

8.1 Financial Institutions

There are several different types of financial institutions

1. BANKS

- Government licensed.
- Provide comprehensive banking services (chequing/savings, ATM/online, investments, loans etc.)

2. CREDIT UNIONS

- 'Co-operative': members own shares in the company.
- similar to banks with respect to the services offered.

3. LOAN COMPANIES

- provide loans and mortgages.

4. INVESTMENT COMPANIES

- provide financial planning services.
- deal with wealth management and investments such as RRSPs.

5. TRUST COMPANIES

- manage and invest assets for individuals, companies, an estate, or a trust.

8.2 Types of Bank Accounts

Three Main Types of Bank Accounts

| Account Type | Features |
|--|---|
| CHEQUING | <ul style="list-style-type: none"> - best for day-to-day banking such as point-of-purchase, cheque writing, bill payments, ATM use, etc. - lower service and transaction fees. - allows for cancelled cheques. |
| SAVINGS | <ul style="list-style-type: none"> - focused on saving without many transactions. - high transaction fees. - higher interest rates than Chequing accounts. |
| TAX-FREE SAVINGS ACCOUNT (TFSA) | <ul style="list-style-type: none"> - savings account where no income tax is paid on the earned interest. - allows for investments of no more than \$5000/year. - must be 18 or older to open. |

Examples

1. John makes about 20 transactions a month and keeps minimum monthly balance of \$650. Compare the following accounts and determine which would be best.

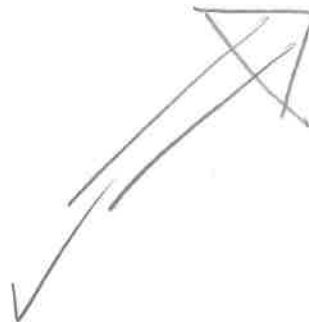
| Account Type | Monthly Fee | Number of 'Free' Transactions per month | Additional Transaction Fee |
|-----------------|-------------|---|----------------------------|
| Low-Fee Account | \$ 3.95 | 10 | \$ 0.65 |
| Value Account | \$ 9.95 | 25 | \$ 0.65 |

Low Fee Account

$$\begin{aligned}
 & \$ 3.95 + 10 (\$ 0.65) \\
 & = 3.95 + 6.50 \\
 & = \boxed{\$ 10.45}
 \end{aligned}$$

Value Account

$$\begin{aligned}
 & 20 < 25, \\
 & \text{so } \boxed{\$ 9.95}
 \end{aligned}$$



2. Ken has \$125000 in his business' savings account on Sept. 1. He deposits \$25000 on Sept. 11 and withdraws \$14000 on September 15. The interest rate is 1.2% /yr compounded daily on the daily closing balance. The interest is calculated daily and paid monthly. How much interest will Ken earn over the month of September?

Interest earned:

$$\begin{aligned} \text{Sept. 1-10: } A &= P(1+i)^n \\ A &= 125000 \left(1 + \frac{0.012}{365}\right)^{10} \\ A &= 125041.10 \end{aligned}$$

$$I = 41.10$$

$$\begin{aligned} \text{Sept. 11-14: } A &= P(1+i)^n \\ 125000 + 25000 \quad A &= 150000 \left(1 + \frac{0.012}{365}\right)^4 \\ A &= 150019.73 \end{aligned}$$

$$I = 19.73$$

$$\begin{aligned} \text{Sept. 15-30} \\ 150000 - 14000 \quad A &= P(1+i)^n \\ &= 136000 \left(1 + \frac{0.012}{365}\right)^{16} \\ &= 136071.56 \end{aligned}$$

$$I = 71.56$$

$$\text{Total } I = 41.10 + 19.73 + 71.56 = \boxed{\$132.39}$$

Ch. 8.3 – Debit Cards

Convenience: Debit cards are more convenient than cheques because:

- i. They are accepted at more places of business;
- ii. You do not need to provide/show identification;
- iii. Purchases are recorded electronically.

Services available with a debit card:

| | |
|---|--|
| Make deposits/withdrawals at ATM | Point-of-purchase use (+ extra cash option) |
| Can transfer funds account-to-account at ATM | Able to use ATMs worldwide |
| Can pay bills (among other things) at ANY bank branch | Can access your account online and/or by phone |

Limit: Debit cards have a withdrawal limit for a 24-hour period. Most start at \$500. In order to increase your limit, you must schedule an appointment with a bank employee. Often, such discussions can occur over the phone if you provide relevant security information (code words, etc.).

Fees: Often, banks charge a fee for clients to use a debit card. Businesses may also charge a fee if customers use a debit card for purchases below a certain threshold limit.

Eg.1: Chuck likes to buy a coffee from Coffee Cart Joe outside his office building. For transactions less than \$5.00, Chuck is charged a service fee of \$0.45. Each day, Chuck purchases the following foods/beverages:

- breakfast: coffee and bagel = \$3.75
- lunch: sandwich and water = \$4.75
- afternoon coffee break: coffee = \$1.90

a. How much money does Chuck spend at Joe's cart?

$$\$3.75 + \$4.75 + \$1.90 = \$10.40$$

b. How much is Chuck charged to use his debit card each day?

$$3 \times \$0.45 = \$1.35$$

Eg.2: Sean is a truck driver and in a typical week, he uses ATMs three times at truck stops. The average charge is \$3.25 per transaction if the ATM does not belong to his bank. Two out of the three times he stops, the ATM is not from his bank.

a. About how much does Sean pay monthly for ATM use?

Say 4 weeks per month.

2 times per week \times 4 = 8 times per month.

$$8 \times \$3.25 = \boxed{\$26.00}$$

b. How could Sean reduce his ATM fees?

- withdraw less often from non-bank ATMs
- withdraw more \$ to avoid multiple withdrawals

p. 225 - 226 # 1-6

p. 227 # 1-4

Ch. 8.4 – Online Banking

Online Banking: Provides clients with 24/7 access to their bank account(s) anywhere in the world.

- safest to use when there exists a secure internet connection.
- banks utilize encryption technology in order to keep clients' information secure.
- online transactions done on the weekend/holidays will be updated the next business day.
- online banking is very CONVENIENT.

| Advantages | Disadvantages |
|--|---|
| <ul style="list-style-type: none"> - 24/7 access - no waiting in line, saving clients a tremendous amount of time - instant access to account information - clients are able to track their transactions - accessible from anywhere with an internet connection or wifi - clients can view images of cashed cheques - clients are able to put a stop-payment on a cheque or credit card payment without actually having to go to the branch | <ul style="list-style-type: none"> - anytime sensitive information exists online, there exists an opportunity for identity fraud/theft <ul style="list-style-type: none"> - mainly due to insecure internet connections or poorly protected devices - unable to deposit or withdraw actual cash/currency - no 'in-person' service...no <i>charisma!</i> - clients unable to exchange currencies |

Requirements to Accessing Online Banking: must have your client card number and your Personal Identification Number (P.I.N.)

Choosing a PIN: Always make your PIN consist of an unpredictable set of numbers; never use your birthday, social insurance number (SIN), or phone number, among other options.

One way to pick a PIN is to use digits from an important date or parts of different phone numbers, then mix them up in a fairly random fashion...

8.6 Creating and Analyzing a Budget

Budgets

- Help you keep track of what you SPEND and EARN
- Compares EXPENSES and INCOME
- Helps you save for the future, plan your finances, and reduce needless spending.

Expenses

- Money that comes out of your budget/possession aka COSTS
- FIXED Expenses: costs that remain from month-to-month
 - Examples: rent, mortgage, insurance, car payment, etc.
- VARIABLE Expenses: costs that change from month-to-month
 - Examples: clothing, gas, entertainment, hydro, water, ...
- RECURRING Expenses: costs that happen over-and-over

Income

- Money that comes into your budget/possession aka REVENUE
- What you EARN

When your INCOME is greater than than your EXPENSES, your budget will show a SURPLUS

When your EXPENSES are greater than your INCOME, your budget will show a DEFICIT

Creating a Budget

Help complete Tiffany's monthly budget. Here is some information to get you started.

- Annual take-home pay is \$29,481.12
- Rent = \$950
- Car Payment = \$219.37
- Utilities = \$86.45
- Food = \$271.42
- Gas = \$84.28
- Clothing = \$75.98
- Recreation = \$68.00
- She puts \$220.00 into Savings each month
- Personal Care = \$54.39
- Miscellaneous Cash = \$67.23

Create Tiffany's monthly budget.

| Monthly Income | |
|---|-------------------|
| Annual take-home pay is \$29,481.12 | |
| Income per month = $29481.12 \div 12 = \$2456.76$ | |
| Monthly Expenses | |
| Fixed | Variable |
| Rent \$950 | Utilities \$86.45 |
| Car \$219.37 | Food \$271.42 |
| Savings \$220 | Gas \$84.28 |
| | Clothes \$75.98 |
| | Rec. \$68.00 |
| | Personal \$54.39 |
| | Misc. \$67.23 |
| Total Expenses per month = \$2097.12 | |
| Income - Expenses $2456.76 - 2097.12 = \$359.64$ | |

Does Tiffany have a Deficit or a Surplus?

SURPLUS

Next month, Tiffany wins \$500.00 on a Scratch-n-Win but then her dog needs to visit the vet, costing her \$785.00. How does this affect her budget? $785 - 500 = 285$

$$359.64 - 285 = 74.64 \text{ SURPLUS}$$

p. 233-235 #1-5 p. 242 #1-4
p. 240-241 #1-7