



Financial Literacy, by SYFI



What is financial literacy?

Financial literacy is the possession of skills, knowledge, and behaviors that allow an individual to make informed decisions regarding money. This skill can bring forth an assortment of benefits that can improve the standard of living for individuals through an **increase in financial stability**.

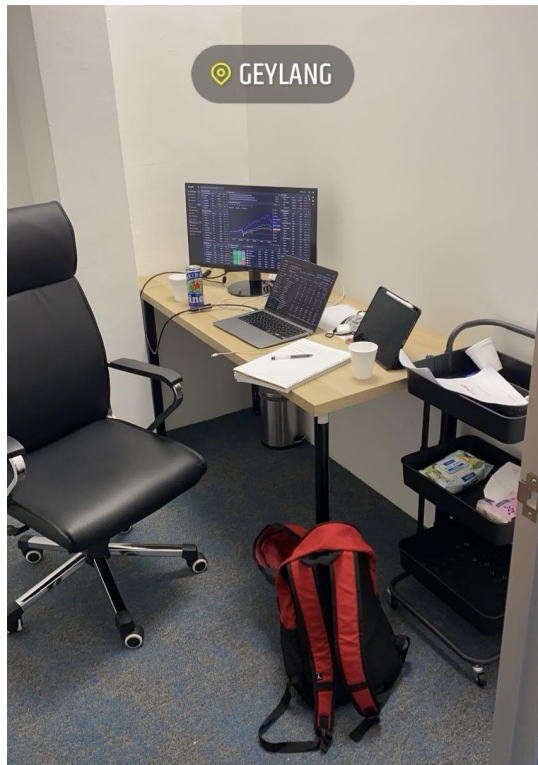




SYFI's Starting

In 2022, Anshul and a friend were writing a stock pitch report, at a co-working space in Geylang. As they were leaving, they heard a knock on the door. 2 elderly gentlemen asked them for their help, showing them an email from “xdqwd7932@gmail.com” claiming to be from Maybank and requesting \$10,000. They calmly explained that it was a scam and the 2 men were so grateful as they could have lost their life savings that day.

As they walked away, Anshul and his friend discussed this prevalent issue that was affecting the community around them. They were determined to solve this, starting off with founding and spearheading their high-school's first ever finance and stock market club, where over 50 students attended their lessons and participated in their simulated investment games. After high-school, Anshul went on to found Singapore Youth Finance Initiative to make a nationwide impact in solving this issue.





About SYFI

The **Singapore Youth Finance Initiative (SYFI)** is a non-profit organisation by youth, that empowers youth with financial literacy skills. SYFI strives to educate youth and prepare them for a career in Finance, Economics and Business. Collectively, they are working to increase the financial literacy rate in Singapore through the youth, but also through community outreach projects aiming to equip vulnerable members of our community with the necessary skills. For further reading, visit our website <https://www.sgyfi.com/> to view content written by our volunteers. SYFI produces frequent easily digestible and accessible news content on local and global financial, economical and business news.



What this course will cover

- 1) **Saving** - Setting aside income or resources for the future
- 2) **Debt** - Obligation to repay borrowed funds or services, often with interest.
- 3) **Budgeting** - Managing and allocating funds for expenses and savings.
- 4) **Banking** - Financial services related to deposits, loans, and transactions
- 5) **Retirement** - Planning and financial preparation for life after work
- 6) **Taxes** - Mandatory financial contributions to government for public services and infrastructure
- 7) **Scam & Frauds** - Deceptive practices aimed at tricking individuals or organizations for personal gain
- 8) **Insurance** - Financial protection against potential losses or risks
- 9) **Investing** - Deploying funds with the aim of generating returns or profits
- 10) **Basic Economics** - the daily functions of economics in our lives

1: SAVINGS



What is Saving?

Saving is income not spent, or deferred consumption. In economics, a broader definition is any income not used for instant consumption. Saving also involves reducing expenditures, such as recurring costs. Many people spend their money as soon as the paycheck comes. This is the issue. Saving allows you to think long-term.





How can I save?

To begin thinking about saving, you need to know what your long-term financial goals are. Are you a simple person? Do you just want to buy essentials now, and let your money grow (we will talk about how you can do this later on). Or do you like spending now, but still want money saved for your future. Both of these are fine, but you need to know this before you begin with your financial planning. To do this, we will use **S.M.A.R.T.** financial goal planning.

SAVINGS:

S.M.A.R.T GOALS



S.M.A.R.T. Goals

S

Specific

Make your goal specific and narrow for more effective planning

**M**

Measurable

Make sure your goal and progress are measurable

**A**

Achievable

Make sure you can reasonably accomplish your goal within a certain time frame

**R**

Relevant

Your goal should align with your values and long-term objectives

**T**

Time-based

Set a realistic but ambitious end date to clarify task prioritization and increase motivation





Specific

A **specific** goal tells you exactly what you want to accomplish. This means that when you set a goal for yourself, you should try to make it as detailed as possible. By making your goal specific, you know exactly what you need to do in order to achieve it.

For example, we can make our goal specific by changing it to, "I want to save money for an emergency fund".



Measurable

A **measurable** goal tells you how you will know if you are making progress or if you have achieved your goal. It answers the question: How much or How many. A measurable goal helps you monitor your performance and celebrate your success.

For example, we can make our goal measurable by changing it to, "I want to save \$1,000 for an emergency fund."



Achievable

An **achievable** goal tells you if your goal is realistic and possible, given your current situation, resources, and abilities. It answers the question: How can I do it? For example, the goal of saving \$1,000 for an emergency fund is achievable, if you have a steady income, a budget, and a savings account. An achievable goal challenges you but does not overwhelm you.

For example, we can make our goal achievable by changing it to, "I want to save \$1,000 for an emergency fund by saving \$50 per paycheck."



Relevant / Realistic

A **realistic** goal is something you believe you can reach or accomplish. It's something that fits into your life, your abilities, and your resources, but it also takes into account your limitations. For instance, if you earn \$100 a week, saving \$80 a week might not be realistic. But saving \$20 could be!

Achievable and realistic may seem similar but they have slight differences. When a goal is achievable, it means you have the skills, resources, and abilities to reach it.



Time-based

A **time-bound** goal tells you when you want to achieve your goal or what is your deadline. It answers the question: When will I do it? A time-bound goal helps you create a sense of urgency and accountability.

For example, we can make our goal Time-bound by changing it to, "I want to save \$1,000 for an emergency fund by saving \$50 per paycheck for 20 weeks."

SAVINGS: SIMPLE & COMPOUND INTEREST



What is simple interest

- Simple interest is interest that is only paid on the principal amount of the loan/deposit (the original sum) and not to any already previously-added interest
- It results in savings growing linearly over time
- In reality, all loans or savings accounts use compound interest



What is compound interest

- Compound interest is interest calculated on both the initial principal and the accumulated interest from previous periods.
- It allows savings or investments to grow exponentially over time.
- The longer the money is left to compound, the greater the growth.
- Compound interest is a powerful tool for long-term wealth accumulation.
- It can significantly boost savings or investment returns over time compared to simple interest.



[GAME] Would you rather...

- Have \$1,000,000 dollars in your bank account
- OR have 1 cent, but your money doubles every day for a month?



The answer...

- If you chose the second option, in 30 days you would have \$5,368,709.12!!

This is the power of compound interest...

The ability to get bigger and bigger returns over time!



Compound Interest in Action

	initial deposit	interest			initial deposit	interest	new deposit		
0	\$ 10,000.00	+			0	\$ 10,000.00			10%
1		\$1,000.00			1	\$1,000.00	\$11,000.00		
2		\$1,000.00			2	\$1,100.00	\$12,100.00		
3		\$1,000.00			3	\$1,210.00	\$13,310.00		
4		\$1,000.00			4	\$1,331.00	\$14,641.00		
5		\$1,000.00			5	\$1,464.10	\$16,105.10		
6		\$1,000.00			6	\$1,610.51	\$17,715.61		
7		\$1,000.00			7	\$1,771.56	\$19,487.17		
8		\$1,000.00			8	\$1,948.72	\$21,435.89		
9		\$1,000.00			9	\$2,143.59	\$23,579.48		
10		\$1,000.00			10	\$2,357.95	\$25,937.42		
11		\$1,000.00			11	\$2,593.74	\$28,531.17		
12		\$1,000.00			12	\$2,853.12	\$31,384.28		
13		\$1,000.00			13	\$3,138.43	\$34,522.71		
14		\$1,000.00			14	\$3,452.27	\$37,974.98		
15		\$1,000.00			15	\$3,797.50	\$41,772.48		
16		\$1,000.00			16	\$4,177.25	\$45,949.73		
17		\$1,000.00			17	\$4,594.97	\$50,544.70		
18		\$1,000.00			18	\$5,054.47	\$55,599.17		
19		\$1,000.00			19	\$5,559.92	\$61,159.09		
20		\$1,000.00			20	\$6,115.91	\$67,275.00		
21	\$ 30,000.00				21	\$ 67,275.00			



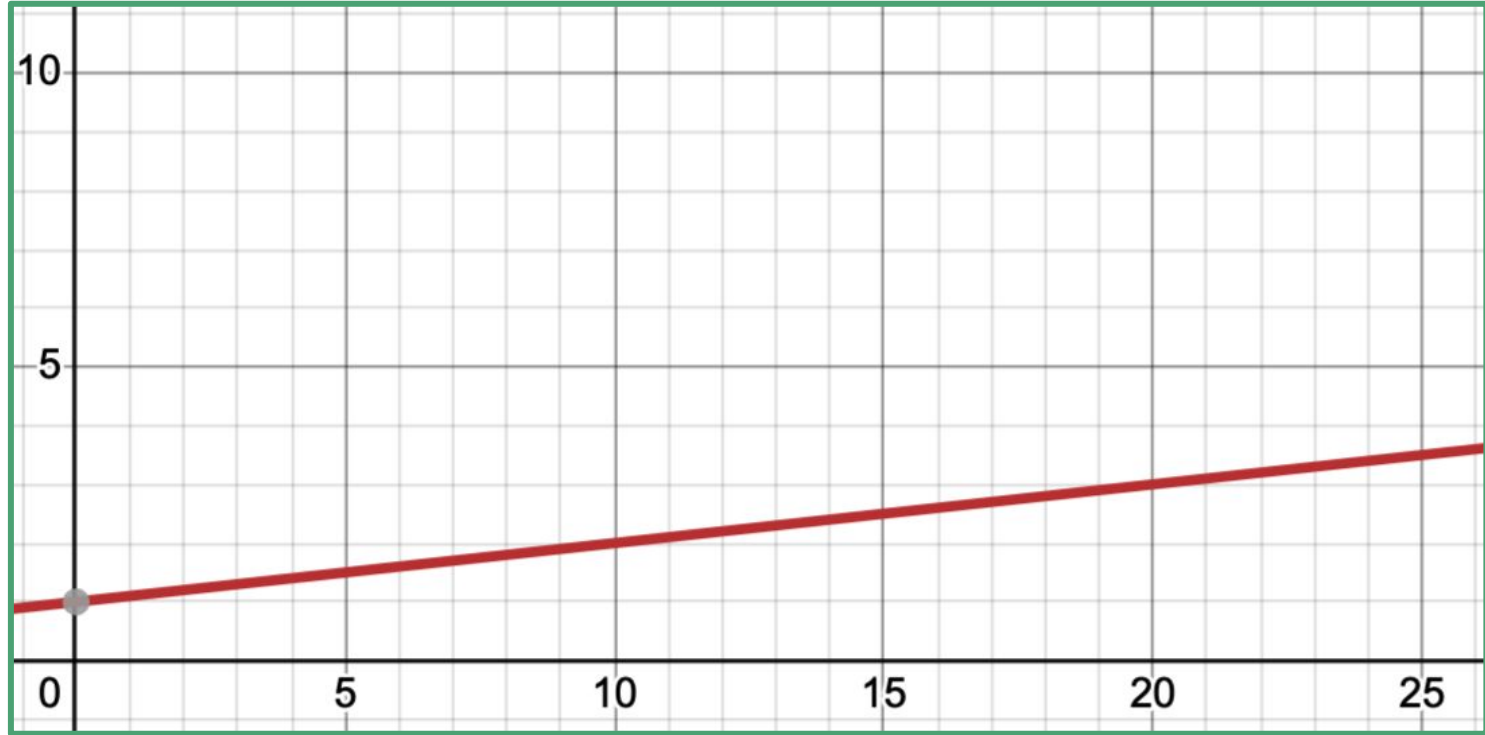
How compounding works

As we can see from the previous slide, simply having a linear interest (saving), will lead to less over a long period of time. Starting of with \$10,000, and saving \$1,000 each year, for 20 years only results in \$30,000.

However, compounding a simple 10% per year (the avg. return of the S&P) would result in the deposit of \$10,000 leading to \$67,000 in 20 years, more than double the savings amount.



How simple interest looks





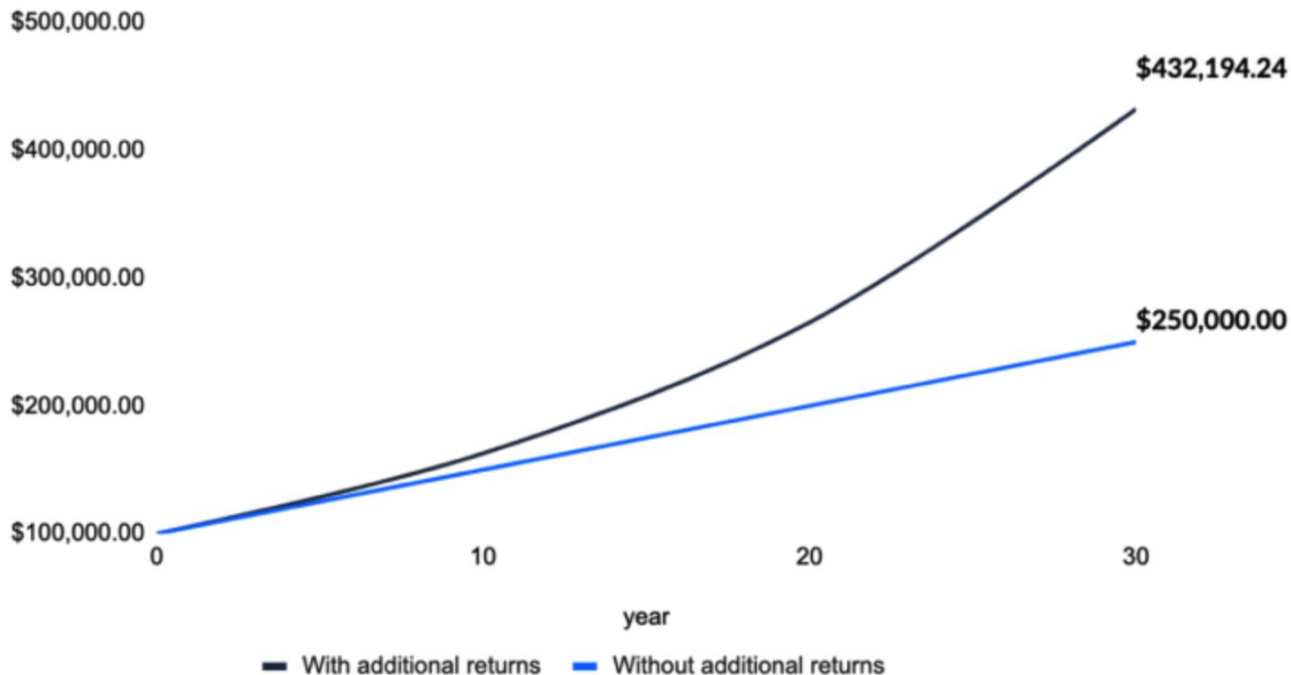
How compounding looks





The difference

Compounded at 5% p.a.





How to earn compound interest?

1. **Savings Accounts:** Deposit money into a savings account and earn compound interest as the bank pays you interest on your balance, which then earns interest over time.
2. **Certificates of Deposit (CDs):** Invest in CDs with a fixed term, earning higher interest rates than regular savings accounts, and watch your money grow through compounding until the CD matures. Certificates of deposit are agreements with banks for you to keep your money in that account for a set amount of time with a higher interest rate than a normal savings account
3. **Investment Accounts:** Invest in stocks, bonds, or funds, and benefit from compound interest through capital appreciation and reinvested dividends or gains, leading to exponential growth over time.

SAVINGS: TYPES OF SAVING ACCOUNTS



Types of Savings Accounts

1. **Regular Savings Account:** Basic account for daily savings with easy access to funds.
2. **High-Yield Savings Account:** Offers higher interest rates, ideal for growing your savings faster.
3. **Certificates of Deposit (CDs):** Fixed-term savings with higher interest rates; funds are locked for a specific period.
4. **Money Market Accounts:** Combines features of savings and checking accounts, offering higher interest rates and check-writing privileges.



Regular Savings Account

A Regular Savings Account is a basic bank account where you can deposit money and earn interest over time. These accounts typically offer low interest rates and are ideal for everyday savings needs, providing easy access to your funds whenever needed.



High-Yield Savings Account

A High-Yield Savings Account is a type of savings account that offers significantly higher interest rates compared to regular savings accounts. This allows your money to grow faster, although there may be certain requirements or restrictions, such as maintaining a minimum balance.



Certificates of Deposit (CDs)

Certificates of Deposit (CDs) are fixed-term savings accounts that offer higher interest rates in exchange for committing your funds for a specified period, ranging from a few months to several years. Early withdrawal usually incurs penalties, making CDs suitable for funds that you don't need immediate access to.



Money Market Accounts

Money Market Accounts are a type of savings account that combines features of both savings and checking accounts. They typically offer higher interest rates than regular savings accounts and may include check-writing privileges and debit card access. Money Market Accounts often require a higher minimum balance.



Emergency Fund

An emergency fund is a savings buffer for unexpected expenses such as medical bills, car repairs, or job loss.

Aim to save 3-6 months of living expenses.

Start small, set up automatic transfers, and cut back on non-essential expenses.



Savings Strategies

- 1. Pay Yourself First:** Prioritize saving by setting aside a portion of your income before spending on other things.
- 2. Automated Savings:** Set up automatic transfers from your checking account to your savings account.
- 3. Cutting Expenses:** Identify and reduce unnecessary expenses to increase your savings rate.



Monthly Budget Planner Game

Objective: Practice creating a monthly budget

How to Play:

1. **Fill in the Sheet:** Fill in income and fixed expenses and write down budget
2. **Present a Scenario:** Create a realistic scenario with a fixed income and a list of expenses
3. **Allocate Budget:** Allocate funds to each expense category while ensuring not exceeding the total income
4. **Discussion:** Review the results and discuss different strategies for balancing the budget

MONTHLY BUDGET PLAN

MONTH: _____ GOAL: _____

INCOME

DATE	SOURCE	AMOUNT	AFTER TAXES

FIXED EXPENSES

DESCRIPTION	BUDGETED	ACTUAL

VARIABLE EXPENSES

DESCRIPTION	BUDGETED	ACTUAL

DEBT/SAVINGS

DESCRIPTION	BUDGETED	ACTUAL

TOTALS

DESCRIPTION	BUDGETED	ACTUAL
Income		
Fixed		
Variable		
Debt/Savings		
Difference		

Online Simulations:

- <https://www.nctm.org/Classroom-Resources/Illuminations/interactives/Compound-Interest-Simulator/>
- <https://goodcalculators.com/simple-and-compound-interest-calculator/>
- <https://www.financialmentor.com/calculator/interest-calculator>

Savings games:

- <https://www.financialfootball.com/play/>: This is an engaging game developed by Visa where players answer personal finance questions to advance down the field and score touchdowns. It's a fun way to reinforce savings principles.
- <https://playmoneymagic.com/>
- <https://mycreditunion.gov/financial-resources/hit-road-financial-adventure>: This game simulates a virtual cross-country road trip where players must manage their money wisely by creating a budget, spending responsibly, and managing debt. It's an excellent way to teach the importance of saving and spending decisions.
- <https://playspent.org/html/>