

Student Guide

Class #11 – Budgets

A budget is a forecast of income and expenses. Forecasts are estimates based on known information and *reasonable* assumptions. Forecasts are almost always wrong.

- Budget surplus = forecasted income > forecasted expenses
- Balanced budget = forecasted income = forecasted expenses
- Budget shortfall = forecasted income < forecasted expenses

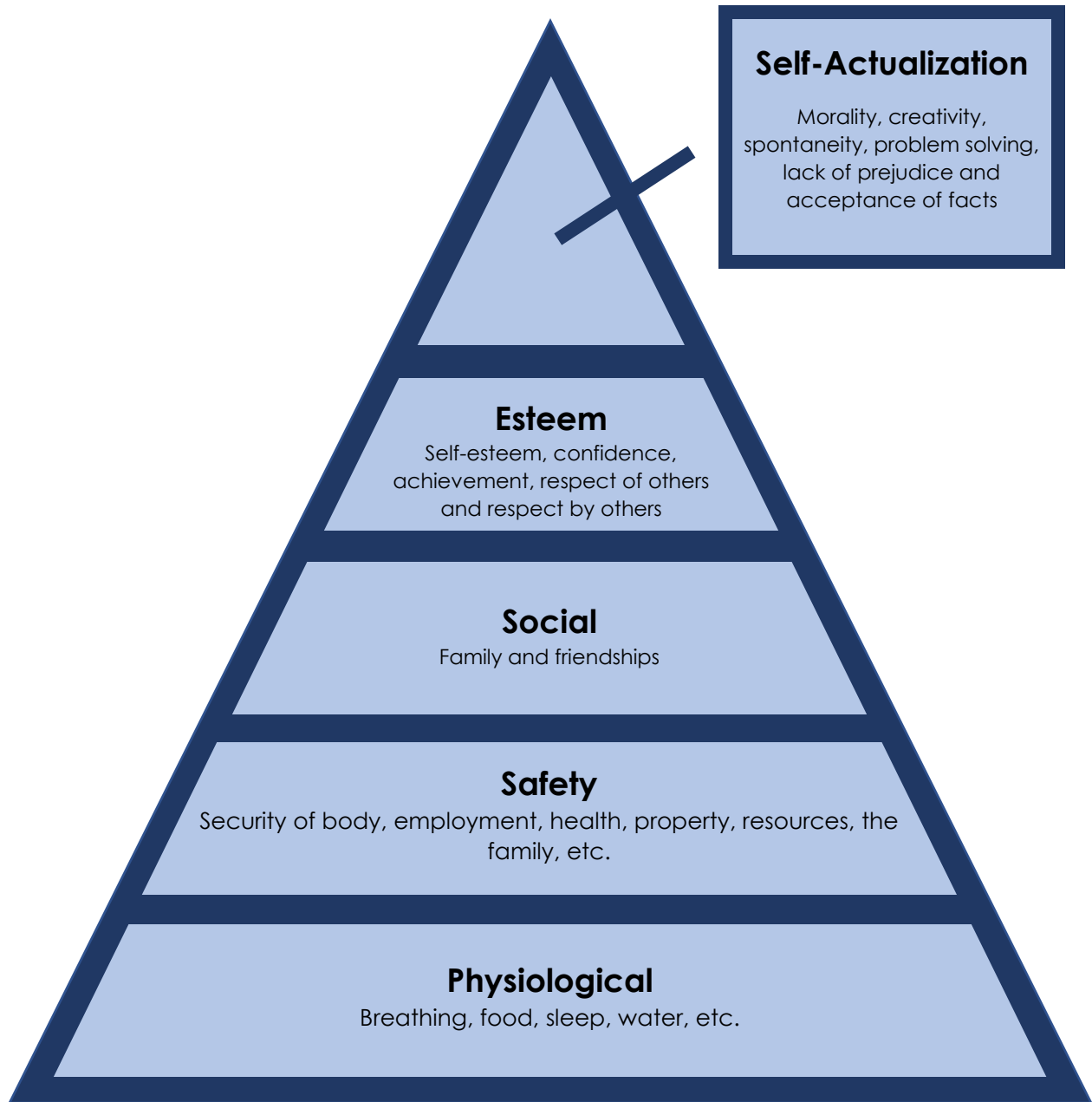
Needs and Wants

When preparing a personal budget, it is important to consider needs vs. wants. Think about needs and wants as follows:

- Must haves: **necessary** to meet day-to-day needs, such as food, shelter, and transportation.
- Should haves: **important**, but **generally not necessary** to meet day-to-day needs.
- Could haves: **nice to have**, but **not necessary** to meet day-to-day needs.
- Wants: **entirely discretionary** and may enhance people's lifestyle.

Hierarchy of Needs

Abraham Maslow was a psychologist who introduced a hierarchy of needs concept in his 1943 paper, "A Theory of Human Motivation." This concept became known as Maslow's Hierarchy of Needs. It suggests that people are motivated to fulfill basic needs first, before moving on to other, more advanced needs. Maslow's Hierarchy of Needs can serve as a guide when thinking about budgets in relation to needs and wants.



Exercise: Write down some of your personal needs and wants.

Must Haves Necessary to meet day-to-day needs	Should Haves Important, but generally not necessary to meet day-to-day needs	Could Haves Nice to have, but not necessary to meet day-to-day needs	Wants Entirely discretionary, and may enhance lifestyle

Must Haves Necessary to meet day-to-day needs	Should Haves Important, but generally not necessary to meet day-to-day needs	Could Haves Nice to have, but not necessary to meet day-to-day needs	Wants Entirely discretionary, and may enhance lifestyle

Ancillary Expenses ("Sneaky Costs")

Many expenses have additional sneaky costs. People often forget about or do not consider sneaky costs when budgeting. Let's look at an example:

Mia wanted to purchase a video game console to play with family and friends. Mia planned to use the income earned from her summer job at her parents' bakery to finance the video game purchase.

Mia's parents reinforced to her that a video game console is a "want," so it is entirely discretionary. The video game console costs \$500. Mia confirmed she could budget \$500 for this purchase, and still have money left over.

However, Mia did not consider ancillary costs in her budget. The actual cost for the video game console, is much more.

The video game console requires a display. If Mia or her parents do not have a suitable monitor or television, purchasing one might cost \$200 for a basic model. Advanced models to support the latest graphics could cost over \$2,000.

The video game console comes with only 1 controller, but Mia wants to play with family and friends at home. Additional controllers cost \$75 each. Each controller requires 2 batteries, which cost about \$1 per battery.

The console did not come with any video games. Older video games cost \$20 and newer games cost \$70. The console also provides a video game subscription, which costs \$10 per month.

The console and display require power to function. Operating the video game console and display for 2 hours per day could add \$3 per month to an electricity bill.

Like all electronic devices, video game consoles, controllers, and displays wear out over time and become obsolete to recent technologies. Budgets should consider replacement costs every few years.

If Mia purchases 1 video game console (1 x \$500), 3 additional controllers (3 x \$75), 8 AA batteries (8 x \$1), 2 older video games (2 x \$20), 4 newer video games (4 x \$70), and a video game subscription, the up-front costs would be \$1,053 plus ongoing monthly costs of \$13, presuming the video game console was played 2 hours per day. Mia should also consider replacement costs in the future.

Tradeoffs and Opportunity Cost

Tradeoffs are important when evaluating needs and wants in the context of a budget. Tradeoffs are different alternatives, both of which can provide similar outcomes. Let's consider tradeoffs in the context of transportation.

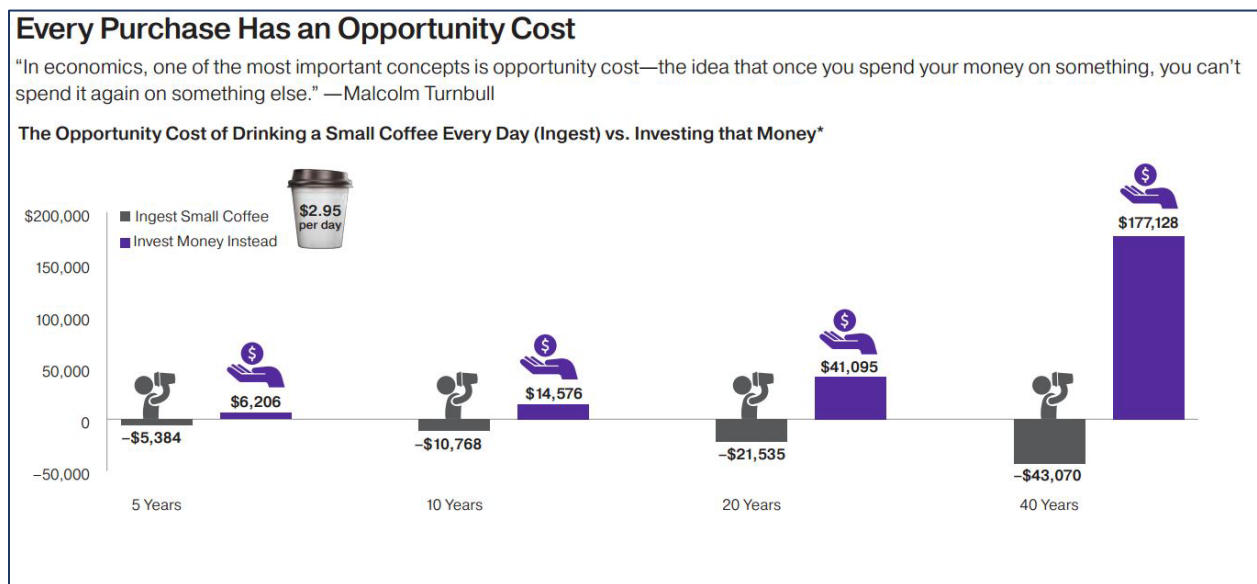
Having a car is convenient, although some people could get by with only public transportation. Having a car enables people to drive on their own schedule, with less planning than required of public transportation. Cars also provide the freedom to drive where public transportation may not be accessible or available. However, public transportation might be more affordable than owning a car. A car has a large purchase price in addition to ancillary costs for fuel, insurance, maintenance, parking, repairs, tolls, and vehicle licensing taxes.

Opportunity costs are like tradeoffs. Opportunity costs represent the potential benefits that people and organizations miss by selecting one alternative over another. Since opportunity costs are unseen, they can be easily overlooked. Understanding potential missed opportunities allows for better decision making. Let's look at an example:

Mathias loves coffee. Although the bakery where he works sells coffee, Mathias prefers the coffee at a local coffee shop.

Mathias purchases a small coffee for \$2.95 every day during his work commute to the bakery and during his days off. Mathias views these coffee purchases as small discretionary expenses that enhance his quality of life.

However, Mathias does not consider opportunity costs. What is the cost to Mathias of doing something else with the \$2.95 daily coffee purchase? What if Mathias had invested it?



The above visualization presumes a 6% annualized investment return, compounded quarterly. Is a \$2.95 daily coffee expense worth it, knowing the opportunity cost?

Sample Budget Template

After you have identified your needs and wants, you can develop a personal budget. Below is a personal budget template, with comments and guidelines from your instructor's professional experiences. This template enables you to prepare a simple budget in only 6 steps.

Step	Budget Item	Comments and Guideline	Formula (if applicable)	Budget Amount
1	Income	Identify all sources of forecasted income . Be certain to include all forecasted earned income, passive income, and portfolio income.		
2	Long Term Financial Security	Invest 15% of your total forecasted income for long term financial security (ex. retirement). If your employer also contributes to your retirement plan accounts, you can include those amounts in your budget, potentially reducing the amount you need to contribute.	Income x 15%	
3	Income Taxes	Estimate your income taxes based on total forecasted income and the tax rates then in effect. Be certain to consider not only federal income taxes, but also state and local income taxes, if applicable.		
4	Emergency Savings	Save 5% of your after-tax forecasted income in an emergency savings account until you have accumulated 3 to 6 months of income.	(Income – Income Taxes) x 5%	
5	Essential Expenses	Spend no more than 50% of your after-tax income on essential expenses, which should include all your needs / must haves, and some should haves.	(Income – Income Taxes) x 50%	
6	Other Expenses, Savings, or Investments	The balance of your income can be spent on discretionary expenses – any remaining should haves, could haves, and some wants. The balance could also be saved or invested.	Income – Long Term Financial Security – Income Taxes – Emergency Savings – Essential Expenses	

One final important guideline is to limit mortgage or rent payments, automobile payments, student loan payments, and credit card debt payments to no more than 36% of total income – the lower the better!

Budget v. Actual

Comparing actual results to budgets allows people to see what happened relative to their forecast. Tracking actual results requires maintaining a ledger of income and

expenses for specific time periods (ex. monthly). All financial transactions should be monitored and classified as income, expense, or other.

Exercise: The following is an excerpt from a bank account statement. Classify each financial transaction as income or expense. For each expense, identify whether it is an essential expense or discretionary expense.



KeyBank Hassle-Free Account | Account number ending: XXXX

Deposits

Date	Description	Amount
09/30	DIRECT DEPOSIT, EMPLOYER PAYROLL	\$3,452.26
10/15	DIRECT DEPOSIT, EMPLOYER PAYROLL	\$3,452.26
Total Deposits		\$6,604.52

Withdrawals

Date	Description	Amount
09/30	RENT PAYMENT E-CHECK	\$2,750.00
10/01	SAFeway	\$587.59
10/05	CHEVRON	\$92.43
10/05	MACYS	\$285.62
10/15	SEATTLE PUBLIC UTILITIES	\$643.24
10/15	ZEEK'S PIZZA	\$185.38
10/15	TOYOTA CREDIT SERVICES	\$985.26
10/20	STATE FARM INSURANCE COMPANY	\$346.22
10/20	CHEVRON	\$88.64
Total Withdrawals		-\$5,964.38

Account Updates

Read this section to discover any changes that may affect your account now, or in the future. Questions? Call the number on this statement, visit your local branch or contact your banker.

INFORMATION ABOUT YOUR CHECKING ACCOUNT

Consumer Account Disclosures

The following disclosures apply only to accounts covered by the Federal Truth-in-Lending Act or the Federal Electronic Funds Transfer Act, as amended, or similar state laws.

IN CASE OF ERRORS OR QUESTIONS ABOUT YOUR ELECTRONIC TRANSFERS:

If you think your statement or receipt is wrong or need more information about a transfer listed, please call the phone number on the first page of this statement, or write us at KeyBank Customer Disputes, NY-31-55-0228, 555 Patroon Creek Blvd., Albany, NY 12206 as soon as you can. When you contact us, make sure you:

- Give us your name and account number
- Describe the error or transfer in question, and explain why you believe it is an error or why you need more information
- Tell us the dollar amount

We must hear from you no later than 60 days after we sent the first statement where the problem or error appeared. We will investigate your complaint and correct any error promptly. If we take more than 10 business days, we will credit your Account for the amount you think is in error, so you will have use of the money during the time it takes us to complete our investigation.

For general questions about your account, call us at:
1-800-KEY2YOU® (1-800-539-2968)
For clients using a TDD/TTY device, please call 1-800-539-8336

Key Takeaways

1. Budgets are forecasts based on known information and reasonable assumptions

2. Never forget to consider ancillary expenses, tradeoffs, and opportunity costs when preparing budgets
3. Budgets should be evaluated against actual financial results