Financial Literacy Capacity Assessment

LEARNING BOOK

PART I: BASIC LEVEL

Chapter 1: Education & Career

The job market is shaped by fundamental economic, social and technological trends, including ***automation, globalization and outsourcing***. Everyone should understand what these terms mean and how they impact the labor market of today and tomorrow.

AUTOMATION is the ability of machines like computers and robots to perform tasks previously done by humans. Its main impact on the job market is to reduce demand for repetitive tasks. Some jobs disappear, others are redesigned so machines do the routine work while humans focus on tasks that require personal interaction, specialized know-how, or creativity.

> *EXAMPLES: Bank tellers may be replaced by ATMs and mobile banking for routine tasks, but human input is still needed for complex transactions and personalized advice. Store merchandising may be less important, but demand for e-marketing expertise will increase. Careers as robot technicians may replace assembly line jobs in manufacturing.*

The definition of repetitive work continues to evolve as technical progress expands the scope of tasks that can be automated. For example, computers powered by Artificial Intelligence may replace some call center and telemarketing jobs, while self-driving vehicles may take over from taxi and lorry drivers.

GLOBALIZATION means increasing exchanges of goods, services, capital and labor among countries. Since 1945, national economies have become much more interdependent. Many goods are made from raw materials and components that are sourced from a wide range of countries and cross several borders before reaching their final destination. We live in one global, interconnected economy.

> *A smartphone sold in the UK may use software from the US, chips from Japan, batteries from China, and cases from Taiwan; it may be assembled in China and carried to the UK by a Danish shipping line operated by Filipino seamen.*

International trade helps countries specialize in activities where they are most productive, thus raising efficiency and lowering costs. But it can lead to painful disruptions for entire industries and regions. Governments can help by supporting the transition to new activities. Workers need to be flexible, changing jobs and learning new skills.

Globalization combines with automation to reinforce trends in the labor market, like ***the decline in unskilled jobs in rich countries***. Immigration has also risen in many countries, adding new skills to the economy but also competition in low-skilled occupations.

There has been some backlash against globalization, as people worry about social disruptions and rising inequality. Globalization is unlikely to beat a full retreat, though some things could be made closer to home in future.

You need to follow these trends and choose career paths that offer good prospects in the place where you live. In addition to labor market demand, you should consider your abilities and preferences – choose something you're good at and like to do!

Best prospects are in jobs that cannot easily be taken over by either machines or overseas workers – e.g., jobs that require personal interaction, creativity, teamwork, and communication skills.

Examples of jobs that offer good prospects include:

- *Creating and maintaining the tools and software that support the global connected economy*
- *Creative services for businesses*
- *Personalized services for individuals*
- *Services consumed where they are produced*
- *Jobs in new or emerging industries, such as online learning, cyber-security, clean energy, wellness, personalized medicine, digital marketing, and many others*

Growth in **OUTSOURCING** is another trend, as businesses purchase from external suppliers goods or services that were previously made in-house. The suppliers can be located in low-cost developing economies or they can be next door.

One form of outsourcing is the "gig" economy, where businesses replace employees with independent contractors. This can lead to lower costs for consumers and can provide advantages like flexible working hours for workers, but can also result in long working hours and low pay with few benefits, job security, or career prospects.

The gig economy is an extreme aspect of a long-running general trend in the labor market: ***the rise in short-term or part-time jobs*** at the expense of long-term, permanent employment.

This more precarious work environment has two key consequences for everybody:

1. **You must rely on yourself to achieve basic financial security, including saving for a rainy day and building a nest egg for retirement**
2. **You must continuously upgrade your skills and knowledge to remain in demand in the labor market.**

HUMAN CAPITAL is a key concept: it represents the sum of formal education, skills, and experience acquired by people. Investments in human capital offer among the best returns available, as they raise long-term earning potential. University graduates, for example, tend to earn higher salaries over the long run, with the extra income more than offsetting the cost of studies.

Human capital includes:

- *Technical and professional knowledge, which can be acquired through a college degree, vocational or on-the-job training*
- *Soft skills, such as problem solving, critical thinking, and communications*
- *Experience working in non-profit and voluntary organizations*
- *Knowledge gained through self-study and online learning in addition to formal classes*

A key takeaway is the crucial importance of **EDUCATION** for everyone. This can take many forms, from practical training and online courses to university degrees, often in combination. Higher studies can be expensive but the cost can often be defrayed by stipends or student loans. Loans may cover living expenses in addition to tuition, and offer favorable terms like long repayment periods and exemption under certain circumstances.

HOW ABOUT BECOMING AN ENTREPRENEUR?

Starting your own business is an option that attracts many people. It can be a highly rewarding experience and lead to big profits and personal fulfilment. But the risks are high, working hours can be forbidding, and the uncertain revenues make it harder to plan your financial future. It's a big decision that requires careful homework and advice from experienced sources. Look at flops and failures, not just success stories!

Chapter 2: Budgeting, Saving, Borrowing

Your personal **BUDGET** is a list of your monthly income and expenditures, grouped by categories such as rent, utilities, food, clothing, transport, entertainment, etc. It can help you understand how much you earn, where your money goes, how you can save, identify potential fraud, and above all – make sure you earn more than you spend!

The surest way to financial ruin is spending more than you earn and borrowing – with interest – to make up the difference.

The first thing to understand is how much you earn. The main source of income is typically your wage or salary – what you earn from a job you hold, whether full or part time. Salaries are often low for young people, because they lack the qualifications and experience needed for higher-paying positions. Some entry-level positions only pay the minimum wage, which is typically set by the government at a level sufficient to cover basic needs (though what these are is subject to much debate).

Unfortunately, not all the salary goes straight to your bank account: there may be upfront deductions for things like national or unemployment insurance, loan repayments, etc.; there may also be income tax that is deducted from your "gross" to arrive at your "net" pay.

On the other hand, there are other sources of income than what you earn from working: for example, benefits from government programs, stipends for university, allowances from your parents, and income from capital (e.g., dividends or interest you collect). All these are added to your monthly income.

If you monthly expenditures exceed your income, there are several options. You can try to ***increase your income***, for example by doing additional work or selling items you don't need on online marketplaces. Sometimes parents and family can be tapped, whether by doing chores or just asking for an allowance.

A key part of the solution is almost always to be ***more frugal and selective*** in your spending: for many items, cheaper options exist that will not ruin your life (nor your image 😉) – for example, buying private labels instead of fashion brands, cooking instead of eating out, sharing your apartment with a roommate, and walking, cycling or using public transport instead of driving a car.

An absolute priority is to **prioritize spending** (no pun intended). You need to distinguish between things you absolutely need or that really make a difference to your life, and those that may be nice to have but are not critical. For every expensive purchase you're planning, ask yourself whether you really need it or are just responding to pressure from friends, social media and advertising? Have you fully researched the market to see if there are cheaper alternatives that will also do the trick?

A good way to think about your budget is to estimate your "DISCRETIONARY INCOME". While there is no precise definition, it means the difference between what you earn and your fixed and essential expenditures – things like rent, utilities, and food. You can then decide how to allocate what's left to things that you want most or simply can't wait to have.

Many purchases offer different payment options, such as cash, cheque, credit card, store card, hire purchase, instalment plan, bank loan, etc. Choosing among then is an important part of the buying decision. The first thing is to understand the full costs and conditions of all options.

EXAMPLE: You see an ad for a TV requiring monthly payments of £20 over 2 years. The cash price is £300. Interest rates on savings accounts are 2%. Which is cheaper?

Answer: *Buying cash! Monthly payments over 2 years are £480, which is £180 or 60% more than the cash price. You should wait until you can either afford to pay cash or borrow more cheaply from your parents or a bank.*

While you should always be careful in incurring debt, buying on credit can be appropriate in some cases. For example:

- **Purchases paid by credit card, provided you pay the card bill at the end of each month**
- **Purchases of durable or long-lasting goods that are too expensive to be paid upfront**
- **Investments in physical capital (e.g., a home) and human capital (e.g., education) that generate benefits over the long run**

Before taking the plunge, you need to carefully assess the risks and consequences of borrowing. Ask yourself:

- Is this a good reason for borrowing?
- How much will it cost me over time, including interest and other charges?
- Have I compared this against other loan offers and payment options?
- Have I considered all potential impacts, including on my comfort, stress level and credit record?
- What is the payback time, i.e., how many years will it take me to repay the loan?
- And last but not least: can I afford it?

To determine how much you can borrow, you need to compare future payments to both your total and discretionary income. A good rule of thumb is that your total monthly debt payments should not exceed 36% of your total gross (pre-tax) income. While this is not cast in stone, it's a useful yardstick for financial planning, especially since many lenders also consider it.

An important factor to determine whether you're eligible to borrow and at what interest rate is your **CREDIT SCORE**. The credit score is a number that measures how likely you are to pay your debts. It depends on your borrowing and loan repayment history. **The most important thing you can do for a good credit score is to pay all your debts on time**!

A bad credit score can have many adverse consequences, for example:

- *Higher interest rates on credit cards and loans*
- *Declined loan applications*
- *Denied cell phone contract*
- *Higher premiums for auto insurance*

SAVING is a lifetime habit that's best acquired when you're young. You should always strive to set some money aside, in order to:

1. **Be prepared for unforeseen events**
2. **Save up for a large purchase (like a car or house)**
3. **Build wealth for the future**

A good way to start is to divert part of your salary to a savings or investment account before you have a chance to spend it, through **AUTOMATIC PAYROLL DEDUCTION**. If you leave the money in the account and reinvest interest and dividend income, this is called "compounding" and is a powerful force for accumulating wealth over the long run.

Chapter 3A: Basics of Investing – Main Asset Types

There are 4 main categories of investment or asset types:

1. **Cash**
2. **Fixed-income**
3. **Equities**
4. **Real estate**

Investing is about understanding what these four categories are, their advantages and drawbacks, what determines their prices, and how to combine them into a sound portfolio.

CASH

Definition: coins, notes, checking accounts

Cash includes all coins and notes, as well as current, checking, and money-market accounts that can be accessed anytime at no cost.

Advantage: safe and liquid

Cash is the safest and most liquid form of investment – meaning you can access your money anytime. Bank deposits of up to £85,000 in the UK and $250,000 in the US are guaranteed by deposit insurance.

Drawback: no return

The safety and liquidity of cash come at a price: it offers no or very little return. Hence its value is eroded over time by inflation.

You should keep only a relatively small proportion of your assets in cash, to cover emergencies and unforeseen expenses. A good rule-of-thumb is to keep 6-12 months of living expenses in cash.

Price: constant value

Cash does not change in value, hence there's no risk of loss. But there's no upside either, and it offers no protection against inflation.

FIXED-INCOME

Fixed-income: loans made to various types of borrowers

Fixed-income investments are loans made by an investor to a company, bank, or government. The borrower promises to pay interest at regular intervals and repay the loan amount at maturity. The interest rate can be fixed or floating in line with a benchmark rate.

Common types are Certificates of Deposit, savings accounts, government bonds, corporate bonds, and junk bonds.

Advantages: steady income and low risk

Bonds are a relatively safe form of investment that provides steady income and a higher return than cash.

Investors should keep some proportion of their assets in bonds; older and more risk-averse investors could own relatively more bonds.

Drawbacks: limited returns, some risks, no inflation protection

Over long periods of time, returns have been lower for bonds than stocks, though stocks are more volatile Bonds also carry some risk, including the risk that the borrower may not repay the money due on time and that the money repaid will be worth less after inflation.

In recent years, bond yields have been very low in many countries. If interest rates barely cover inflation or are negative, savers should be careful before committing large amounts to bonds. Cash, property, low-risk equities and gold could be considered as alternatives or complements to bonds in such circumstances.

Price: bond prices vary inversely with market interest rates; the interest rate for any particular bond depends on its characteristics

Prices of bonds vary inversely with interest rates: when market interest rates rise, bond prices decline, since investors could earn a higher return by selling existing bonds and buying newly issued ones.

The general level of interest rates depends on factors like growth, inflation, and monetary policy. When growth or inflation are strong, interest rates tend to rise.

The interest rate paid by a specific bond depends on its characteristics: bonds with higher risk, longer maturity, and less liquidity tend to carry a higher interest rate.

EQUITY

Equity: part ownership of a business

Equity or stocks represent partial ownership of a business. They can generate big gains, but are risky since the company can make losses or go bankrupt.

You can buy individual stocks or stock mutual funds. Mutual funds pool money from multiple investors to invest in a range of stocks. They offer the advantages of diversification and professional management, and can be used to target specific countries or sectors.

Actively managed mutual funds try to use insights and skills to beat the market. Index or passive funds track a general market index and charge lower fees. Exchange Traded Funds (ETFs) are a popular type of index fund combining liquidity with low costs; they can be a good addition to a diversified mix of funds.

Advantages: good long-term returns, outperforming other investment classes

Stocks offer virtually unlimited growth potential. Stockholders can benefit from dividend payouts (the part of profits that companies distribute to their stockholders), stock buybacks (the purchase of its own stock by a company), and increases in the share price (which can be due to many factors, from positive developments in its business to a general rise in the stock market).

In the long run, stocks tend to outperform other types of investment. Stocks also offer some degree of inflation protection: if prices rise, the revenues and profits of most businesses increase as well.

Drawbacks: risky – prices are volatile and can go through long periods of decline

Stock prices are volatile. Stocks of individual companies can fall sharply on account of negative corporate or business news. The stock market as a whole can go through long periods of decline.

Price: prices depend on profits, dividends and growth prospects

The value of a stock depends primarily on the profits earned by the company, the dividends it pays to its shareholders, and the growth prospects for both.

Markets are driven by sentiment as well as fundamentals; they can be subject to speculative bubbles or irrational fear. In the long run, however, prices tend to track fundamental value.

REAL ESTATE

Real estate: your home or related types of investment; the most important investment most people make in their lifetime!

The most common form of real estate investment is your house or flat. Real estate also includes vacation homes, buy-to-let properties, raw land, Real Estate Investment Trusts, etc.

Buying a home is the largest investment most people make during their lifetime; it is essential to research and plan it carefully.

Advantages: comfort and security; prices stay ahead of inflation in the long run

A home can provide residential comfort and financial security. You can make any changes you like to your home and – unlike rent – part of the mortgage goes towards building your home ownership.

A home may increase in value over time, as population grows and incomes rise. Historically, the price of real estate has exceeded inflation, making it a valuable inflation "hedge" or shield.

Drawbacks: lumpy and expensive; prices can decline both locally and nationwide

The real estate market can be prone to speculative bubbles, where prices move out of line with fundamentals like wages and rents. Mortgages can make homes more affordable and offer tax advantages – but be careful of debt exceeding 80% of home value or requiring more than 35% of income to service.

Real estate investment tends to be lumpy and illiquid: it takes lots of money to buy even a small flat. Houses are not easy to sell on short notice, though they are generally saleable within a reasonable time frame if the price is right.

Price: general economic and demographic trends + specific characteristics of home

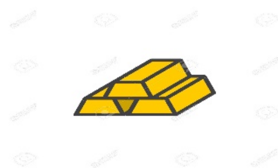
General economic and demographic trends exercise a key influence on the real estate market. Rising population and incomes boost demand for housing, while zoning laws limit supply. Interest rates and tax laws can make mortgages more or less affordable.

In the long run, real estate prices must be related to average incomes and rents, as these determine what tenants or buyers will be willing and able to pay.

Regardless of general market conditions, check out carefully the specific condition of any home you plan to buy and the attractiveness of its location.

OTHER ASSET CATEGORIES

Other assets: gold, commodities, art, collectibles, etc. – for knowledgeable investors!



A small amount of gold and commodities could be included in a more sophisticated portfolio, and investors with relevant know-how could buy art, tangibles, or collectibles. But these are not essential for a reasonably balanced portfolio, and students should try to absorb – and master – the principles relating to the four major asset categories before venturing too far beyond them.

Chapter 3B: Basics of Investing – Portfolio Management

Portfolio management is not rocket science, but it is absolutely key for long-term investment success. It means following a few core principles on how to build and maintain a sound and balanced investment portfolio:

Rule 1: Adopt a sound asset mix

Select an appropriate mix of the 3 main financial asset types—cash, bonds, and equities. There are no strict rules and opinions differ, but here are some fundamental principles that most people agree on:

- Cash should cover at least 3-6 months of living expenses, and possibly more given the uncertainties of today's job market. You should have enough cash and liquid assets (those you can turn into cash at short notice) to cover unforeseen events or expenditures. Life is full of surprises – and even the pleasant ones can cost money…
- Equities should account for the major proportion of your financial assets, i.e., at least 50% and likely more, as they tend to produce the highest returns in the long run; the younger you are, and the more willing to take risks, the higher the share of equities should be
- Bonds or fixed-income investments should generally account for between 10% to 40% of your financial assets, mostly in form of government and high-quality corporate bonds; in times of ultra-low interest rates, you might supplement these with alternatives like high-yield bonds or low-risk equities

- Owning a home is generally a desirable objective, as long as it is affordable and makes sense in your current circumstances (see Advance Level Chapter 4: Housing).
- A portfolio could also include other assets, such as real estate (physical properties or financial investments), gold and commodities, hedge and private equity funds, etc. But cash, bonds and equities form the cornerstone; other assets could be considered by more sophisticated investors and under certain circumstances.

Rule 2: Stick to your asset mix

Once you've defined a target asset mix, you should rebalance your portfolio from time to time to stay on track. If you want to own a mix of 5% cash—25% bonds—70% equity, and equities have risen to 80% following a bull market (period of rising share prices), you should sell some equities to restore the balance. You'd be selling when prices are high which is generally a good idea!

As your circumstances changes, you could make some amendments to your target asset mix. For example, as people near retirement age, it may make sense to reduce the share of equities in their portfolio (since equities tend to rise in the long run but can go through long periods of decline).

Rule 3: Diversify

Diversification is important not only for the overall asset mix but also within each asset category. You should buy different types of stocks and stock mutual funds. Mutual funds offer diversification along with professional asset management and liquidity. There are different types of funds, specialized by country, sector, type of security, active or passive management, etc. You could buy a mix of funds with different features.

Diversification also applies to bonds: you should buy a mix of short and long-term bonds, and a majority of safe bonds (government and high-grade corporate) along with some higher-risk bonds. You could invest through fixed-income mutual funds, especially in areas like high-yield or foreign bonds where specialized expertise is particularly useful.

Diversification can reduce the risk of your portfolio without sacrificing return: it takes advantage of the fact that not all assets go up or down at the same time. An important factor is the correlation between different assets, i.e., the degree to which their performance tends to move in tandem: by mixing assets with low correlation, you can enhance the overall stability of your portfolio.

Rule 4: Balance risk and reward

High risk should be compensated by high returns. Examples of relatively high-risk investments that should offer high potential returns are venture capital funds, emerging markets, and junk bonds. You could consider investing in them if you understand the risks involved and they account for a relatively small proportion of your portfolio.

Rule 5: Don't try to time the market

Stocks should account for the bulk of your portfolio since they have outperformed other asset classes in many countries over long periods of time. The best strategy for stock investing is "buy and hold": it minimizes trading expenses and avoids buying at the top and selling at the bottom.

A smart way to accumulate stocks is dollar or pound-cost averaging: you invest a certain amount of money in a stock or mutual fund every month or quarter; when prices are high, you buy more units, and when prices are low you buy less.

Rule 6: Investing is not speculating

If you want to bet on individual stocks that you think are hot or that someone recommended to you, keep in mind that speculation is inherently risky and nobody knows the future. The best advice is to stick to sound, long-term investment strategies. But if you really want to take a punt, make sure it's for a small amount that will not materially affect your well-being if it goes sour (nor leave you exposed to your family's sneers…). Never bet the farm on any one idea!

Rule 7: Avoid leverage

Leverage or gearing means borrowing money to invest in risky assets. It can magnify returns when the asset goes up, but also losses if it goes down. Leverage is a double-edged sword and is strongly discouraged for all but the most wealthy and sophisticated investors.

You should also be aware of leverage in companies and funds you invest in. Using borrowed funds to boost returns is a common strategy. It can be useful under certain conditions, but the risks need to be carefully managed and fully disclosed.

Rule 8: Minimize complexity

Stay clear of investment products that are highly complex and that you don't fully understand. If you can't explain it to your granny, you should probably avoid it!

Rule 9: Consider taxes and fees

Always consider the tax implications and the fees associated with any investment you make. Neither can be avoided, but both can be reduced if you play it smartly!

Rule 10: Keep an eye on your net worth

Net worth is the difference between the market value of your assets and liabilities.   It can vary for many reasons, but should gradually increase over time as you earn and save more, your investments increase in value, and you build your "home equity" by repaying the mortgage. But beware: rising incomes can lead to higher spending financed by debt, while investments can turn sour. Check your net worth from time to time to make sure you're on the right track!

Rule 11: My home is my castle

In recent years, house prices have risen sharply in many countries, as low interest rates made investing in property more attractive. There is no guarantee such trends will continue, but owning a home – if you can afford the mortgage – can provide financial security and personal comfort. A roof over the head will always be worth something (especially in countries where it rains a lot…😊)