CHAPTER 4: DEBT MANAGEMENT AND LOANS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Need of debt
- Role and impact of debt in cash flow management
- Know about Leverage and Debt Counselling
- Calculation of debt servicing requirements
- Understand Responsible Borrowing
- Concept of secured and unsecured loans
- Know certain terms related to loans
- Types of borrowings
- Understand various Loan calculations
- Know Loan restructuring – present value of future payments
- Repayment schedules with varying interest rates
- Criteria to evaluate various loans
- Opting for change in EMI or change in tenure for interest rate changes?
- Invest the money or pay off outstanding loan?
- Know the Strategies to get rid of debt faster

4.1 The purpose or need of debt

Debt is used to finance goals when available funds (self-funding) are inadequate. Even though income might be higher than expenses it is not possible to finance every purchase or asset with just the existing savings. For example, most people cannot buy a house without a loan. This is because the cost of a house is huge and if people waited till they had enough savings to buy a house then it is likely that this would not be possible till they near retirement. Lenders protect themselves by securing their loan against a charge or security or pledge or mortgage on the property. Such loans are also called 'mortgages'.

Other debt includes auto loans, credit taken for buying consumer durables, personal loans and credit card outstanding. However, debt comes at a cost and imposes a repayment obligation on the borrower. The decision on whether or not to use debt will depend upon the ability of the available income to bear the additional charge of interest cost and repayment.

Debt is not always bad, it has to be seen in perspective as to what is it being spent for. As an example, debt for acquisition of house property is not bad. In some cases, the decision to use borrowed funds over own funds, also called leverage, may actually increase the return made on an investment (Modigliani-Miller Theorem (M&M)). In some cases, a loan may make more sense in a given situation. For example, an education loan may be a better choice than drawing from a retirement account to fund the children's education. The future income would be easily able to repay the loan and at the same time the existing funds can continue to earn without losing the benefit of compounding. Continuation of existing investments is important, to maintain the compounding effect.

It can be seen that debt is needed under various circumstances and sometimes it can be also for temporary use of funds. This kind of short-term needs might arise due to some emergency or some cash flow mismatch but it can ensure that an individual is able to continue on their life path without facing sudden disruptions.

4.2 Role and impact of debt in cash flow management

While some debt is good and may even be recommended, how much debt is good depends upon the financial situation of each household. A good indicator is the debt-to-income ratio (DTI) that measures the ability to meet the obligations arising from debt with the available income. There is no "perfect or optimal" DTI ratio that lenders require, but all lenders tend to agree that a lower DTI is better. Depending on the size and type of loan they're issuing, lenders set their own limits on how low your DTI must be for loan approval.

Consider a salaried employee who draws a salary of Rs. 15,000 per month, and is paying Rs7,500 towards debt servicing. The debt servicing ratio comes to Rs.7,500 ÷ Rs15,000 i.e. 50%. This is too high. If 50% goes towards debt servicing, it affects the ability to meet other regular expenses, provide for emergencies and the person may have nothing left to invest for the future.

The interest rate and the amount of debt play an important role as far as the measurement of the impact of the debt is concerned. A higher interest rate will raise the repayment amount that will have to be paid and similarly a higher loan amount will also increase the monthly repayment amount. One has to look at the cash flow and then decide on the amount of debt that will be taken.

All this needs to be done to ensure that the debt and its outflow do not disrupt the entire cash flow management plan laid out. Often there could be a situation wherein the debt servicing needs are high and at the same time a crisis on some other front can leave little room for borrowing some more amounts to tide over it. This is also the reason why the debt servicing amount needs to be low so that there is scope for raising some more funds in case this is required.

4.2.1 Differentiating between consumption expenditure and investment expenditure

Many clients have an endless list of lifestyle expenses. The Investment Adviser should be able to influence the client to be prudent in the expenditure. This can be done by highlighting how expenditure might affect the chances of the family being able to fulfil some other financial goal. One way to differentiate the various expenditures is by classifying them as consumption expenditure and investment expenditure. Consumption expenditure is that amount which once used does not create any asset that generates further income. Amount spent at a restaurant or for buying clothes or expenses made at a saloon are some examples of consumption expenditure. On the other hand investment expenditure will lead to the creation of an asset, which then can generate further income in the future. The trade-offs should be clearly understood by the client. For example, buying a bond or a property can be investment expenditure.

Some outflows, like providing education to children, may appear to be consumption expenditure. But they may be a useful investment, if the children do well and are able to raise the family's income. Such expenditure needs to be prioritized. A budget that clearly demarcates mandatory and legal payments such as taxes, contributions to provident fund and gratuity and loan commitments, essential living expenses such as food and shelter and discretionary expenses such as lifestyle expenses, will help allocate income better between current and future needs. Allocate savings for goals before considering the discretionary expenses. This will make sure that the future needs are taken care of. Systematic investment plan (SIPs), especially when automatically transferred from the salary, helps in prioritizing the investment expenditure.

The approach of people should be, instead of Income minus Expenses = Savings i.e. save only after expenses, to make it Income minus Savings = Expenses i.e. spend after savings.

4.2.2 Identifying the holes in the household budget

A household may not be managing its income and expenses efficiently to enable savings for goals. Some common errors that make it seem as if savings are not possible include not being clear if an expense is an essential living expense or discretionary in nature, incorrect (higher) allocation for expenses, not 'paying self' before allocating for discretionary expenses, not tracking expenses regularly and hence going over-budget, among others. Very often, clients do not realise how much money goes in various avoidable expenses. The adviser should inculcate the habit in the client, to note down all expenses above a specific level. The limit may be Rs.500 for some clients; Rs.5,000 for some others. The actual figure would depend on the income level of the client.

A summarisation of the list of expenses at the end of the month can be enlightening, even for the client. For example, the amount that went in eating out or entertainment might be pretty high but this might not register for the client because all payments were made by credit card so this was not actually tracked. When the client recognises the scale of the lost opportunity to save, there is better likelihood of prudence in future. An adviser's primary role is to identify and eliminate these lacunae that inhibit savings. There are often cases where a lot of money is spent on buying the latest gadgets when this is not necessary. Spending on a gadget like a phone or a laptop is necessary because it helps in work and increases efficiency and learning for an individual or the household. However constant upgradation just so that they have the latest model to show off is not a wise way to spend money and the amount saved from such expenses can be used at several other places.

4.2.3 Allocation to various categories of expenses

The monthly summary of outflows helps in understanding the current prioritization. If unusual expenses are kept out (for instance, a hospitalization that was not covered by insurance), the balance outflows can be categorized as mandatory contributions to provident fund and other retirement savings, loan servicing, essential expenses and lifestyle expenses.

Families vary in their financial circumstances. The advisor should work with the family in setting limits on various categories of outflows. The household can make additional savings possible by changing their choices on the expenses they incur. An essential expense does not lend itself to much reduction but lifestyle expenses can be controlled to a large extent. Considering the alternate use to which the income can be used instead of spending it on discretionary expenses is one way in which such expenses can be controlled.

In corporate finance, there is a concept of 'zero base budgeting' which means, rather than taking the previous budget as the reference point and modifying the numbers, take it from scratch. In that case, each and every expense is thought through, and is not incurred just because it was incurred earlier. The concept can be applied in household finances as well.

4.2.4 Windfalls

Clients occasionally earn a windfall such as unexpectedly high annual bonus, inheritance, winning a lottery, etc.. A healthy portion of such unexpected income should be set apart for the future, since the family is used to living without that windfall. This can also be the time to take a look at the outstanding loans and consider pre-paying some of them.

Windfall gain need not be invested immediately, and can be deployed as and when appropriate. The gain may be held in risk free liquid assets, till investment decision is reached. The amount of the windfall should be properly allocated as the extent of the windfall matters. For example, a very high annual bonus a year can be used to prepay loans and at the same time make some additional investments too, which can yield a return in the future. One should not expect a windfall to occur regularly in the hope that this will save a bad financial situation, as this can encourage wayward financial behaviour and still end up with a higher amount of debt when the windfall does not materialise.

4.3 Leverage and Debt Counselling

Investment Advisers need to consider various aspects when they are advising clients on debt as this can have a big role in the kind of financial behaviour that is witnessed. Many factors will vary for a client and each of these needs to be taken into consideration when a specific plan is put forward. Some of the factor here includes the following:

4.3.1 Purpose of the debt

Debt or loan should ideally be taken for acquiring appreciating assets such as real estate. Some debt may be recommended to meet an expense that will increase the value of an asset, say an education loan to upskill, so that the income generating ability of the person goes up. Financing risky or volatile investment propositions with debt may entail high risk and may put the entire financial security of the individual or household at risk. Margin financing for stock market investing is one such investment. A fall in the value of the investment will magnify the loss since the cost of debt will also have to be accounted for. Debt should certainly not be used for financing one's regular expenses. If a person starts borrowing to meet expenses, then he is clearly living beyond his means and likely to be in a debt trap. Taking short term debt to tide over temporary liquidity problems may be fine, as long as the borrower knows the risk and has a plan to repay the debt as soon as possible.

4.3.2 Cost of debt

Higher the rate of interest at which money is borrowed, more will be the outgo in servicing the debt. Secured loans, such as mortgages, and education loans are relatively cheaper as there is the benefit of the security available to the lender. Unsecured loans such as personal loans and credit card debt are very expensive and must be used with caution. Credit card is an interest free borrowing option only if the use is within the limits specified, and the repayments are made by the due date each month. When the credit card user does not pay the entire amount i.e. some amount is carried over for payment in the following business cycles, it is called "revolving credit". If a credit card company charges 3% p.m. as interest, the compounded annual cost is (1+3%)^12-1 i.e. 42.6%. Given the exorbitant cost, revolving credit should be avoided. A similar argument can be made for loans for unorganized sector like pawn traders or money lenders who charge as high as 60-80% interest rate or 5% a month from people.

4.3.3 Maturity of debt

Shorter the tenor of the loan; more will be the periodic repayment putting pressure on available income. Even if the cost of debt is low, short loan tenor can put financial pressures in repayment. Therefore, loan tenor should be decided keeping in mind the repayment capacity of the borrower. A longer tenor loan translates into higher interest paid over the term. The debt-to-income ratio can be used as an indicator of what the household income can take on as repayment obligations, and decide on the tenor accordingly.

4.3.4 Debt Re-scheduling

If the borrower is unable to manage the debt repayments, then it helps to work out a solution as soon as possible. Potential solutions are as follows:

* Rank debt in order of their cost and deal with the costliest debt first. Typically, credit card dues and personal loans will be the most expensive, and work to eliminate them from the outstanding debt list. Low-cost debt and debt that provide tax benefits such as home loans and education loans can be dealt with later when finances permit.

* If the debt was taken for purchasing an asset, then the asset can be sold and the proceeds used for pre-paying the debt provided the asset has a reasonable realisable value. While doing this, the borrower should also plan for any pre-payment charges that the bank may levy.

* If the cost of debt is high, then cheaper re-financing is an option. A lower cost loan can be availed to repay the costlier loan. A credit card balance transfer is an example of such refinancing.

* If the problem is with the tenor of the loan, then the possibility of extending the tenor of the loan can be explored. This will reduce the monthly outgo in debt servicing. However, the loan will be repaid over a longer period of time and the total interest paid over the tenor of the loan will go up.

* If none of these is possible, then the borrower should inform the lender about the problem and explore a revised loan schedule. It should however be noted that such re-scheduling of loans hurts the borrower’s credit history (also known as credit score like CIBIL score). This will affect the chances of obtaining loans in future or the cost at which they will become available.

4.4 Calculate the debt servicing requirements

4.4.1 Role of Credit Bureaus and Credit Score

Credit score is a number assigned to each individual by a credit information bureau based on their credit behaviour and repayment history. A credit bureau is licenced by the RBI and governed by the Credit Information Companies (Regulation) Act, 2005. The credit and financial health of the individual is assessed on the basis of the outstanding loans and credit facilities used, repayment behaviour exhibited, utilization of credit limits, type of loans i.e. the proportion of credit card outstanding, personal loans and other unsecured loans, and other factors that may affect the ability to service loans. This information is reported on a monthly basis by providers of loans and credit to the credit information companies. Here it is collated and used to develop the credit score and the credit report. For example, the CIBIL TransUnion Score is a three digit number ranging from 300 to 900.

Banks, Housing Finance Companies, NBFCs use this score and report for making decisions on a loan application to determine interest rate, loan eligibility and credit limits. A high credit score makes the lender consider the loan application and the terms of offer.

A good credit score and credit report can be built by dealing with debt responsibly. Always pay dues on loans, credit cards and others on time. Credit utilization relative to credit available should be kept low. Too much of unsecured loans such as credit cards or high utilization on your credit card limits and personal loans have a negative impact on the score. For a good score it is important to have a mix of secured and unsecured credit and to apply for credit, or make credit enquiries only when required, and in moderation. A person’s credit score is also affected by the repayment behaviour in loans where they are joint holders or guarantors. Review the credit report periodically so that any errors can be identified and rectified.

Accessing your credit score

In order to have access to your credit score the client has to go to a credit bureau that is licensed to operate in the country. The various personal details can be mentioned to the bureau and the appropriate credit score and even the credit report can be taken. The credit report will not just have the score but all the details of the various loans outstanding and those that the client has serviced or missed payments on or even settled.

The credit bureaus allow for online access to the details for an individual, so this is also an option that can be used to directly access the credit score. The client can open their account with their login details and password on the website of the credit bureau and then check the details. There is also a tie-up by the credit bureaus with various loan providers, so the client can also get their credit score from such loan providers. One has to be careful about accessing the credit score this way because one has to be sure that there is a genuine tie up for access to such scores and that this is not some online scam targeting people for their personal information.

RBI’s regulation about free credit score

The importance of credit scores is increasing with each passing day and there is a greater emphasis on this aspect while a new loan is sanctioned by various banks and financial institutions. In order to protect the customer and enable them to get the right kind of information, RBI has introduced some specific conditions with respect to free credit scores. Some of the highlights here include:

* Every individual is entitled to a free copy of their credit report every year from each credit bureau also known as credit information companies. In India, you can access the same from CIBIL, EXPERIAN, CRIF Highmark and Equifax.

* The customer should get a full copy of such a credit report which is the same as what is accessed by the financial institutions when they check the credit details of a borrower.

* The report should also enable the borrower to rectify the mistakes like wrong info, loan closure if any, present in the credit report.

* The credit report will have the credit score plus the details of the latest outstanding loans that are there for the individual. Typically, the report shows, repayment history for last 2-3 years

* The year for this purpose is from January to December or a calendar year.

* The report can be accessed in electronic format.

* The report can be given after the necessary checks for authentication of the individual is done like UID, PAN etc. Credit scoring reports are also available for non-individuals like companies etc..

4.5 Responsible Borrowing

Every individual has a need for some sort of debt or borrowings for meeting their various financial needs. Since there are several assets that are big ticket purchases, there is a need to have some debt to finance their purchases. Similarly, the use of electronic and plastic payment methods ensure that the individual is able to incur some expenses and pay them off in a few days. All these are facilities for an individual but they need to be used responsibly.

One of the key points that every individual needs to follow is that they should never borrow more than what they can afford. A lifestyle that is flashy might seem enchanting but there is a cost that has to be paid for this and if this is not sustainable then it is better to not go down that path. In terms of expenses an individual should be responsible enough to buy only those things for which they can make payments. The best way to use a credit card is to pay off the amounts by the due date and not leave any amount as revolving credit.

On the loan front it is better to borrow for assets that are value appreciating in nature and which can yield some income down the line. Also, too many loans at the same time can make debt servicing very difficult and hence this has to be avoided. Ensuring that debt options are used responsibly will ensure that this is sustained over a longer time period and at the same time the goals are also attained.

4.6 Secured and Unsecured loans

There are various types of loans based on the nature of the security that is present for the lender of these loans. One is secured loans and as the name suggests these loans are backed by some asset as security. The most common example of such a secured loan is that of housing loans. When an individual takes a housing loan the lender takes the house as a security or mortgage. This is a source of comfort for the lender in case the borrower is not able to repay the money. The asset that is present as security remains in the name of the borrower but in case the loan is not repaid then the lender can take over and dispose of the asset to recover the money. The most visible outcome of such a security is that the interest rates on such loans are relatively lower. Vehicle loans, Gold loans, loans against securities are some other examples of secured loans.

Unsecured loans are those loans where the lender does not take any security from the borrower. In such loans there is just the personal security or guarantee of the borrower to repay the amount, so this is more risky in terms of lending. The outcome is that such loans are costlier in terms of a higher interest rate to be paid by the borrower. Examples of such loans are personal loans and credit card dues. The interest rate on such loans can be quite steep.

Clients should be advised to use secured loans for building long term assets as the cost will be lower if needed and ensure that the unsecured loans are kept to a minimum or regularly paid before the interest cycle kicks in on credit cards.

4.7 Terms related to loans

4.7.1 Fixed Rate Loans

Fixed rate loans are those loans where the interest rate on the loan is fixed for the entire duration of the loan. This enables the borrower to know the exact cost that they would face over the entire duration of the loan. Fixed rate loans are useful when the interest rates are low and the borrower wants to lock into these low rates.

4.7.2 Variable or Floating Rate Loans

Variable rate loans are also known as floating rate loan. These loans have an interest rate that changes or gets reset periodically with the changes to the benchmark rate to which this is linked. Variable rate loans can be linked to an external benchmark like the repo rate or an external bank benchmark rate like the Marginal Cost of Lending Rate (MCLR). These types of loans are preferred by borrowers for long term loans especially when they feel that the rates are likely to fall over a period of time.

4.7.3 Home equity loan

A home equity loan is also called a loan against property (LAP). In such a loan the borrower uses the home or any other real estate as collateral for the purpose of taking a loan. The home is the asset of the individual and they are thus borrowing against the security of this asset. The borrowing enables them to raise money which can be used for several purposes. The value of the property and the extent to which the lending institution gives money against the value is what will determine the extent of the home equity loan.

4.7.4 Hire purchase

A hire purchase agreement is one where an individual agrees to buy a certain asset by paying instalments over a period of time. There is an initial payment that is made followed by several instalments over a given time period. The person paying the amounts becomes the owner of the asset when the final instalment is paid. This separates the hire purchase transaction from a lease because here the individual can become the owner of the asset at the end of the agreement period when all payments are made.

4.7.5 Lease

A lease is a contractual agreement where the owner of an asset called the lessor allows another person called the lessee to use the asset for a certain period of time in exchange for the payment of lease. Assets like property, vehicles, machinery etc. are those where a lease agreement is normally seen. The difference in a lease as compared to a hire purchase is that the lessor will remain the owner of the asset and the lessee cannot become the owner even after the specified lease period is over. This is largely used for vehicles by large companies.

4.7.6 Amortisation

The process of amortisation of a loan is one where the capital borrowed is repaid over a period of time. This is done through fixed payments which are also known as Equated monthly Instalments (EMI). The entire repayment amount is converted into equal fixed amount called the EMI. This gives an element of stability and certainty to the repayments and the borrower knows exactly how much they need to repay each month.

However, there is a schedule to the whole amortisation whereby the EMI repaid consists of both capital and interest in different proportions. The amortisation chart will list out the breakup of the EMI into the interest and capital component each month. There is a higher element of interest component in the EMI repayments in the earlier period of the loan which becomes smaller as the capital component increases with time.

4.7.7 Refinancing

The act of refinancing a loan means that an individual repays an existing loan by taking another loan either to extend the duration of loan or lower the interest cost. The reason for doing this is that there is a lower interest rate on the new loan which will reduce the overall outgo because a lesser amount has to be paid on the loan. The refinancing is usually done for long term loans or for those loans where the amount outstanding is high as in these cases the savings on the interest will also be higher. An example is refinancing a home loan when the difference between the existing rate paid by the borrower and the new available rate is significant.

4.7.8 Prepayment

There is a specific schedule that is prepared for every loan wherein the total amount to be repaid is broken down into equal instalments. There are times when the borrower has some extra amounts and they would like to reduce the outstanding amount of the loan. At such a point they can go and make a prepayment which is paying back the capital before the specified time. The prepayment will reduce the capital and it will reduce the remaining EMI period too on the loan. Lots of loans, restrict the prepayment of the loans for certain periods like 12 months or levy charges for prepayment e.g. car loan. RBI has mandated that there would be no pre-payment charges for home loans taken from banks.

4.7.9 Pre EMI interest

The Pre EMI interest refers to the monthly payments that are made on the loan which includes only the interest component being repaid. Normally a loan will not have capital amount repaid till the time that the entire loan is disbursed. This kind of pre-EMI interest is usually present for house properties that are not yet complete and hence the full amount of the loan has not been taken or possession has not been received for the property. The amount that is being repaid here just consists of the interest component and the normal EMI repaying both capital and interest will start at a later date.

4.7.10 Moratorium

Moratorium refers to a period wherein the repayments on a loan are stopped temporarily or for a certain period of time because of some extraordinary factors also known as (a.k.a) force majeure or tough conditions including some crisis or war or similar situation. The important thing is that under normal circumstances non-payment of the regular EMI will be considered a default but under a moratorium there is a pause and no default is counted. This does not affect the credit score and credit history of the borrower. The interest meter during the moratorium continues so the dues of the borrower keep increasing. The EMI missed during the moratorium are pushed back but they will have to be repaid with the additional interest. For example, banks and financial institutions have given several months of moratorium to borrowers following the Covid outbreak. During Covid-period moratorium, many consumers assumed the EMIs for this period is being done away with, without realizing that the meter is still on, with compound interest.

4.7.11 Mortgage

A mortgage is a debt instrument that is backed by a specified property that the borrower has to pay back over a specified time period through regular payments. In simple words, a home loan backed by the security of the property is also called a mortgage. Individuals use mortgages to buy properties without putting up the entire money upfront as this allows them to repay the amount over a period of time. It allows for leverage in buying an asset which they would otherwise not be able to afford.

4.7.12 Pledge

A pledge is something that is held as a security on a contract. In case of a debt this is an asset that is held and which can be sold by the lender in case the borrower is not able to repay the amount. Under a pledge the asset which is usually a movable asset remains with the lender till the loan is repaid. This can be contrasted with a mortgage which is for an immovable asset.

4.7.13 Hypothecation

This is a term used for creating a charge against an asset but in this case the asset remains with the borrower. In this sense it differs from a pledge where the asset is with the lender. If there is a default then the lender will have to first take possession of the asset and then sell it. The best example of hypothecation is that of a car loan where the asset is with the user and if there is a default the lender comes and repossesses the car.

4.8 Types of borrowing

4.8.1 Home Loan

A home loan is a loan that is taken for the purchase of a house property. This can be to purchase a constructed property or it can be an under-construction property. In case of an individual, those who buy a house either for living or for investment can take a loan for the purpose. The loan is taken because the cost of the house is high and it is not possible for everyone to pay the full amount from their own financial resources. The home loan is the amount that is borrowed from the financial institution to pay for the purchase of the property.

Home loans are a long-term loan and the period for this can stretch even for 30 to 35 years subject to working age limits. This makes it a significant loan because even the amount of the loan is likely to be large. The interest that is paid on the loan will thus be huge since it stretches over a longer time period. The security against the loan is the property itself and the financial institution takes the property documents and keeps it with itself till the loan is repaid.

4.8.2 Education Loan

The cost of education is rising with each passing year. Courses for post-graduation or higher education and in many cases even graduation have become very expensive. This can make it difficult for someone with low savings or without large assets to actually finance the education of their children. An education loan is one which is used to fund the cost of education. This is not a very long-term loan as the time period of repayment is usually 5 to 8 years.

One of the features of an education loan is that the repayment usually starts after the completion of the education course or when the person completing the course starts earning whichever is earlier. Till this time the interest keeps accumulating on the loan. The loan can be repaid by the parent or even by the child who was educated.

4.8.3 Vehicle loan

A vehicle, be it a two-wheeler or a four-wheeler, is now a requirement for many people across the country. The lack of proper public transport plus the convenience of an owned vehicle makes this an essential asset. A loan that is taken for the purpose of purchase of a vehicle is called a vehicle loan. The vehicle is hypothecated against the loan and the individual is then able to use the vehicle.

The vehicle loan is usually for a period of 3 to 7 years and the longer the time period the lower will be the EMI but the total interest paid will keep climbing. The individual has to choose the right time period and the EMI which is affordable to them plus it does not put too much burden in terms of interest payments since the vehicle is usually a depreciating asset.

4.8.4 Business Loan

A loan that is taken for the purpose of conducting business or profession is a business loan. This differs from an individual taking a loan to purchase an asset. In this case, the amount would be used for the purpose of running the business. The lending institution would look at the financial position of the business and whether it would be able to repay the amount that has been borrowed. For this purpose, the working capital requirement and various turnover ratios are also seen along with the strength of the balance sheet.

A business loan can often have the security of an asset so that there is additional comfort for the lender or it could be that the goods that are produced are hypothecated in the form of stock i.e. goods/inventory. There are often overall limits for the business loan and the amount that is required is utilised. Depending on the nature of the business and the economic cycle there could be different amounts that can be used on this loan at varying time periods.

4.8.5 Personal loan

There are times when an individual would want to spend some money for purposes like travel or even buy some gadget or use the money for a wedding. The full amount that is required might not be available at that specific time. At other times they might have to pay for some expense like a medical emergency or some other debt repayment that cannot be done due to lack of funds. In such times, there is a personal loan which can be taken. This loan is one which can be used for any purpose and there is no fixed area in which this has to be spent.

The personal loan is given without any security and hence it is called a personal loan, which an individual can use any way they want. There are no restrictions on its usage but there is a cost that comes with this freedom. A personal loan is far more expensive than a normal loan backed by an asset and one has to be very careful when using such loans because they are easy to get. The amount of such loans can be easily spent but paying back can become a problem if care is not taken.

4.8.6 Credit card debt

Credit card is a way to access short term credit for an individual. A credit card has a specified spending limit and a person can use the credit card to spend up to the limit. At the end of the billing period cycle the total amount that has been spent is the amount to be repaid on the credit card. Payment of the amount by the due date will not involve any charge but if a part of the amount is carried forward then the interest meter starts ticking. Since this is an unsecured loan there is a large interest charged on credit card remaining unpaid which makes it a very expensive way to borrow.

Credit card debt is the most expensive way to borrow but it is also the easiest because an individual needs to just swipe the card or enter the details online and the transaction is completed. People end up spending far more than what they would be able to repay immediately and they end up getting stuck in the revolving credit cycle. With a high rate of interest, the dues also keep increasing at a quick rate so one has to be very careful in keeping control over expenses when using credit cards.

4.8.7 Overdraft

A bank account allows an individual to use the money that is present in the account. The normal way of using the account is that one can spend only upto the balance that is present in the account. There are times when a higher amount is required for just a few days or a short time period and taking a loan for such a situation would take up too much effort and be time consuming too. The solution is an overdraft wherein the individual is allowed to use more than the balance in the account up to the limit specified in the overdraft. The overdraft facility is usually used by businesses.

There is some asset like a fixed deposit or some other security that is taken by the bank when the overdraft limit is sanctioned. The individual can issue cheques and make payments from the account and the interest is charged only for the time period for which the account was overdrawn. Any amount received can be deposited into the bank account and this would automatically reduce the overdraft amount. This is a flexible and easy way to access short term credit.

4.8.8 Loan against securities, gold, property etc.

There is a category of loans which is in the nature of secured loans. There are various assets like some investment in a mutual fund or shares or even gold that is available with the individual. If there is some need for money then instead of selling the asset there is an option to take a loan against the asset. In this type of loan, the individual uses the security as collateral and gets a loan which has to be repaid according to the schedule that has been set up.

The loan that is taken under this route is given at a certain percentage of the value of the asset as per RBI guidelines. In case there is a sharp downward movement in the price of the asset then the bank can also ask the borrower to deposit some money to cover the change in value. A large loan can also be taken in the form of loan against property, wherein the asset is used to raise money. The repayment capacity of the borrower is considered in deciding the amount that is sanctioned so this remains an important factor. Loans against an asset or security is preferred over personal loan or credit card outstanding, provided you have an asset, as the rates are lower.

4.8.9 P2P loans

Peer to Peer loans, also known as P2P loans, involve one person lending to another person directly instead of a financial institution lending to an individual. There are P2P lending platforms where a person can register themselves and then give or take loans. What happens in these types of loans is that an individual is giving money to another person and this is an unsecured credit because there is no security behind the lending. There is a basic background check that is made of the people on the platform but this does not reduce the risk for the lender.

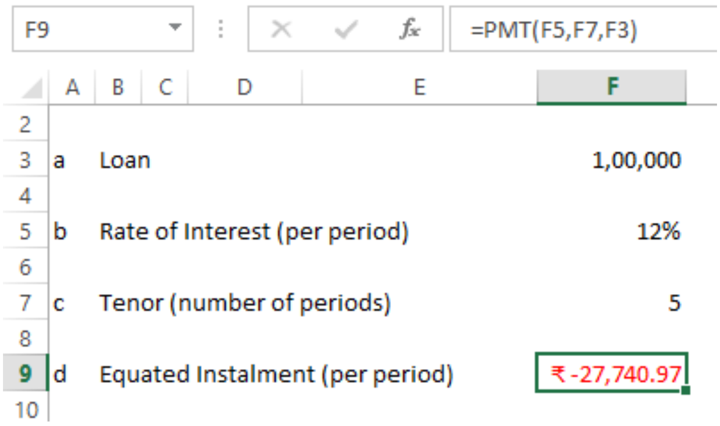
The risk for the lender is that the amount might not be repaid. Since this is an unsecured lending there is a high risk that if the borrower might not be able to repay the money there is no recourse to some asset to recover the amount. This is why the interest rates on such loans are quite high, although the amounts are very low. The time period for the borrowing is usually short term and it is an easy way to get some funds when there is an immediate need for money. The borrower is able to borrow smaller amounts using these platforms and that too in a short period of time. This is a growing field and lenders as well as borrowers need to be alert about the conditions and features of the loan when they use this mode to transact.

4.9 Understand loan calculations

Many investors need assistance in understanding how much loan is good for them. The financial pressures arising from debt are linked to debt repayment. What is the Equated Monthly Instalment (EMI) for a loan under consideration?

EMI can easily be calculated in MS Excel using the '=pmt' function as shown in the example

Determining the EMI



F9 =PMT(F5,F7,F3)

	A	B	C	D	E	F
2						
3	a	Loan				1,00,000
4						
5	b	Rate of Interest (per period)				12%
6						
7	c	Tenor (number of periods)				5
8						
9	d	Equated Instalment (per period)				₹ -27,740.97
10						

Type = 0, assuming end of the period. FV = 0

The point to note is that b, c and d in the table are defined in terms of per period – a year in the above case. If each year Rs. 27,740.97 is to be paid, then the monthly payment would be Rs. 27,740.97 ÷ 12 i.e. Rs. 2,311.75, payable for 5 X 12 i.e. 60 months. This instalment represents a combination of principal and interest.

If the debt is at 1% per month interest and loan is to be repaid in 5 years, interest per period would be 1% and number of periods would be 60. Accordingly, the equated instalment would be Rs. 2,224.44 by changing the variables.

Lenders use the term ‘rest’ to indicate the interest charging cycle, which can be different from the payment cycle. For example, interest is chargeable at 12% p.a. on annual reset. The repayment obligation needs to be worked out, initially for the interest charging cycle (period =1 year in this example). Thereafter, each instalment is calculated. Thus, if payment cycle is quarterly, the annual instalment is to be divided by 4; monthly instalment is calculated by dividing the annual instalment by 12.

Suppose interest is chargeable on annual reset and payment cycle is monthly. The implication for the borrower is that although repayments are being made monthly, the lender will adjust the loan obligations (for calculation of interest charge) only every year. Since borrower is not getting credit for payments made during the year, the effective borrowing cost turns out to be higher than the interest rate quoted by the borrower.

If the borrower earns Rs. 10,000 per month, and this is the only debt, then debt servicing ratio would be Rs2,224.44 ÷ Rs10,000 i.e. 22.24%.

This can be reduced by increasing the tenor or reducing the interest cost or reducing the amount borrowed. Suppose the tenor is extended to 6 years. Then the EMI changes from Rs.2,224.44 to Rs 1955.02. The revised debt servicing ratio is 19.55%.

If the borrower has another loan on which repayment is Rs1,000 per month, then total debt servicing is Rs1,955.02+ Rs1,000 i.e. Rs2,955.02. Debt servicing ratio would then be 29.55%.

4.10 Loan restructuring

There might be some sort of financial stress for the borrower that would make them unable to pay the loan that has been taken. For an individual this can happen when they lose their job and their income stops or it could happen when they face a sharp reduction in their income either through a pay cut for an employee or through loss of business or professional income for others. The financial institution would not like the loan to become a non performing asset and hence they would want to ensure that there is a loan restructuring.

Under a loan restructuring there is a change in the conditions related to an existing loan. This could involve a reduction in the EMI that is being paid so that the loan becomes affordable or it could be an increase in the time period for repayment. These have to be seen in two ways where the first is the affordability for the client. This should fit into their financial condition, so that it does not disrupt their other payments and expenses. The other aspect is the actual value of such a change and this is known through the present value of all the future payments that are going to occur.

For example, consider a loan of Rs. 3 lakh that has to be repaid over the next 3 years at an interest rate of 7 per cent when the rest is monthly. In this case the existing EMI would come to Rs. 9,263. If the period of the loan is extended to 5 years then the payment periods go from

36 to 60 and this will bring down the EMI to Rs 5,940. The entire flow of Rs 5,940 is nothing but the cash flow whose present value will be equal to the loan amount.

This is calculated by using the PMT function=PMT(0.07/12,36,-300000,,)

PMT = 9263

This kind of calculation can be done for any situation wherein the amounts are adjusted so that the present value for the lender remains the same. There can be cases where the lender takes a haircut and in this case the amount that is to be repaid would be less. In the example above if the lender decides to reduce the amount to be repaid to Rs 2 lakh and the loan period remaining is at 3 years then the EMI would drop to Rs 6,175 which would be a real relief for the borrower because they are paying less in terms of present value of the final payments.

=PMT(0.07/12,36,-200000,,)

=6,175

A simple reduction in the number of instalments would again mean that the borrower is going to pay a lesser amount in terms of present value on the loan. However, this has to be seen in the light of whether the amount of the instalment has been raised. This could cancel out the benefit of the lower number of instalments, so this has to be checked.

In some cases, the restructuring will also involve a reduction in the interest rate. When there is a reduction in the rate the borrower will end up saving some payments if all the other conditions related to the loan remain the same. For example, if the 7 per cent rate in the example goes to 5 per cent then the EMI will drop from Rs 9,253 to Rs 5,994. This is a real saving only if the period of repayment is not increased.

Sometimes an additional loan is given which will help in tackling the financial crisis and this can help the repayment of the amounts on the earlier loan. The conditions of the new loan will once again need to be seen in the light of the present value calculations so that this does not end up putting a higher burden on the borrower.

The client has to ensure that they are paying the right amount under the entire restructuring process because unless they check the present value of the cash flows, they will not be able to know what the real situation actually is.

4.11 Repayment schedules with varying interest rates

The repayment schedule on a loan is a significant component that is often ignored because all that an individual focuses on is the EMI amount. The repayment of a loan consists of two parts which is interest and capital repaid. There might be a specific amount paid but every individual also needs to see the amount that is being repaid towards capital as well as interest as it will determine the amount that is outstanding on the loan.

The normal EMI amount is found out by the PMT function in Excel but to get a proper break up of how the interest and the capital are being repaid there is a need to look at more functions. This would be the PPMT function for the purpose of knowing the principal part of the repayment. In this part the principal component of the EMI will be known and this will give an idea of the kind of money going to repay the capital borrowed. Similarly, for the interest component it is the IPMT function that has to be used.

Taken an example where the interest rate is 7 per cent that is being paid on a loan of Rs. 10 lakh that has to be repaid in a period of 10 years in monthly instalment assuming that the rest is monthly. Using the simple PMT function the EMI for this repayment would come to Rs. 11,610.

The next part of the exercise is to see how this would be broken up into the principal and interest part. In the PPMT function there is the interest rate that has to be entered along with the period which is the period for which the break up has to be found. In this case if you want the principal payment for the first month then 1 entered here with the total loan period of 120 months and the loan amount would give an amount of Rs. 5,777. Using the IPMT function the interest component comes to Rs. 5,833 which shows the total breakup of the entire EMI.

For the principal calculation for the firm EMI

=PPMT(0.07/12,1,120,-1000000)

= 5,777

For the interest calculation for the first EMI

=IPMT(0.07/12,1,120,-1000000)

=5,833

If the interest rate is lower at say 5% in the example then the total EMI drops to Rs. 10,606. However, this has a big impact on the distribution of the interest and the capital within the EMI. Now the capital repaid in the first instalment is Rs. 6,440 while the interest component is Rs. 4,166. As can be seen since the overall interest rate is lower a larger part is going towards the capital repayment right from the initial EMI.

To contrast the situation, consider the position when the interest rate is 9 percent. In this case the EMI would rise to Rs. 12,667. Now out of this amount in the first month it is just Rs. 5,167 that goes towards the principal and the remaining Rs. 7,500 goes towards the interest component. A higher interest rate has led to a higher total interest cost which means more goes towards interest right from the first payment.

4.12 Criteria to evaluate loans

There are multiple features of loans that differ and this need to be considered by anyone who wants to take a loan. The exact feature can make a huge difference as far as the final cost or expense on the loan is concerned. Here are some criteria that can be considered while looking at loans.

a) The interest rate on the loan is one of the most vital criteria to consider. The rate of interest that is charged is significant and a lower rate will be better than a higher rate but this is not enough. The method of calculation of the rate is also a factor. The interest rate has to be calculated on a reducing balance method as compared to a fixed capital so that the repayment benefit on the loan leads to a lower interest rate.

b) The period after which the loan is reset for interest rate changes is also critical. A very long period of say a year could mean that the benefit of some rate cuts come to the individual borrower very late. This could result in the outstanding amount not being affected much. In case of a rising interest rate then the same thing could be a benefit as the higher rates kick in after a longer time period.

c) There are different expenses involved at the time of taking a loan. This could include a processing fee or legal/other charges which can be expressed as a small percentage of the loan amount or a fixed sum. This will raise the cost of the loan as this is a payment that is additional to the interest cost. Many times, these processing charges are waived and that can be a factor that leads to some savings for the borrower.

d) The time period of the loan being offered will be a serious factor that can decide where to take a loan from. There are situations when some institution offers a longer time period for repayment and this could be favourable for someone who wants a longer term loan. A longer time period of repayment means a higher interest outgo but for those who want to reduce their EMI the choice here could be crucial.

e) The nature of the benchmark that is available for the loan is also a factor that an individual has to consider before making their decision about a loan. There are now loans linked to an external benchmark like the repo rate which is transparent. Internal bank benchmarks often do not change as quickly as the changes in the rates in the economy as the transmission of the rates takes place slowly. The changes can work either ways because a rising rate scenario will lead to higher rates coming through quicker so this also needs to be considered before a final decision is made. Nowadays, usually, Banks show their floating rate loans rather than fixed rate loans because in a fixed rate loan, in case interest rates in the economy move up, the margin will be an issue. In a floating rate loan, rate changes are fast and transparent.

4.13 Opting for change in EMI or change in tenure for interest rate changes

Floating rate loans are a very popular category of loans and most long-term loans are of this nature. The changes in the linked benchmark to the loan will lead to a change in the interest rate applicable on the loan. There are two choices that come before the borrower when the interest rate changes and this is to either change the EMI amount or change the time for which the loan would be repaid.

Making a choice as to what route to adopt is crucial for the individual because they will be affected by how their loan payment behaves. There is a clear working that is done when the loan is taken. The EMI that has been selected is usually an amount that is affordable for the individual given their income and savings level. So, it is easier to deal with a situation wherein this remains the same and the tenure of the loan changes it is easier to keep track of the same amount that has to be paid rather than having this change with each change in the applicable interest rate. It is also that there would be some times when the interest rate rises and if the EMI starts rising then this could impact the financial situation or cause distress if the loan payment goes higher than what is optimal.

There can be times when the interest rate change can be reflected in the EMI. If for example a loan has been taken at a high interest rate and this has declined significantly then the tenure would have come down quite a bit. To ensure that there is a reduction on the monthly outgo there could be a onetime reduction in the EMI which would reset the entire working. In other circumstances when the EMI pressure is high then such a change in interest rate can be used to change the EMI and keep the financial situation strong.

4.14 Invest the money or pay off outstanding loan

Many times, the individual has some amount that they received either as a lump sum or even as a one-time gain or windfall. The question that arises at such a time is whether the amount should be used to make an investment or to pay off an outstanding loan. There are different conditions that would impact the decision and some factors here would be as follows:

1. If there is a very high loan burden, which is a strain on the finances then the amount received can be used to pay down the loan and bring it to a comfortable level. This would relieve a lot of mental pressure and while in some cases this might not be the best opportunity for deployment, it could be essential for mental peace or pressure.

2. The amount that is available to repay the loan or invest also has to be seen in the context of both the absolute figure and a relative figure. In terms of absolute amounts, if this is quite high, then this could be significant in terms of the decision made. Hence, additional factors

like the interest rate on the loan and the earnings on the investment need to be considered. However, if the absolute amount is small, this might not make a big difference in terms of repaying the loan if the loan amount is large. In case the amount available is a significant portion of the loan, then repayment could lead to a debt free situation being seen earlier.

3. The mathematical aspect of the decision would depend on two main things. What is the interest rate that is being charged on the loan and what is the average earning, which would be available from the investment amount going forward? In some cases, the decision is easy to make, as a high-cost credit card outstanding or a personal loan would see a repayment as a better choice. When it comes to the question of earnings, then one needs to look for a longer time period in the future because unlike a loan where the repayment of the EMI leads to a reduction in the interest component in the entire working, the reverse is true for the investment. The benefit of compounding would mean that a good rate of return would boost the capital amount significantly, so that in some time the capital available would be high which would easily pay off the loan and still have some amount left as investment.

4. The asset class of the investment also has to be considered because if one is planning to invest in equity then there is also an extra risk that is being taken, However, if the return here over the longer term comes to around say 12 percent while the loan rate is around 7 percent then the better idea would be to invest. However, when there is a higher earning investment, then there is also a risk element involved. This should not be forgotten. Sometimes the rates are not very different in the loan and the investment but still the latter is compounding, so it could lead to a better return on the money some time down the line, if it sustains.

4.15 Strategies to reduce debt faster

A large amount of debt can seem to be a big problem in terms of the amount outstanding as well as the interest cost that this also brings along. The goal of many people would be to reduce the debt as quickly as possible. There are several strategies that can be used in this regard.

4.15.1 Avalanche

The avalanche strategy for paying off debt involves looking at the various loans and borrowings and paying off those with the highest interest rates first. This is a logical way of going about the repayment process because the highest interest rate loans are the most costly and hence this is expected to bring down the interest burden. The thought is also that the lower interest rate loans will not hurt the financial situation as much, so they can be paid off later. The risk in such a strategy is that if the higher rate loans are less in terms of absolute amounts, then paying off them first will not reduce the interest payment pressure as expected.

For example, if an individual has a credit card outstanding of Rs. 30,000 (42 % interest), a personal loan Rs. 1.2 lakh (21 % interest), a housing loan of Rs. 15 lakh (8 % interest) and a car loan Rs. 1 lakh (12 % interest) then the avalanche strategy will lead to repayment of the credit card first followed by the personal loan and then the car loan. This will reduce high interest-bearing debt first followed by others.

4.15.2 Snowball

The snowball route of repayment of debt focuses on the amount of the loan. In order to get a sense of success in the repayment the method first starts off with the lowest debt amount and then moves to the higher amount that is outstanding. In the snowball method, the interest rate does not come into the decision making consideration, so it could be that some lower amount outstanding has a low interest rate but this will still be repaid first while a higher cost loan still remains standing. This kind of strategy is useful to achieve a sense of success when there are quite a few loans remaining. The exact mixture of the amounts outstanding and the rates could still leave the interest pressure high, if the high amount loans have a higher outstanding and hence this is not preferred for the example, we took above for credit card and car loan etc.

In the snowball strategy the goal is to pick up momentum as the next repayment occurs. When the first loan is paid off the amount saved here is sought to be mixed and rolled on to the next loan repayment with the expectation that this will keep gaining in terms of amount, so the next higher debt becomes easier to pay. This is often used as a motivational strategy.

4.15.3 Blizzard

The blizzard approach to repaying debt is a mixture of the avalanche and snowball methods. This starts off with the snowball method, whereby the lowest amount of debt is paid off first. Once this gives a motivational boost, then the next step involves switching to the avalanche method and paying off the highest interest rate debt. This method is supposed to take care of the risk of ending up with the highest interest rate debt in the portfolio while paying off the outstanding.

To get the calculations correct the exact amount that is outstanding plus the interest rates on the loans would need to be available. In the example above this would involve paying off the credit card debt first, since it is the smallest amount and this would be followed by the personal loan since now this has the highest rate and then followed by the car loan and the housing loan.

Module 1 Sample Questions

1. **Which of the following is not a part of the financial planning process?**
    a. Setting goals
    b. Monitoring
    c. Develop financial planning recommendations
    d. Financing the investments

2. **In the avalanche mode of repayment of loan the amount paid first is the:**
    a. Loan with the highest amount
    b. Loan with the lowest amount
    c. Loan with the highest interest rate
    d. Loan with the lowest interest rate

3. **In a P2P lending process the lender is**
    a. A bank
    b. A financial institution
    c. An individual
    d. A fund

4. **A car loan is usually under ______.**
    a. Hypothecation
    b. Pledge
    c. Mortgage
    d. Moratorium

5. **Which of the following is an unsecured loan?**
    a. Home loan
    b. Car loan
    c. Gold loan
    d. Personal loan