Managerial Economics
Prof. Trupti Mishra
S.J.M. School of Management
Indian Institute of Technology, Bombay

Lecture - 78
Product Pricing (Contd…)

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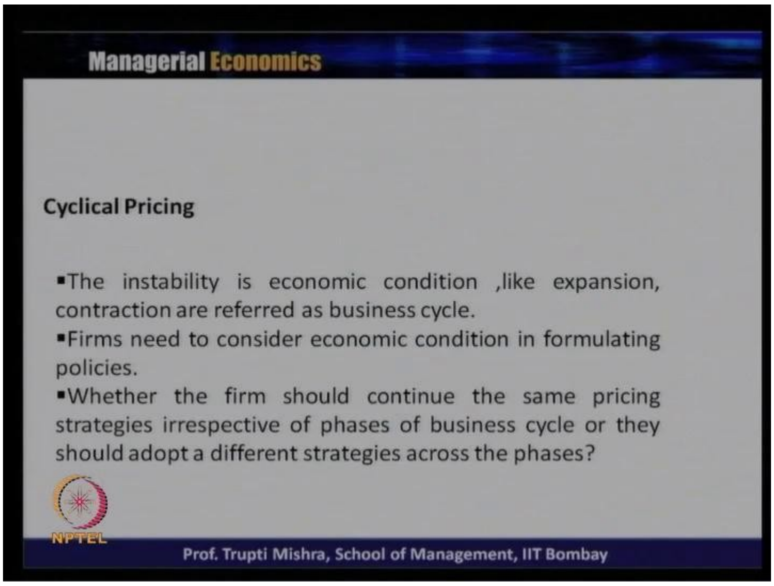

Then, we will talk about the cyclical pricing and what is cyclical pricing? Cyclical pricing related to the fact that there is always the instability in the economic condition. It is not constant; there may be expansion; there may be contraction in the economic activity, which is typically known as the business cycles. And we also get different phases of the business cycle, like starting from whether it is recession, whether it is boom, whether it is revival or whether it is the growth; in all this cases, we get different stages of the business cycle and in all this phases either there is expansion of economic activity or there is contraction of economic activity.

So, the seller has to be very careful in deciding the pricing at the different phases of the business cycle; when the economic activity, they are contracted or when the economic activities are expanded. So, firms need to consider the economic condition in formulating the policy; so, whether firm should continue the same pricing strategy irrespective of the phases of business cycle or they should adopt a different strategy across the phases. So, the challenges for the seller is to know whether they can do the same pricing in all these phases of the business cycle or they have to follow the different pricing strategy in the different phases of the business cycle.

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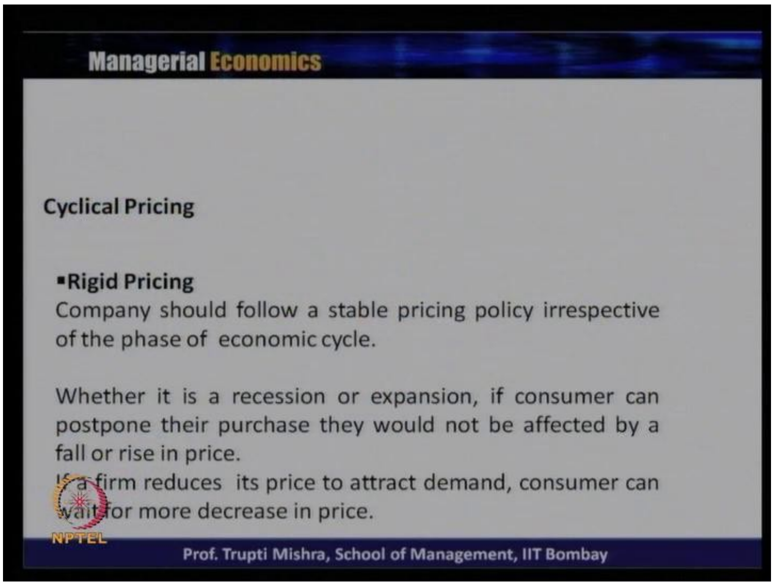

There are two kinds of pricing: one - rigid pricing, where the same pricing is being followed in all the stages and second is the flexible pricing. So, coming to the rigid pricing, company should follow a stable pricing policy irrespective of the phases of the economic cycle. So, whether it is a recession or expansion, if the consumer can postpone their purchase, they would not be affected by a fall or the increase in the price.

So, company in this case of rigid pricing, company generally follows a fixed pricing policy in all these phases of the economic cycle. And whether it is a recession phase, whether it is a expansion phase, consumer cannot postpone their purchase; they would not be affected by the fall or the decrease in the price. So, if the firm reduces its price to attract demand, consumer can wait for more decrease in price and in that way it generally reduces the price because once the consumer knows that there is there is a reduction in the price because of this economic activity, they will anticipate that again there is going to be decrease in the price, and if they are going to wait for the decrease in the price there is a going to be effect on the quantity demanded.

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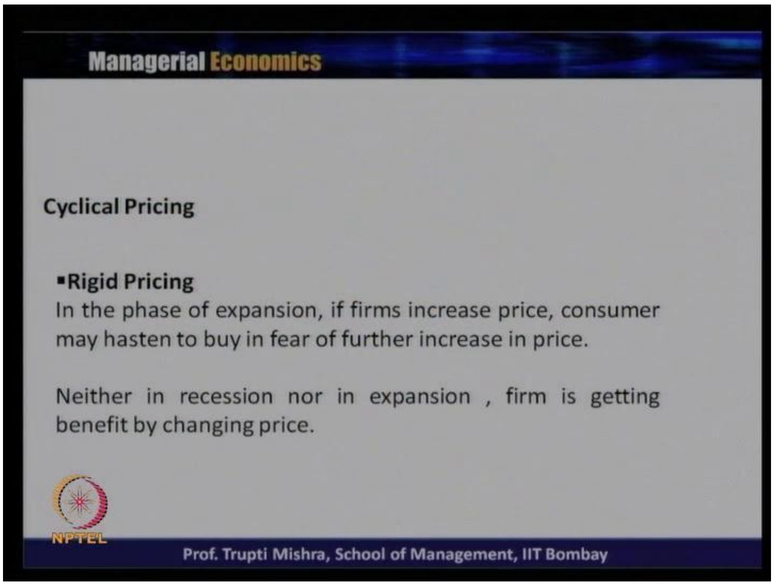

Similarly, in the phase of expansion, if firm increase the price, consumer may hasten to buy in fear of the further increase in price. So, even there is a increase in the price, still people they will consume more because they are going to anticipate that this is the phase of expansion or it may happen that again the price can increase and that is why they increase their consumption with a high price also. So, neither in recession recession nor in expansion, firm is getting benefited by changing the price.

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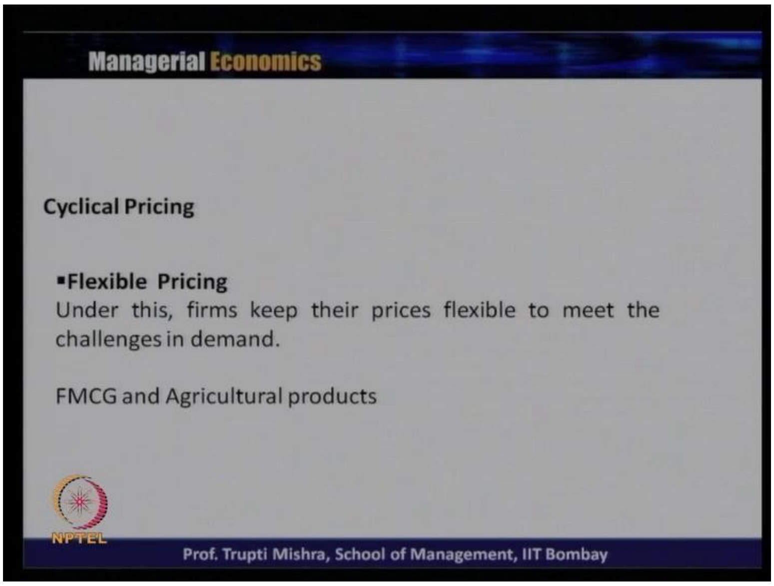

Then we have flexible pricing and under this flexible pricing, firm keeps their prices flexible to meet the change in the demand or the typically the challenges in the demand, and generally the flexible pricing is more relevant in case of the FMCG goods and the agricultural products because they are generally they change with respect to the different phases of the business cycle.

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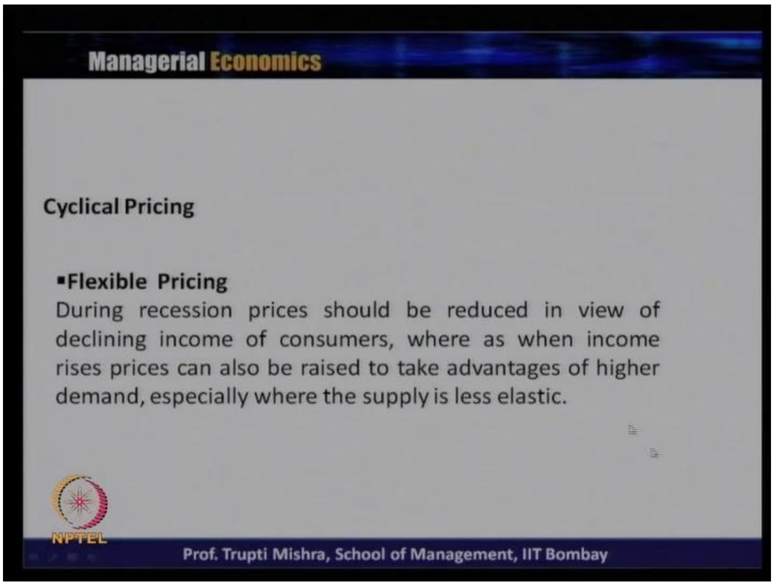

So, in case of flexible pricing, if you look at, during the recession prices should be reduced in view of declining income of the consumer because there is a recession, in general, the market is going on a lower side and income decreases. So, during recession, price should be reduced in view of declining income of the consumer. Whereas, when income rises price can also be raised to take advantages of higher demand, especially when the supply is less elastic.

So, in one case, if there is a recession price to be reduced because there is a decline in the income, but when there is a increase in the income, there should be increase in the price to take advantage of the higher demand. There is a increase in the price; people they demand more. And since that they demand more, prices can be increased because if the consumer is not responsive to change in the price, still they will continue the same amount of the demand and there is one more backdrop over here is also; income is going on on a increasing side. So, in that case, if they are increasing the price, still the quantity demanded is going to be maintained and there whatever the high price they are charging, that is accepted to the consumer.

Here, one more one more point to notice is that, if the quantity is increased in a higher price the supplies also has to be less elastic because if the high price again supply more, it is not going to give the benefit; if supply is more than the demand the price has to come down again; so, supply has to be less elastic. High price can be charged if the income is increasing.

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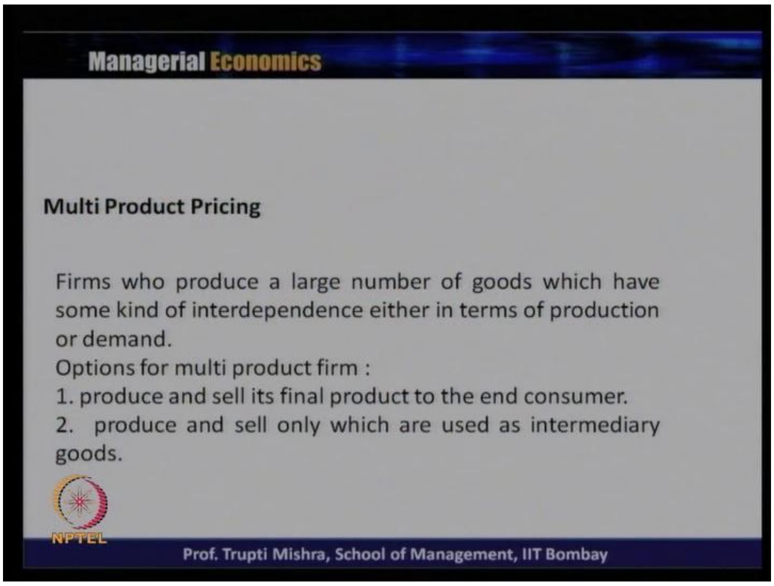

Then, we will talk about the multiproduct pricing and multiproduct pricing here is specifically relevant to those firm who produce large number of goods which have some kind of interdependence, either in term of production or in term of the demand. Now, what is a multiproduct pricing? Multiproduct pricing is relevant to the firm where they are producing more than one product and they are interdependent in term of production of the goods or in term of the demand for the goods.

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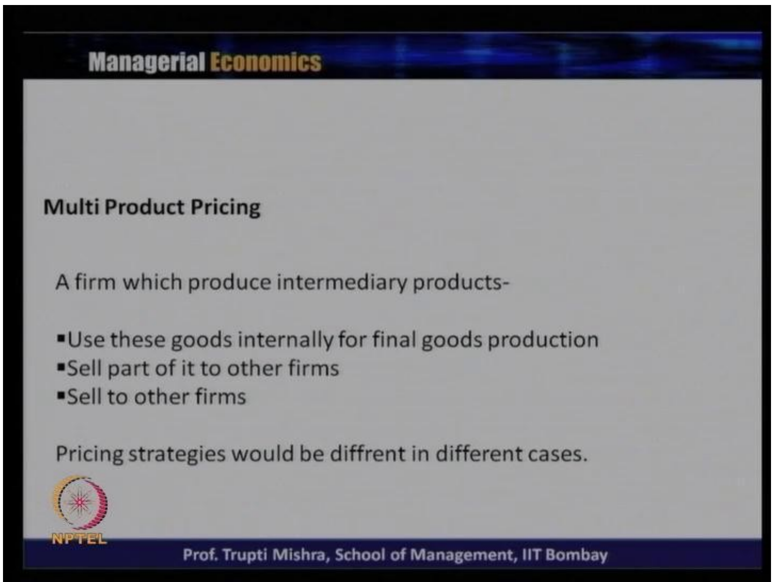

What are the options for multiproduct firm? Either they produce and sell its final products to the end consumer or they produce and sell only which are used as the intermediary goods. So, either they will produce or sell the final products to the end user that is option one for the multiproduct firm or they will produce or sell only the intermediary goods which will be by the other firms to produce it as a final product. If the only firm only produce the intermediary products, they use these goods internally for the final goods of production, sell part of it to the other firms and sell it to the other firms.

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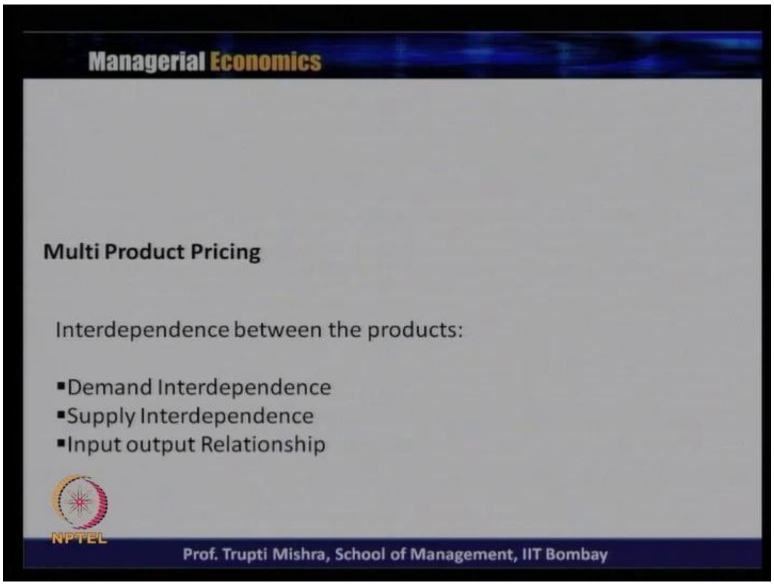

So, when they are producing the intermediary products, what are the options for them? They use these goods internally for final goods of production. It is not going to the outside market or they will sell part of it to the other firms or they will sell all these products into the other firm. The pricing strategy has to be different in all these three cases; whether it is getting used for the final products, whether part of it is being sold or entire intermediary intermediary goods is getting sold in the market. And this pricing is dependent on the fact that what is the interdependence between the products when they are interdependent on the basis of the demand, when there is interdependence on the basis of the supply, and when it is input and output kind of relationship.

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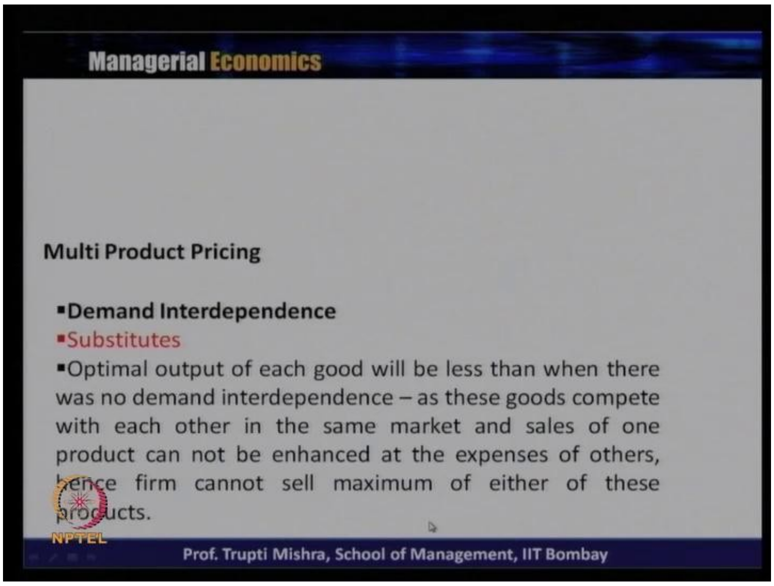

So, we will start with the demand interdependence and here we will talk about two kinds of goods: one is substitute goods and second one is the complementary goods. So, if it is demand interdependence, then substitute good is one where both the goods they are related to each other and that is why there is a demand interdependence interdependence.

Now, what happens in case of substitute goods? Optimal output of each goods will be less when there is no demand interdependence. So, if there is no demand interdependence, generally the optimal output for each good will be less as these good compete with each other in the same market and sale of one product cannot be enhanced at the expenses of the others. So, the firm cannot sell maximum of either of this product; both the goods, they goe from one firm.

So, generally the optimal output for each good will be less because there is no interdependence and they are operating in the market independently and they competing with each other in the same market, and sales of one cannot be enhanced at the expenses of the others because they are independent. So, firm cannot sell maximum of either of these products, if there is no interdependence.

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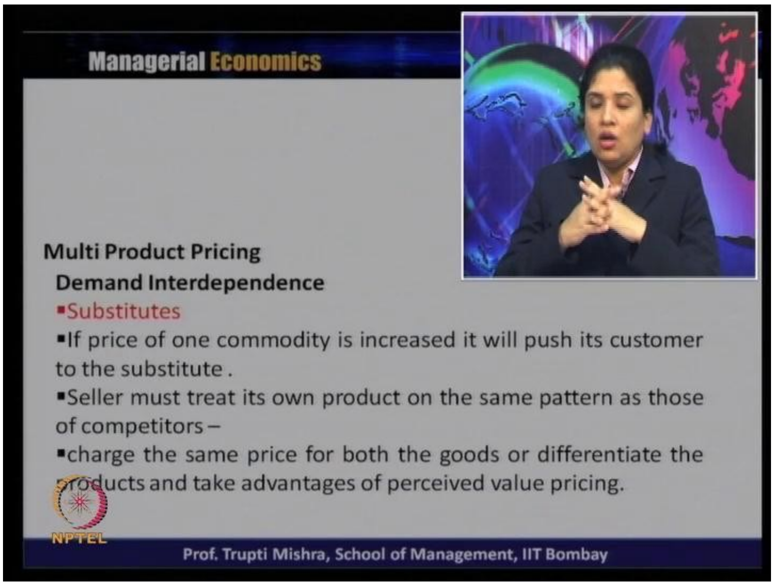

If the price of one commodity is increased, it will push its customer to the substitute; that generally happens in case of a market. Seller must treat his own product on the same pattern as those of competitor. Generally they have to charge the same price for both the goods or differentiate the product and take advantage of the perceived value pricing. So, if it is both the products are substitutes, either they have to charge a price which is same or they will differentiate the product either on the basis of the content or in the basis of the service associated with it or with the basis of the packaging or with the basis of the quality and they will say this two products are different. And on that basis, they will give a perceived value if the consumer is perceiving a higher value product for a product, they will charge a higher price, and if they are perceiving a lower value for a product, they will charge a low price.

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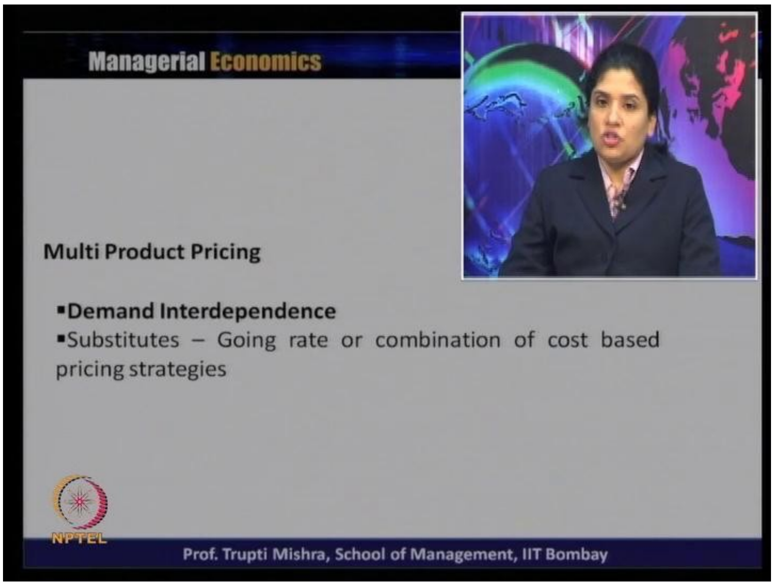

So, both the products seller trade at their own product; either, they he will produce the product in the same level and charge a same price or he will differentiate it and the take the advantage of the perceived value pricing. And in this case, generally the pricing is followed as the going rate pricing or the combination of the cost based pricing strategy. So, if you remember, the going rate pricing is the same pricing for the all the substitute products in order to avoid the price war or in order to avoid the uncertainty associated with the different market, different price being charged for the different firms.

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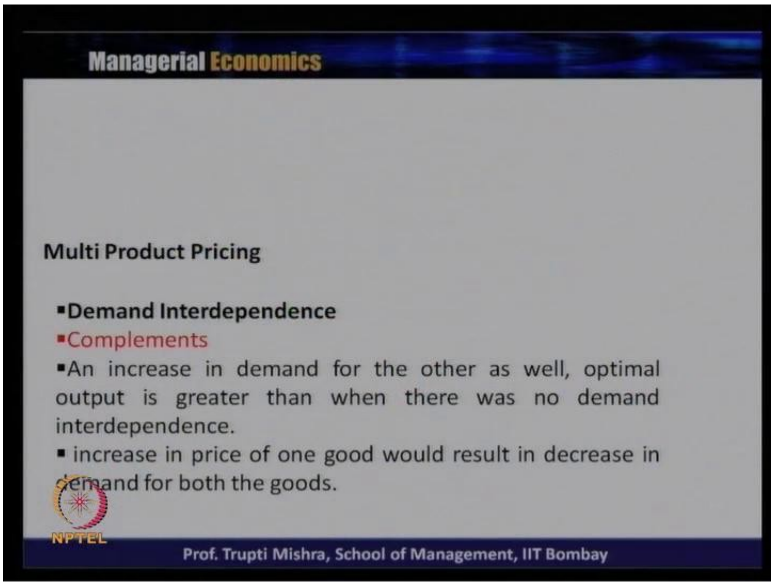

Then, we will see the demand interdependence in case of the complementary goods. And what are the complementary goods? When one goods cannot be consumed without the consuming the other goods; so, in case of complement goods, an increase in the demand for the other as well and optimal output is greater than when there is no demand interdependence. So, optimal output is greater when there is no demand interdependence and increase in demand of one will be always leads to increase in the demand for the others.

So, increase in price of one good would result in the decrease in the demand for both the goods because both that, both the goods they are complementary in nature. So, if the increase in the price of one goods that lead leads to decrease in the demand for that goods and that simultaneously leads to decrease in the demand for the other goods also because both of them, they are complementary in nature.

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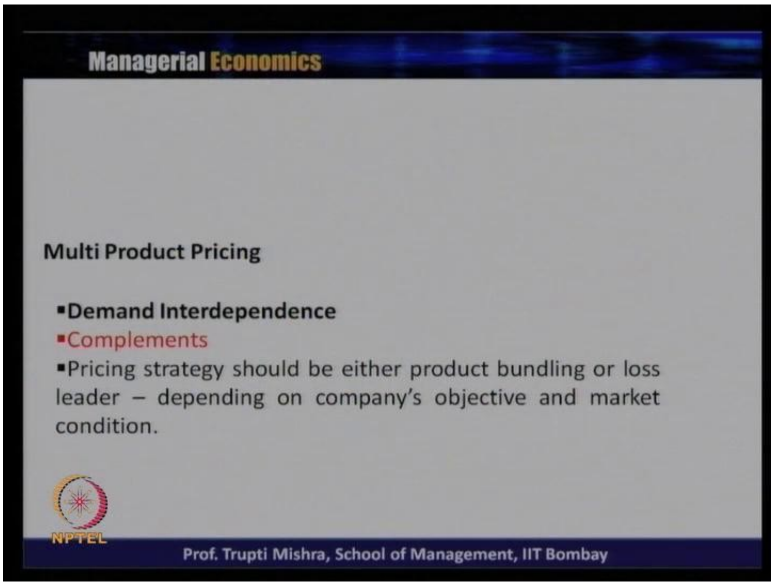

Now, what is the pricing strategy that has to be in case of complementary good? Pricing strategy should be either product bundling because it is a complementary product product, or loss leader where the price of the product can be taken can be taken from the combined value of the product by charging low price to one product, but the complementary product is on a higher price. So, the pricing strategy in case of the complementary goods, when it is a multiproduct pricing, either it has to be the product bundling pricing strategy or it has to be to the loss leader pricing strategy.

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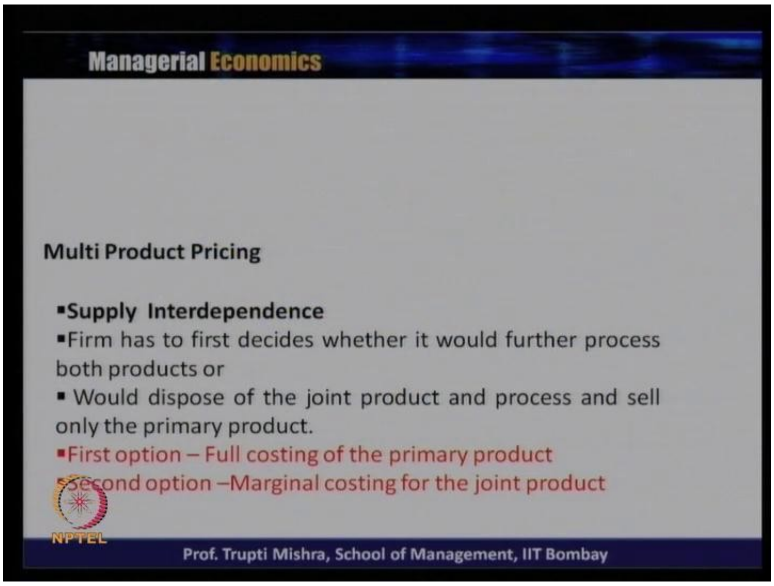

Then, we will come to the second category of multiproduct pricing where there is a supply interdependence between the products. So, here, the firm has to first decide whether it would further process both the products or would dispose of the joint product joint dispose of the joint product, and process and sell only the primary product.

So, since the product, since the firm is producing the multiproduct, it has to choose one of these options. They have to further process both the products which is in the intermediary in nature or they would dispose of this joint products, or they process or sell only the primary product. If the option taken is the first option, then the pricing method should be the cost plus where the full costing has to be taken, which consider both the variable cost and the fixed cost.

And second option is the marginal costing of the joint product, and in this case, the marginal costing has to be taken marginal costing where we only consider the variable cost, not the full cost which is consist of the fixed cost and the variable cost. So, when they are disposing off, then in this case they are following a marginal cost pricing method and when they are non-disposing off, they are doing it and processing further. Generally, they do the full cost pricing method or the cost plus pricing method.

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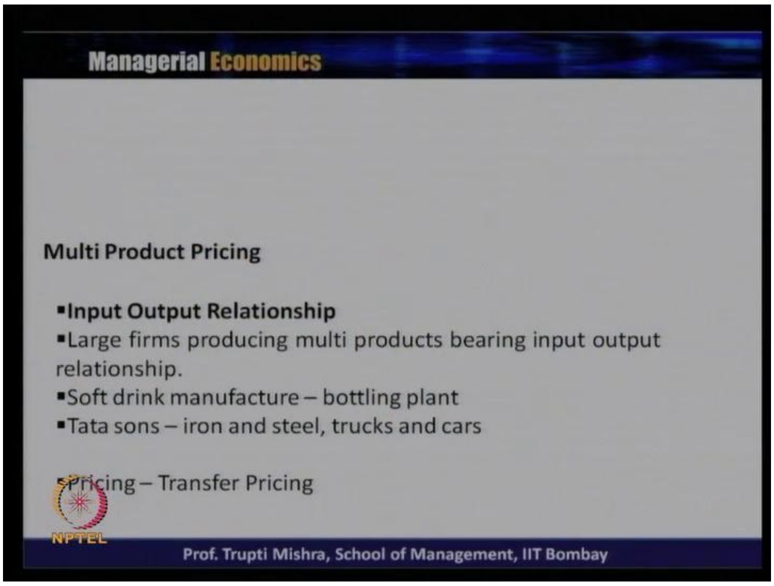

Then the third category is input output relationship in case of a multiproduct pricing. And what is input output relationship? Large firm producing multiproduct bearing an input output relationship. And what is the input output relationship? Suppose, if soft drink manufacturer also producing in a bottling plant or if you take the example of Tata sons, they produce iron and steel in one setup; they produce a they produce trucks and car in the other setup. But when it comes to the relationship between both these products produced by the same company, iron and steel is being used to produce the truck and car, and similarly, when it comes to the final product by the soft drink manufacturer, the bottling plant is always the complementary product because the final product of the bottling plant has to be taken to the soft drink manufacturer; then on soft drink manufacturer then only it can be the final product

And in this case, generally the pricing strategy is followed as the transfer pricing, about which we will discuss bit later that what is transfer pricing and how the pricing has to be determined in case of the transfer pricing methods. So, in this case, in case of input output relationship, if the one product is the input and the other product is the output because large firm produce the multiproduct, in this case, generally the transfer pricing method has to be followed.

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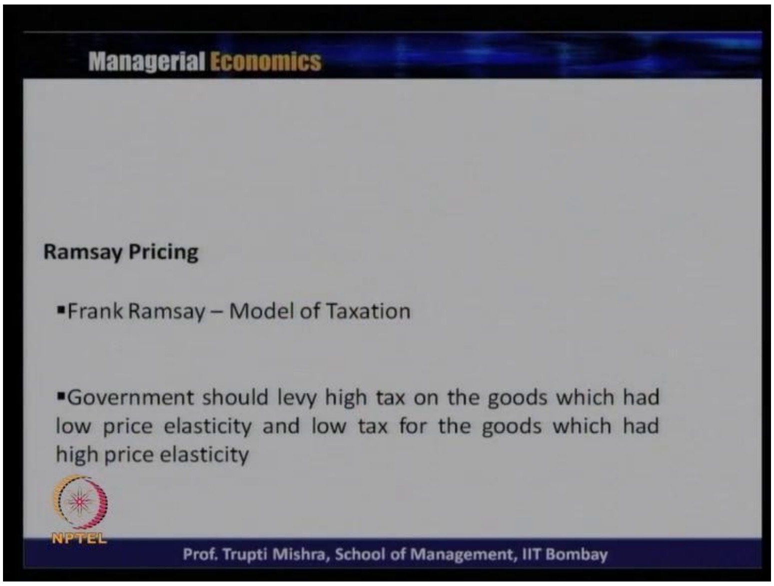

Then we will talk about a pricing strategy known as Ramsay pricing and what is Ramsay pricing? This is developed by Frank Ramsay and the initial contribution of Frank Ramsay is the model of taxation. According to this model of taxation, Government should levy high tax on the goods which had low price elasticity and low tax for the good which has high price which had high price elasticity.

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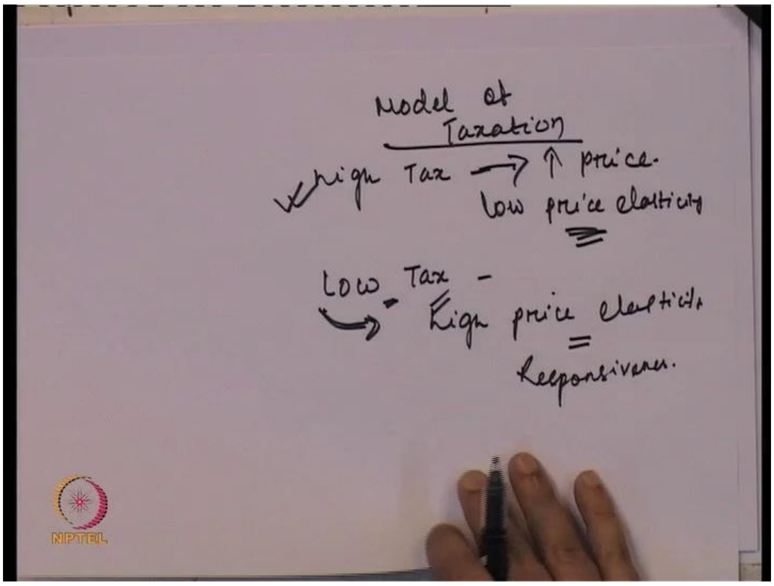

Why this has to be followed because if you look at what is higher? If you are giving a high tax, on the basis of this model of taxation, if you are giving high tax, your levying high tax on low price elasticity and low tax on high price elasticity because if it is low tax on high price elasticity, because if tax is low, this is the market where the responsiveness is more. So, if if it is low tax, it cannot if you are combining with the market, still since the market is elastic, at least there is a responsiveness is more, but rather than low tax, if it is going to be high tax, it is going to have more effect on the quantity demanded if the seller is trying to charge it to the or trying to transfer it to the buyers. That is why the low tax is given in case of the high price elasticity. And why high tax on the low price elasticity because here the consumer is not very sensitive to the change in the price.

So, in this case, if the high tax is being charged which further leads to increase in the price, this can be followed because there is less responsive to the change in the price. So, the basis is again, how the consumer is going to react in case of the change in the price and the change in the price has to be on the basis of the whatever the imposition of the tax. So, on that basis, the model of taxation says that Government should always levy a low tax in case of the high price elasticity and high price elasticity product, and high tax on the goods which has the low price elasticity.

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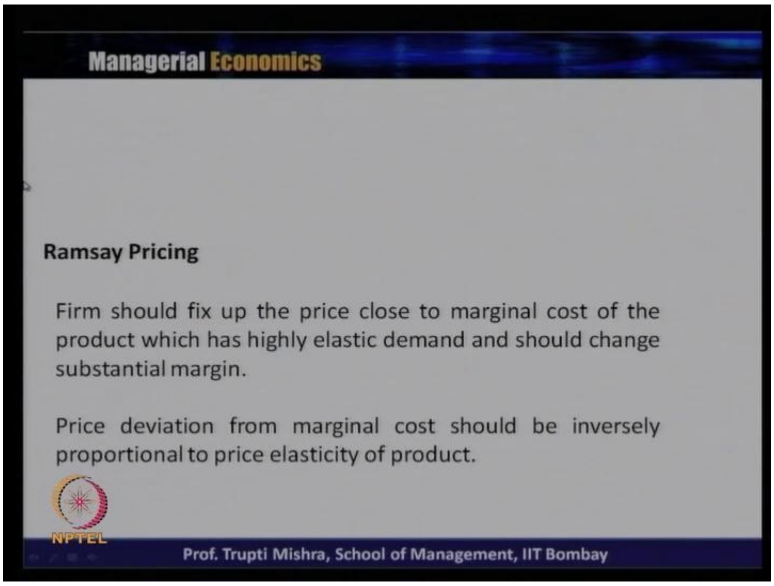

Firm should fix up the price close to the marginal cost of the product which has highly elastic demand and should change the substantial margin. And according to this Ramsay pricing, the price deviation from the marginal cost should marginal cost should be inversely proportional to the price elasticity of the product. So, whatever the deviation for the marginal cost, if it is more, then it is - the price elasticity is less and if the deviation is less, then the price elasticity has to be more.

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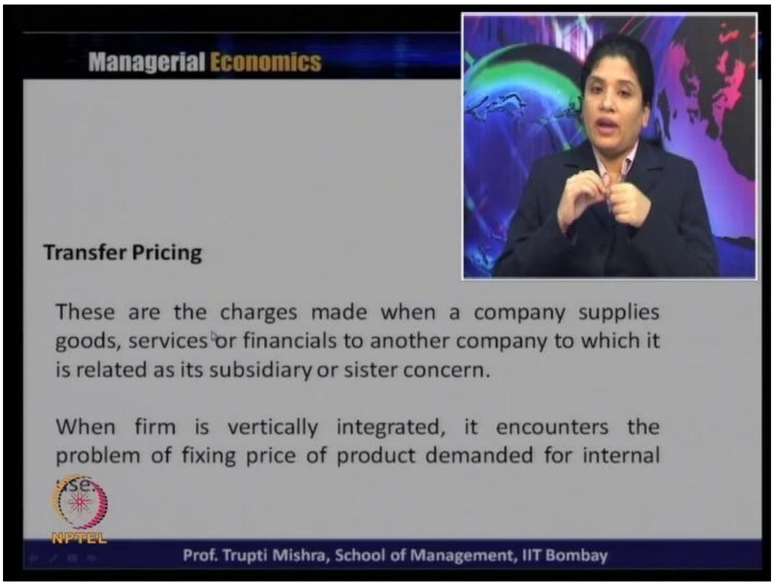

Then we will talk about one more kind of pricing that is transfer pricing and transfer pricing are the charges made when the company supplies goods, services or the financials to another company to which it is related as its subsidiary or the sister concern.

So, generally, this kind of pricing are… it is more also in the internal manner because this is the pricing to that company which is related as the subsidiary or the sister sister concern. So, charge is made when a company supplies goods services or financial to another company and another company is either as a subsidiary or a sister concern. And when a firm is vertically integrated, it encounters the problem of fixing up the price of the product demanded and also for the internal use.

Now, here what pricing has to be, what pricing strategy has to be followed? Because here the pricing if you are related, it is related to the subsidiary sister concern and there it is going to like Tata group and just now we are taking the example of one group, they produce iron and steel and the other group they produce truck and cars. So, the final product of iron and steel is used as the input in the truck and car industry. So, in this case, both of them, they are subsidiary; both of them, they are the sister concern. In this case, the pricing generally followed is the transfer pricing. And here if you look at, the firm is particularly integrated and that is why there is a problem that for how to fix up the price for this kind of the situation.

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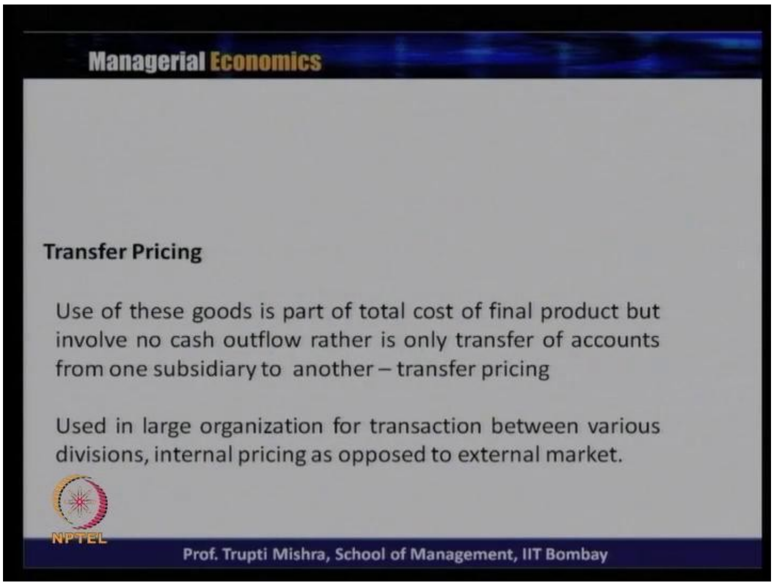

So, if in case of transfer pricing, use of these goods, typically the goods from the another another industry of this typical group; use of these good is the part of the total cost of final product, but involve no cash outflow; rather, it is only the transfer of account from one subsidiary to another. So, since this is the transfer of account from one subsidiary to another, this is generally known as the transfer pricing because there is no cash outflow. It is in the same group; it is just transfer of account from the one industry to another industry for a typical business house. This is generally used in the large organization for transaction between the various divisions internal internal pricing as opposed to the external market.

So, when there is a large group of industries are there, this is this transfer pricing is generally used when the transaction between the various division takes place; so, there is no cash outflow. Basically, it is the transfer of account from one division to another division.

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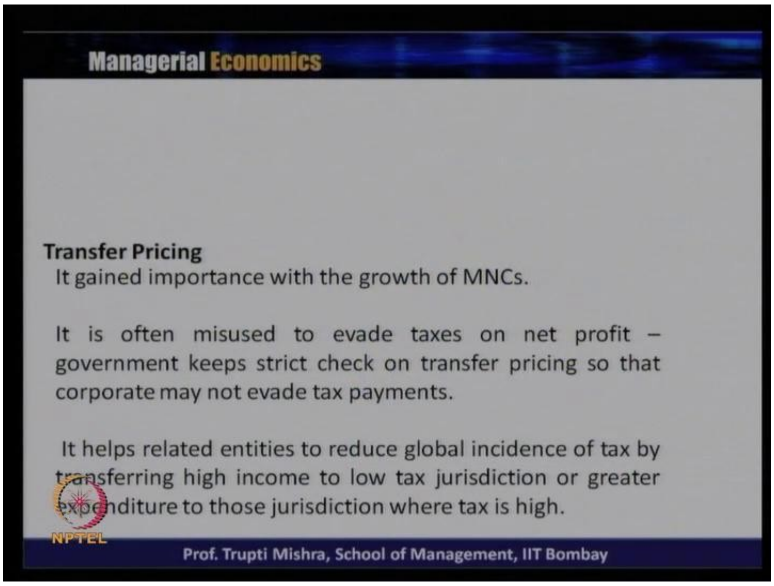

It gained more importance when the MNC started; when we started the multinational corporation after the liberalization. This, typically this pricing technique gained more popularity after this introduction of MNC and this is also often misused to evade tax on the net profit. And that is because this is basically transferring account from one division to another division and that is why it is often misused to evade the taxes on the net profit. Government keeps strict check on the transfer pricing so that the corporate may not evade the tax payment.

It helps related entities to reduce the global incidence of tax by transferring high income to the low tax jurisdiction and greater expenditure to those jurisdictions where tax is high. So, generally, if they are working in a group, this incidence of tax can be planned according to the transfer pricing. They generally transfer the high income to the low tax jurisdiction so that they pay lower tax and greater expenditure to those jurisdiction where tax is high; and in that way, generally, as a whole, as a large organization they can reduce that whatever the imposition of tax or the what is the effect of the incidence of tax.

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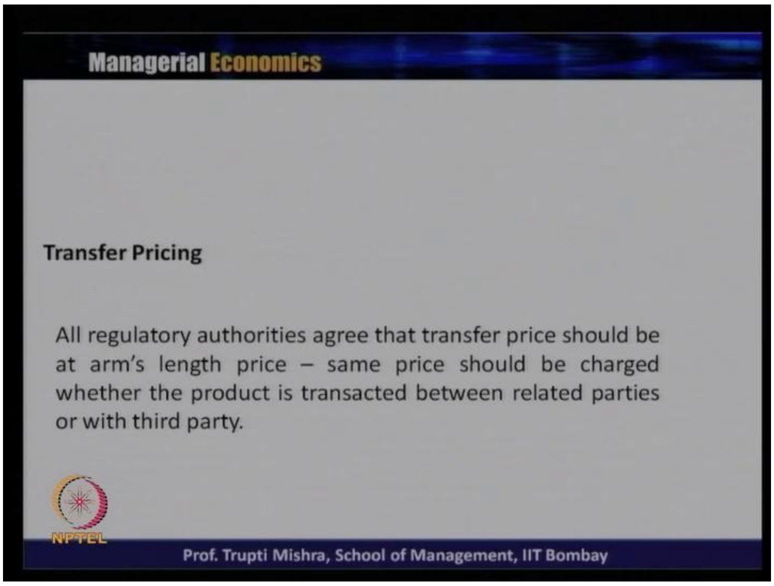

So, all regulatory authorities generally they agree that transfer price should be at the arm's length price; the basis of the transfer price should be the arm's length price and what is arm's length price, that the same price should be charged whether the product is transacted between the related parties or with the third party.

So, arm length is one whether the transaction is between two parties of the same industry or also between the related parties, or also with the third party. And all regulatory authorities, they agree that the basis of the transfer pricing should be at the arm's length price.

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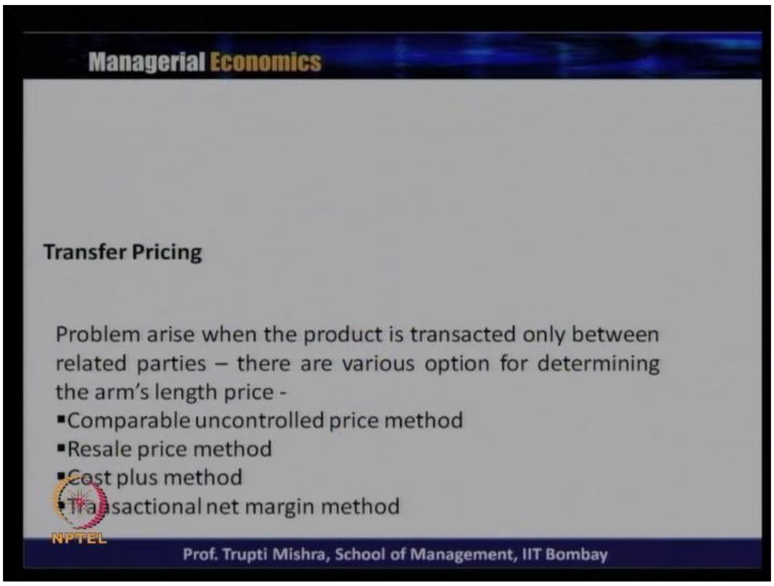

There is some potential problem if the product is transacted only between the related parties. There are various options for determining the arm length price. And what are the options for determining the arm length price? The comparable uncontrolled price methods, resale price method, cost plus method, and transactional net margin method. So, these are the options to decide the arm length price and any of this method can be followed to decide the arm length price, when the transaction is essentially taking place between the two related parties.

The transfer pricing law requires company should submit details of its own transaction with others. So, whatever the what is the requirement for this transfer pricing? The requirement for this transfer pricing is that, this law requires, because this is given by the regulatory authority and this law requires, that company should submit details of its own transaction with others; major problem is non availability of the comfortable information in the public domain.
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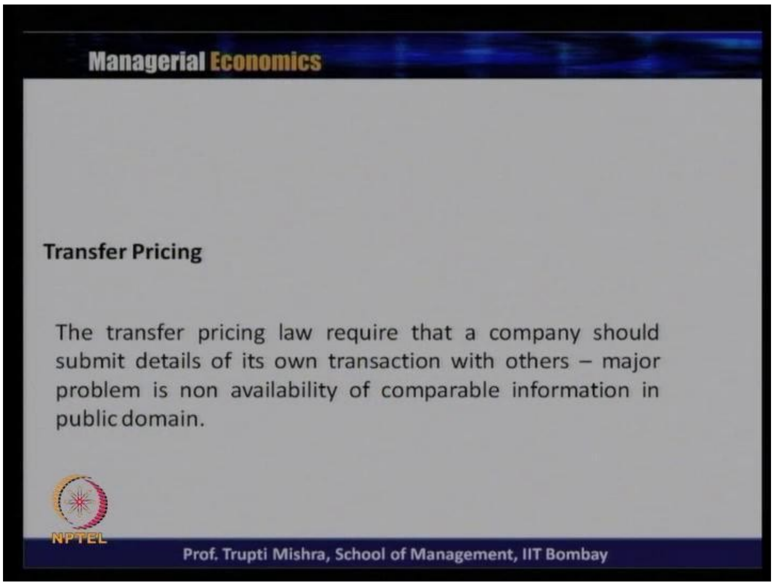

So, what is the problem here in case of transfer pricing? The regulatory authority requires that the company should submit details of their own transaction with others, but it is difficult to know the transaction. You can at least give the details of the firm’s own transaction with others, but what is the other transaction with the third party, that information is not available in the public domain and that is generally the challenge or what it comes when it is about the applicability of the transfer pricing.Then, we will discuss few more types of pricing like peak load pricing and also this seal bid pricing strategy, retail pricing, and administer pricing, in the next session. And after that, we can do a comparative assessment that what is more applicable in the real world, which kind of pricing is being followed more, in case of the real world.