Chapter 9: Interest and Inflation

In a loan, the borrower commits to making two kinds of payments to the lender:

- **PRINCIPAL** is the nominal amount of the loan, which is due either at maturity (at the end of the loan) or in periodic instalments
- **INTEREST** is an additional payment due on top of the principal, generally paid monthly and expressed as a percentage of the principal amount outstanding

=>

Interest represents the cost of borrowing money. It compensates the lender for three kinds of risks:

1. **CREDIT RISK: the risk that the borrower may not repay in full and on time what they owe**
2. **LIQUIDITY RISK: the risk that you may need the money while it is tied up**
3. **INFLATION RISK: the risk that inflation may erode the real value of the money you get back**

These 3 elements explain the **TIME VALUE OF MONEY**, i.e., the concept that a pound, dollar, euro or yen today is worth more than tomorrow. Money in hand can be spent freely, while future money (a) cannot be used yet, (b) may not arrive when it is due, and (c) may be worth less when it does.

You should make sure you understand the way interest rates are quoted. A common term is the **ANNUAL PERCENTAGE RATE (APR)**: it is the amount of interest you pay per year as a percent of outstanding debt. If you owe £1,000 on a loan with a 20% APR, and leave that debt unchanged for a year, you will pay £200 in interest. APRs can sometimes be higher than interest rates because they include other costs, for example closing costs and mortgage insurance in the case of housing loans.

Interest can be **SIMPLE** or **COMPOUND**: simple interest is calculated on the principal amount outstanding, while compound interest is calculated on principal plus accumulated interest. Compounding means earning interest on interest; it can be a powerful tool, especially over long periods of time and when interest rates are fairly high. The **RULE OF 72** states that the approximate time for doubling an investment equals 72 divided by the annual interest rate; so a £100 loan at 6% compound interest becomes £200 in about 12 years. When interest rates are low, compounding loses some of its appeal, though it also applies to the dividend income of stocks.

Interest rates are significantly lower today than they have been in the past. Since the global financial crisis of 2008, low inflation, a global savings glut, and large-scale central bank purchases of bonds have contributed to exceptionally low interest rates. In some cases, interest rates on government bonds have turned negative. This has significant implications on financial planning and investment strategy:

=>

If interest rates on safe government and high-grade corporate bonds barely or do not cover inflation, it may not make sense to allocate a large share of your portfolio to them. Investors should consider supplementing or replacing them with alternatives, for example:

- **Cash: keeps its value and is only subject to the risk of a sudden spike in inflation or the cumulative impact of inflation in the long run**

- **High-yield bonds: pay higher interest though the extra yield should be large enough to compensate for the additional risk**
- **Floating-rate bonds: these pay a spread over a market rate; the latter should normally rise with inflation**
- **Low-risk equities: for example, stocks of utilities which tend to have steady revenues and profits**
- **Rental property: tends to keep its value in real terms and generates rental income; can be physical properties or financial assets like Real Estate Investment Trusts**
- **Gold: tends to rise in value during periods of inflation or financial unrest, providing a hedge to investors**

Ultra-low or negative interest rates are a relatively recent phenomenon and uncharted territory in financial planning; investors should carefully consider the implications, hedge their bets, and seek advice from qualified sources.

Part of interest compensates for the risk of inflation. **INFLATION** is an increase in the average price of goods and services bought by consumers. It tracks the price of a basket of typical household purchases. Inflation erodes the purchasing power of money, especially over long periods of time, affecting both the standard of living of people and the real return on investments.

=>

Inflation is particularly harmful to those who receive fixed amounts of money, such as retirees with fixed (non-inflation adjusted) pensions and owners of long-term, fixed-rate bonds.

Moderate or high inflation has been a regular phenomenon in many countries over the past half-century. But inflation has been low in recent times, even during periods of strong growth and low unemployment which traditionally coincided with higher inflation. Economists continue to debate the reasons for this and whether it will continue; explanations include growing imports from low-cost developing countries, competition by e-commerce firms, and reduced power of trade unions.

Investors and consumers should be on the look-out for signs of a possible resumption of inflation and be prepared to deal with it if it happens. Among other things, this means having a portfolio that provides some degree of protection against inflation, for example through:

- **Equities**, which have some built-in inflation protection as the revenues and profits of businesses tend to rise with the general level of prices
- **Real estate**, whose prices tend to be stable or rise in real terms
- **Gold**, which is viewed as a hedge against inflation and rises during periods of high inflation