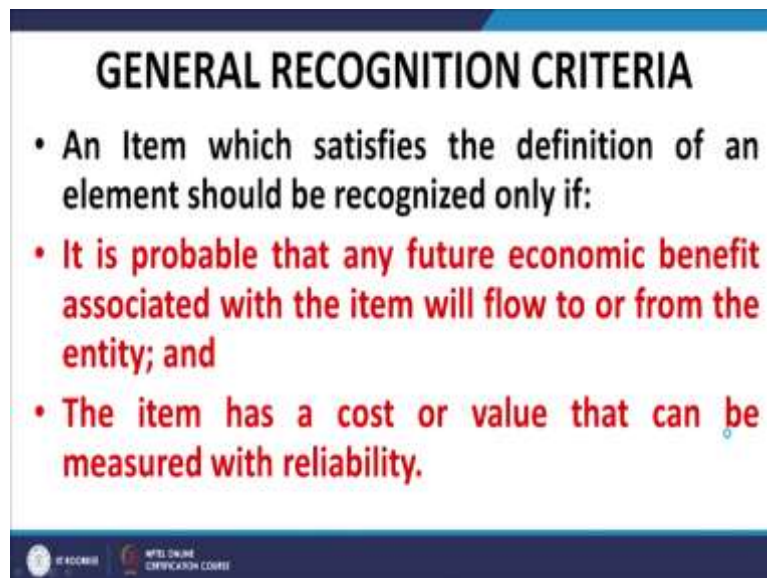


**Security Analysis & Portfolio Management**  
**Professor J.P. Singh**  
**Department of Management Studies**  
**Indian Institute of Technology, Roorkee**  
**Lecture 35**  
**Balance Sheet Analysis - II**

Welcome back. So, let us continue from where we left off in the last lecture. In the last lecture I introduced the concept of economy, industry, company analysis is known as the EIC analysis. And I completed the segments relating to the economy and industry, gave give you a brief overview of how or the parameters that need to be considered when we do the economy analysis and the industry analysis. And our prime focus in this course will be on the company analysis segment, which we started discussing about.

So, let us go back and let us recall the general recognition criteria of the items of accounts, be it assets or liabilities. There are two fundamental requirements we are of recognizing or recording, entering into the books of accounts and that is called the recognition criterion, the initial recognition criterion to be more precise.

(Refer Slide Time: 01:31)



**GENERAL RECOGNITION CRITERIA**

- An Item which satisfies the definition of an element should be recognized only if:
- It is probable that any future economic benefit associated with the item will flow to or from the entity; and
- The item has a cost or value that can be measured with reliability.

© ACCA 2018 WPIE ONLINE CERTIFICATION COURSE

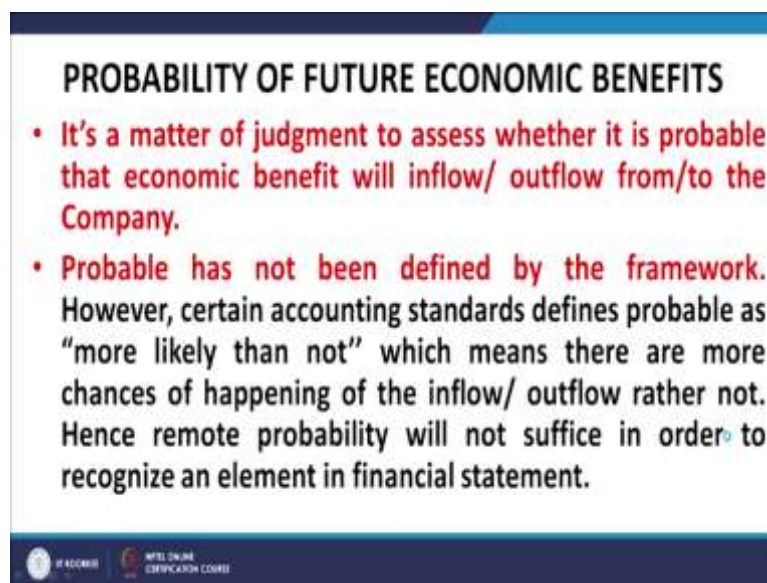
And an item is to be recognized in the accounts if number 1, it is probable that any future economic benefit associated with the item will flow to or from the entity. So, the emphasis here is on two points. Number 1, the future economic benefit shall determine the entry criteria not the past status of the item.

If the item is going to yield or is going to provide or is expected to provide rather a future economic benefit to the company, it should be brought into the accounts. And the second thing is the issue of probability. Because future economic benefits pertain to the future

therefore, there cannot be any absolute certainty associated with it, but there should be some significant element of probability of the realization of the future economic benefits. So, these are two salient features of this first clause of this definition.

In the second clause, we have that the item should have a cost or value that is ascertainable with reliability. This is fundamental. Because if the value is not realized and not ascertainable, with appropriate degree of reliability, then incorporating the account at a haywire value will render the entire documentation, haywire entire financial reports haywire. So, we need to be careful on this count in particular.

(Refer Slide Time: 03:06)



**PROBABILITY OF FUTURE ECONOMIC BENEFITS**

- It's a matter of judgment to assess whether it is probable that economic benefit will inflow/ outflow from/to the Company.
- Probable has not been defined by the framework. However, certain accounting standards defines probable as "more likely than not" which means there are more chances of happening of the inflow/ outflow rather not. Hence remote probability will not suffice in order to recognize an element in financial statement.

WU ACCREDITED WU ONLINE CERTIFICATION COURSE

As far as the probability of future economic benefit, I discussed briefly, the issue. The emphasis is that, although, explicitly explicit definitions are not present in these standards, at least not in the Indian accounting standards.

However, in some standards, is some guidance notes issued by the appropriate authorities, probability has been defined to mean that the event or the benefit that is deemed probable should satisfy the test of being more likely than not, which means, that there are more chances of happening of the inflow realization of the benefit than there are chances of not realization of the benefit. So remote probability will not suffice in order to recognize an element in the financial statements.

So that is important that the probability of happening of the event or probability of happening of the benefit should outweigh the probability of not happening of the event that is a test that can be considered reasonable when we talk about the probability of future economic benefit.

And I reiterate, that the future economic benefit is the cardinal determining criterion, the possibility or the probability of future economic benefit rather than the past events will determine whether an item or an element will be recognized as an asset or a liability.

Then we started talking about reliability and relevance. The relevance of a financial statement was defined as essentially the capacity or the attribute of the financial statements to influence the decision making of the user of such financial statement. So, information is deemed to be relevant when it influences the economic decisions of users by helping them evaluate business events or confirming or correcting such evaluations.

Then we moved on to reliability. Reliability is one of the fundamental attributes, as I alluded to, just a few minutes back. Information, which is relevant, but not reliable will serve a miss purpose rather than a good purpose in the sense that it may mislead the decision making of the users of financial statements.

So, information, which is incorporated in the financial statement must be reliable in the sense it should be accurate and unbiased so that it provides value to the users of the financial statements in arriving at correct investment decisions. If the statements are going to be more reliable, they will lose out on relevance and the other way around. If statements are relevant, they would lose out on reliability. So, a trade-off needs to be achieved with between these attributes of financial statements. That is the reliability and the relevance thereof.

For example, to put this thing in perspective the use of historical cost is obviously more reliable because it is supported by documentary, evidence of the vouchers and the bills, and the goods receive notes and the entire chain of documentation is available to the auditor to assess the veracity of the expenditure or the relevant accounting transaction.

However, when we talk about historical cost, the issue of relevance is a compromised with in the sense that statements which are based entirely on historical cost portray incorrect picture so far as the future decision making is concerned or rather to be more accurate portray an irrelevant picture, as far as future decision making is concerned.

Because when you are talking about decision making, what you are concerned with is the future course of events, the future happening of events, rather than what has happened in the past. So, as I gave you an example also in the last lecture of an item say, a land, a plot of land which is purchased 50 years ago at a certain price, it continues to prevail in the books at that particular price.

Now, obviously, that price is totally irrelevant, totally out of date to influence future economic decisions, and as a result of which that price becomes totally irrelevant. So, incorporating of that price into the financial statements make the statements in a sense, they make them irrelevant for future decision making or decision making by the users of the financial statements.

So, that is the important part. If we use historical cost, you are having reliability, but you are compromising on relevant. On the other end look at a situation where market value is the underlying attribute of the financial statements.

Now, if you talk about market value, the ascertainment of the market value of assets has beset with a lot of inaccurate, lot of impressions. And as a result of which, reliability gets compromised with although these statements obviously become more relevant, because market values epitomize the future cash flows or the they are in a sense in efficient markets, at least they reflect the condensed form of the future cash flow, the discounted future cash flows of the firm or of the relevant assets or liabilities.

So, now, let us move on to fair value. Now, there has been a paradigm shift in the underlying philosophy of accounts. In the sense, that relevance has now become the predominant characteristic a predominant attribute that is emphasized by the accountants, the preparation of financial statements and the regulators of financial matters. So that is the important part.

Now, reliability is to some extent compromised with, and there has been a paradigm shift from historical cost accounting towards fair value accounting. And, therefore, we need to understand what exactly fair value means. Although, as I mentioned, just now, fair value has a nexus with market value, it is not exactly market value. So, let us study what fair value is about.

I reiterate this paradigm shift. There has been a strong shift in emphasis from reliability to relevance. And in correspondence with that, in tandem with that, there has been a shift from historical cost to fair value accounting, as far as is practicable for the time being. So that being the case, we need to know a little bit more about how fair value is ascertained. What is the relationship between fair value and market value, and the characteristics of fair value? How the standards mandate, the ascertainment of fair value. These are issues that I will address right now.

So, IFRS the International Financial Reporting Standards define the term fair value, as the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction that is contained in IAS 39, which relates to financial instruments.

So, IFRS defines the term fair value, as the amount for which the asset could be exchanged or a liability settled between knowledgeable willing parties at an arm's length transaction. Arm's length transaction means, a transaction which is unbiased, which is not influenced by extraneous factors, and which is not influenced by any ulterior motives of the parties entering into the transaction.

The US GAAP on the other hand has a slightly slight variant of fair value. It defines fair value in terms of exit value. What exit value is? I will come back to it in a minute. So, it defines fair value as an exit price that is the price which would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

So, although, the definitions are similar, the emphasis on the US GAAP is on an exit value as far as the IFRS is concerned, it is relatively ambiguous on this particular issue of the exit value or the entry value. So, what are the arguments that go into this paradigm shift from a historical cost accounting to fair value accounting? Let us try to understand these.

The primary use of financial statements is decision making. An entity's current and prospective investors and creditors are the primary users of a general purpose financial reporting documents. And the primary purpose for which these interest groups use the entity statements is to assess the investment and creditworthiness of the entity.

So, for this objective, they would make suitable cash flow forecasts. Now, here is the crux of the argument that has propounded investor, propounded standard setters to move away from historical costs into the reign of fair value. It would be desirable from the perspective of the creditors and the investors who focus on making future cash flow forecasts to arrive at the valuations of the entity and its constituents that accounting information reported we aligned with the future to the extent possible rather than reflect the past.

So, here is the crux. Because the fair values or the market values is as the case may be, reflect future prospects of the company. Anybody would be willing to buy an asset would buy an asset would be more concerned with what benefits or what future benefits he could derive

from that asset, so the focus on market values is obviously on the future worthiness or the future cash flows that can be generated from that particular asset.

So, fair valuation epitomize future cash flows, as I explained just now. And the cardinal attribute of financial statements is now there shifted from the historical cost or that is from the, from the reliability to the relevance aspect. The standard setters feel that it is the relevance of financial statements, which should be the predominant characteristics and which should be emphasized, rather than focusing entirely on reliability, which makes the statements really outdated on several counts.

So, one may assume that, however, there is a positive future to this why this paradigm shift has taken place. There is a reason behind this. The reason is that the markets have gradually become more and more efficient. And as the markets have become more and more efficient, the representational faithfulness of the prices has increased. In other words, what I am simply trying to say that market prices, as in an efficient market, which by enlarge is the status as on today.

Most of the markets as of today are quite efficient, maybe not perfectly efficient, but certainly quite efficient. So, prices in these markets reflect the representational faithfulness of the value of that particular asset. And as a result of it prizes can be used as a measure of the value of that assets with or without less scope for distortion than was the situation several years ago, maybe several decades ago, where the markets were not efficient.

So, prices are believed. Now, in this situation when we are having highly efficient markets prices are believed to give an unbiased assessment of the present values of future cash flows forecast. And so, this is the reason that the standard setters have taken this bold step of by enlarge, foregoing historical cost accounting. By enlarge, I repeat because at the end of the day, we are still following historical. I am sorry, hybrid accounting where part of the balance sheet needs to be reported at historical cost and part of it has to be reported at fair values.

So, we are having the best of both worlds as you may say, as far as possible, but certainly there has been a paradigm shift towards fair value accounting. The emphasis has gone over from historical cost accounting to fair value accounting. So, these figures are based on the economic behavior for aggregates of market prices, that is the prices of assets are based on the economic behavior of aggregates of market players, instead of entry-specific assessment as is used to be when the markets were inefficient when the assets were not traded or that the

proportion of assets that were not traded regularly was much larger than the regular traded assets in a symbolic balance sheet of a company.

Now, we come to the issue of exit value and entry value. The exit value of an asset is defined as the cash flow or the funds that it would generate, if it is sold in the market at the, in the current condition in the present condition that is called the exit value. So, the funds that an asset would generate on sale that is called the current exit value.

The funds that are required for making a purchase of an asset is called entry value. I repeat, the funds that are generated when an asset in its existing condition is sold in the market is called the exit value of that particular asset. And if the funds that are required for replacing an existing asset by an asset of similar characteristics and similar condition is called the entry value.

Now, theoretically, if the market is efficient and perfect and devoid of any irregularities or distortions and there are no market frictions as well, the two values should tend to converge, exit value and entry value should converge. But however, in the presence of several market frictions like transaction costs, commission's transportation costs etc. it is likely, that the net cash inflows received on the sale of an asset would be less than the cash inflows to be paid when buying an asset. In other words, the exit value is expected to be lower than the entry value in real market conditions.

What are the arguments favoring exit value? Well, there are several important arguments that favor exit value. The logic is, that the primary objective of board is corporate is to further the interests of the stockholders. The primary objective of companies is to further the interests of the stockholders.

Now, the exit valuation gives us information about the amount that could be realized by the company if it liquidates an asset of the company, its current condition in a normal market situation, and those funds would then be available notionally with the company for distribution to the shareholders of the company, who could use it for meeting their other requirements, meeting their other wants and needs.

So, that is the argument propounded by standard setters in favor of exit value rather than entry value, as a benchmark or as a measure of fair value of an asset or liability. So, I repeat, because the primary objective or in line with the primary objective of an enterprise to benefit or to look after the interests of its shareholders, and the exit value being the realizability of

the cash which could then be distributed to the shareholders notionally to enable the shareholders to make alternative uses of that cash is the rationale behind the emphasis on exit value as a benchmark for the fair value of an asset or liability.

Now, as I mentioned, there is a difference and there is a difference between the fair value and the market value of an asset. Although, very frequently, the two are intermixed and are treated synonymously, but in actual fact, there is a significant difference between the fair value and the market value of an asset.

Market value is obviously the market price of an asset. However, fair value has a certain legalized structure of computation, it has a legalized methodology of computation, framework of in which on the basis of it needs to be computed, it needs to be calculated.

So, that legalized framework comprises of three steps or three tier, it is a three-tier hierarchy, which provides the inputs for determining the fair value of an asset or liabilities. So, there is a three-tier hierarchy advocated by most accounting standards level 1, level 2 and level 3, which relate to the characteristic of the asset and liability and the corresponding inputs that are to be used for ascertaining its fair value.

So, in the case of level 1, which relates to assets, which are actively traded in the market, then the inputs that should be used for ascertaining the fair value of such assets which are actively traded in the market themselves is the quoted prices of identical assets or liabilities in active markets. So, this particular level relates to the assets or liabilities, which are actively traded.



(Refer Slide Time: 20:58)



**FAIR VALUE VS MARKET VALUE**

- **Level 1:** These are market inputs reflecting quoted prices for identical assets or liabilities in active markets;
- **Level 2:** These are: (a) market inputs reflecting quoted prices for identical assets or liabilities in inactive markets, or quoted prices for similar assets or liabilities in all markets, adjusted for differences;
- (b) market inputs other than quoted prices, such as interest rates, yield curves, volatilities, and default rates;
- (c) market inputs not directly observable for an asset or a liability, but corroborated by other market data through correlation or other means;
- **Level 3:** These inputs are entity inputs.

IF ACCREDITED BY ACCREDITED INSTITUTIONS

INTEL ONLINE CERTIFICATION COURSE

And in that case, since you have adequate information or adequate inputs in terms of market prices of identical assets, you can use those market prices or spectrum of market prices and arrive at an appropriate valuation of that particular asset.

Then you have the level 2 assets or liabilities as the case may be. Level 2 assets or liabilities are instances of assets and liabilities, which are not actively traded in the market, but there nevertheless there is adequate information on the basis of which either directly or indirectly we can ascertain information from the market on the basis of which we can ascertain the value of such assets.

What are the inputs in these situations, well, they are number A, market inputs reflecting quoted prices for identical assets or liabilities in inactive markets. Because, as I mentioned, this is at a level lower than the level 1 assets for which there is active market for the asset themselves. Here you do not have active market for the assets themselves, although, there do exist similar assets and they are traded in relatively inactive markets. In other words, they are not as liquid as the level one assets.

So, A, market inputs reflecting quoted prices for identical assets or liabilities, in inactive markets are quoted prices for similar assets or liabilities in all markets are adjusted for differences. Because identical assets are not traded either not traded or infrequently traded therefore you have to take recourse to these inputs or market inputs other than quoted prices if quoted prices are not available for similar assets or assets, which are slightly different and you can account for those differences then you take the next recourse. Market inputs other than quoted prices such as interest rates, yield curves, volatilities and default rates.

And for level 2 assets at point C, we have market inputs not directly observable for an asset or liability, but corroborated by other market data through correlation or other means. So, this is the three-tier hierarchy in the case of assets, which are level 2 assets, which do not have active market for themselves.

But nevertheless, there are similar assets, which are actively traded in the market or we then if that is also not there, we take recourse to other inputs from the market like interest rate, volatilities, yield curves and so on. Then you have the level 3 assets, which are not traded at all in the market, and therefore, for this valuation or the fair valuation of these kinds of assets you need to have entity specific inputs, which are estimates, which are provided by the management of the company.

Now, that is all I wanted to say about fair value. I repeat, the fair value is the contemporary paradigm for financial reporting. Although, there are certain assets, which can which are still allowed to be carried at historical costs. There is logic behind that, we will also come to that point, but then, now we talk about the notes to the accounts.

Very frequently, the notes to the accounts are not really seriously viewed by the analysts. So, here I would like to strongly emphasize that the notes to the accounts are as important as, as vital as the face of the balance sheet. In other words, the content of the balance sheet and the profit and loss account mean.

The notes, and there is another point also that the notes to the accounts are a constituent of the total accounting picture that you get legally also. Notes to the accounts are, you cannot say, that if an information is contained in the notes to the accounts and we have not perused or utilize that information you cannot come back and say that it is not a part of the financial reporting framework.

Notes to the accounts are an integral part of the financial reporting framework. So, notes to the accounts provide information that is required to be disclosed, maybe not accounted for. Now, there is a lot of information in our company law Companies Act 2013, as far as the structure of the final accounts is concerned, which is simply in the form of disclosures, and which may not actually be accounted for in terms of accounting entries, and therefore, may not be reflected in the balance sheet itself or the income statement or the OCI statement.

So, in that case, these disclosures may well be given in the notes to the accounts. So, notes to the accounts provide disclosures, which may or may not be a part of the accounts or a part of

the formal accounting in so far as the preparation of the balance sheet and the P&L account is concerned.

So, I repeat, notes to the accounts provide information that is required to be disclosed, maybe not accounted for. It may not be accounted for, but it needs to be disclosed additional information say about the fair value of an asset or how a particular asset or a transaction gain or loss has been accounted for has been incorporated in the accounts, all these things need to be incorporated in the notes to the accounts.

(Refer Slide Time: 26:37)

**NOTES TO ACCOUNTS**

- Notes to accounts provide information that is **required to be disclosed (maybe not accounted for)** under the Companies Act & the standards.
- The notes to accounts form an **integral** part of the financial statements.
- The other financial statements are to be read in conjunction with the notes.
- The notes may also contain voluntarily disclosed information by the management to facilitate decision making by the users.

IAFORBI IFEL ONLINE CERTIFICATION COURSE

And the notes to the account form an integral part of financials statement. As I have mentioned, notes to the accounts are an integral part of financial statements. You cannot contend that an information which is contained in the notes to the accounts has not been provided by the company. If that information is provided in the notes to the account, then that is deemed to be provided as per law.

The other financial statements are to be read in conjunction with the notes to the accounts. The other financial statements are to be read in conjunction with the notes to the account. The notes may also contain voluntarily disclosed information by the management to facilitate decision making from the users.

So, this is what the status is, as far as the notes to the accounts are concerned. It is very important. I would say, it is essential that the analyst peruses the notes to the accounts. Because if you are going to miss out on the notes to the accounts, it would be very difficult

for you to get into the balance sheet and the P&L accountant reads information between the lines.

You may get the information that is there on the face of the balance sheet and P&L account, but that information may have been qualified in the notes to the account. So, the notes to the accounts are very important, very fundamental. And an analyst must necessarily consider the notes to the account, study the notes to the accounts while arriving at assessments of the financial position of entity.

Now, I propose to look at the accounting for financial assets, financial instruments. It is here, that this radical change, radical shift, paradigm shift in the underlying principles of accounting, fundamentals of accounting manifests itself with the biggest or the greatest prominence. Financial instruments accounting has radically changed, substantially changed in the last couple of decades you must say with the introduction of the new accounting standards across the world.

In particular the IndAS in India. And there has been and these changes has not been cosmetic, these changes have been fundamental. So, I addressed some of them in this series of lectures. Financial assets now there is a mandate there is an explicit mandate that financial assets, financial instruments and financial asset holdings of a company need to be measured at fair value. Explicitly mentioned that financial assets will be recorded at fair value.

Changes in fair value are included in the income or the OCI, other comprehensive income statement for the period, which are to be included in P&L which are to be included in OCI. I will come back to it. For the moment changes are to be included. And this is a very important point. I will again come back to it.

Now, this is important. Why it is important? Let us try to understand this. The reason that this particular point merits a discussion, which point, changes in fair value are included in the income or OCI statement for the period. The point is, these are unrealized gains. Now, please understand, try to understand. If an asset has not purchased during a year, so let us say 2021 say sometime in June, 1st of June let us say 2020.

And say, it is held by the company, as on 31st March 2021. Now, the loss, the x-standards, as the standard now mandate, that a fair value of that asset would be calculated notwithstanding the fact that the asset has not been sold. It is still live with the company, you still have to value that asset at fair value. And the difference between the change in value between this

fair value which you have arrived at as on 31st March 2021, and say the acquisition cost will have to be incorporated into your income statement or the OCI statement as the case may be.

Notwithstanding the fact that that particular asset has not been sold, you are still carrying it. So, in other words, what does it lead to? It leads to the inference that unrealized gain, gains that have not been realized in cash will also be recognized. This is one of the most serious implications of the shift to fair value accounting.

Now, the law explicitly requires, not only enables, but also requires that in certain cases, the changes in fair value, which have not been realized will also be incorporated in the accounts and will also be accounted for. So, fair value accounting explicitly provides the recognition of unrealized gains or losses. Unrealized gains or losses will be reflected in retained earnings within owner's equity in certain cases, which are called fair value through profit and loss account.

And in accumulated other comprehensive income, in other cases, which are called fair value through OCI through other comprehensive income. So, these are two possible treatments of unrealized gains or unrealized changes in fair values. Unrealized changes in fair values may be reflected in the retained earnings, if they are carried at fair value through profit and loss account they would be reflected in accumulated other comprehensive income if the changes are recorded FVTOCI that is fair value through other comprehensive income. These are two possible approaches to the recording, and accounting for unrealized gains on account of changes in fair value.

Before I conclude this lecture, I emphasize once again, this is the most fundamental shift or the implication of the fundamental shift from a historical cost accounting to fair value accounting. You are now recording the changes in fair value and these changes in fair value may not be actually realized. In other words, you are recording unrealized profits or losses as the case maybe. So, we will continue after the break. Thank you.