EAR): Calculates the effective return taking compounding into effect
$EAR = (1 + \frac{APR}{m})^m - 1$, where m is the number of compounding periods per year

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Types of Chequing Accounts

Regular Chequing Accounts

- Usually have a monthly service charge that you can avoid with a minimum balance

Activity Accounts

- Charge a fee for each cheque written

Interest-Earning Chequing Accounts

- Require a minimum balance

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Example

Assuming you have about $\$5,000$ in savings, how much should you keep in your chequing account if your monthly expenses are approximately $\$3,000$ a month? What would you do with any excess not put into the checking account?

- Keep about $\$3,000$ in chequing to cover expenses
- Invest the remainder
    - Ensure you can easily access the funds (keep the money liquid)
- 3-6 months of living expenses set aside

Example

What are common savings goals for a person who guys a five-year GIC paying 4.2% instead of an 18-month savings certificate paying 3%?

- Saving for a larger purchase
- Doesn't need the cash for the next five years

Example

Compute the earnings for the year for a $\$15,000$ savings account that earns 1.5% compounded a) annually, b) quarterly, c) monthly, d) daily

Annually
- $= FV(0.015,\ 1,\ 0,\ 10000,\ 0) \Rightarrow \$15,225.00$

Quarterly
- $= FV(0.00375,\ 4,\ 0,\ 10000,\ 0) \Rightarrow \$15,226.27$

Monthly
- $= FV(0.00125,\ 12,\ 0,\ 10000,\ 0) \Rightarrow \$15,226.55$

Daily
- $= FV(0.000411,\ 365,\ 0,\ 10000,\ 0) \Rightarrow \$15,226.69$

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Example

What is the value of a savings account that started with $\$1,500$**, earning** 2% **(compounded annually) after** 10 **years?**

$= FV(2,\ 10,\ 0,\ 1500,\ 0) \Rightarrow \$1,828.49$

Example

With a 26% **marginal tax rate, would a tax-free yield of** 7% **or a taxable yield of** 9.5% **give you a better return on your savings? Why?**

$9.50 \cdot (1 - 0.26) = 7.03 > 7$

Therefore, the taxable yield will give you a better return on savings because the effective yield is higher

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Chapter 5 - Introduction to Consumer Credit

Learning Objectives

1. Define consumer credit and analyze its advantages and disadvantages
2. Differentiate among various types of credit
3. Assess your credit capacity and build your credit rating
4. Describe the information creditors look for when you apply for credit
5. Identify the steps you can take to avoid and correct credit mistakes and protect against fraud and identity theft

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Types Of Credit

1. Consumer Loans
   - One time loan that the borrower pays back in a specified period of time with a pre-determined payment schedule
   - Ex. Automobile loans, home mortgages, demand loans, other consumer instalment loans
2. Revolving Credit
   - A line of credit in which loans are made on a continuous basis and the borrower is billed periodically for at least partial payment
   - Ex. Credit cards issued by banks, charge cards or travel and entertainment cards, lines of credit, overdraft protection

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Credit Card Facts

- Nearly 89% of Canadian households carry one or more credit cards
- 70% of all credit card users are convenience users (They pay off their balance in full each month)
  - The other 30% are borrowers

Costs and Benefits of Credit Cards

Costs

- Late / overdue payments
- Charges for exceeding credit limits
- Cash advances
- Transactions in foreign currency
- Membership fees
- Exchange rate loading fees

Benefits

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- Short term no interest loan if paid in full monthly
- Rewards, rebates, points
- Insurance on purchases
- Protection against fraudulent use
- Availability of a credit card in case of an emergency

Protecting Yourself Against Fraud

Phone Scams: Someone pretending to be a relative in need of some money for an accident or CRA stating that you owe money

Phising: An attempt to obtain sensitive information (passwords, usernames, credit card details, etc.) by posing as a reliable source

Pharming: When you are redirected to a bogus website even if you enter the correct information in your initial search. The redirection is the result of a computer virus

Shoulder Surfing: When someone tries to attain your PIN while watching you enter it on a PIN pad

Dumpster Diving: When personal information is gathered by collecting information from your trash or recycling
Skimming: When a thief steals the information on the magnetic strip of your credit card by swiping your card through a small and then creates a new card to be used for fraudulent purposes

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Personal Lines of Credit

- Set up as revolving line of credit
- Interest rate linked to lender's prime rate
- Withdraw up to specified limit
- Repay minimum stated or more
- Secured with assets

Home Equity Line of Credit (HELOC)

- A loan based on the current market value of your home less the amount still owing on your mortgage
- Outstanding mortgage balance and home equity line of credit cannot equal more than 80% of the value of your home
- Can borrow up to 65% of the appraised value of home through a HELOC

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- Interest on loan is tax deductible if proceeds are being used for an investment (outside of registered plans)
- Usually set up as a revolving line of credit

Example

A few years ago, Maria Ramundo purchased a home for $\$600,000$**. Today, the home is worth** $\$700,000$**. Her remaining mortgage balance is** $\$370,000$**. What is the maximum HELOC she can borrow?**

$HELOC = (700,000 \cdot 0.8) - 370,000 = \$190,000$

Consumer Loans

Mortgage Loans

- The biggest single debt most Canadians will incur

Car Loans

- Likely the second largest purchase after a house
- Can be financed at bank or a car dealership

Debt-Payments-to-Income Ratio

- The debt payments to income ratio is calculated by dividing your monthly expense by your gross monthly income
- Experts suggest this ratio does not exceed 20%

Example

Louise Gendron's monthly gross income is $\$5,000$**. Her employer withholds** $\$850$ **in federal and provincial income taxes,** $\$268.35$ **towards the Canada Pension Plan, and** $\$79$ **for EI contributions. Louise contributes** $\$100$ **per month to her work pension. Her monthly credit payments for Visa and MasterCard are** $\$175$ **and** $\$65$**, respectively. Her monthly payment on an automobile loan is** $\$525$

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What is Louise's debt-payments-to-income ratio? Is Louise living within her means? Explain.

Net Take Home Pay:

Gross Income	5,000.00
- Income Tax	850.00
- CPP	268.35
- EI	79.00
- Pension	100.00
=	3,702.65

Monthly Debt Payments:

Visa	175.00
MasterCard	65.00
Auto Loan	525.00
=	765.00

Debt Ratio:

$= \frac{765.00}{3702.65} = 20.66\%$

- Experts suggest that this ratio should not exceed 20%
- Therefore, this suggests that Louise is over-extended (too much debt)

Example

Bob's net take-home income is $\$4,000$. What is the maximum he should use on debt payments?

$4,000 \cdot 0.2 = \$800$

Therefore, he should use at maximum $\$800$ for debt payments

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Debt-to-Equity Ratio

- The debt to equity ratio is calculated by dividing your total liabilities by your net worth
- Experts suggest this ratio stays below 100%

Example

Nadia has the following debt:

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- **Visa** → $\$1,565$
- **MasterCard** → $\$3,500$
- **Other Debts** → $\$7,151$

Nadia's net worth is about $\$20,000$. This equity is in mutual funds, an automobile, jewellery, furniture, and other personal property. What is Nadia's debt-to-equity ratio? Has she reached the upper limit of debt obligations? Explain.

$DER = \frac{1565+3500+7151}{20000} = 61.08\%$

Therefore, Nadia has no reached the upper limit of debt obligations since her debt to equity ratio has not exceeded 100%

Example

Dinesh Dani flew to Toronto to attend his brother's wedding. Knowing his family would be busy, he did not ask anyone to meet him at the airport. Instead, he planned to rent a car to use while in Toronto. He has no nationally known credit cards but is prepared to pay cash for the rental car. The car rental agency refuses to rent him a car, even though they have several cars available. Why do you think Dinesh is unable to rent a car?

- They use the credit card incase there are any damages for the vehicle
- Gives more security and piece of mind
- Credit cards give you trust and a track record

Example

Juan Villavera, a recent teachers college graduate, has accepted a teaching position at Brockville High School. Juan moved to Brockville and applied for a car loan at the Royal Bank. He had never used credit or obtained a loan. The bank notified him that it will not approve the loan unless he has a co-signer. On what basis has the bank denied Juan credit?

- A co-signer is someone who will take responsibility for the loan if Juan in unable to pay the loan
- He doesn't have a track record, so the bank does not trust him

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Co-Signing a Loan

- Guaranteeing a debt
  - If the borrower does not pay the debt, you will have to

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- Statistics show that around 38% of co-signers have to pay for all or some of the debt

  If you do co-sign a loan:

  1. Be sure you can afford to pay
  2. Liability can keep you from getting other credit
  3. Could lose the property you pledge as security
  4. Understand provincial laws
  5. Request copy of all overdue notices

Building and Maintaining Your Credit Rating

- Your credit experiences (or lack of) is a major consideration for the creditor
- A good credit rating is a valuable asset
  - Use credit with discretion
  - Limit borrowing to your capacity to repay
  - Abide by the terms of the lending contracts

Credit Bureaus

- Collect credit and other information about consumers
- There are two main credit bureaus in Canda
  - Equifax Canada
  - TransUnion Canada

  Who Provides Data to Credit Bureaus?

  - Credit bureaus obtain theur data from banks, finance companies, merchants, credit card companies, and other creditors

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Credit Scoring

- Used to assess the credit risk of prospective borrowers
- Data in a credit report is summarized in a credit score
  - Helps to precist creditworthiness
  - Higher scores are better
- A strong credit score will help you get credit faster and at a better rate

  Improving Your Credit Score

  - Review your credit report
  - Pay your bills on time

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- Do not exceed your credit limit
- Use credit wisely
- Learn the legal steps to correct your credit
- Be aware of credit scams