Economics of Health and Healthcare
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Lecture – 34
Reinsurance

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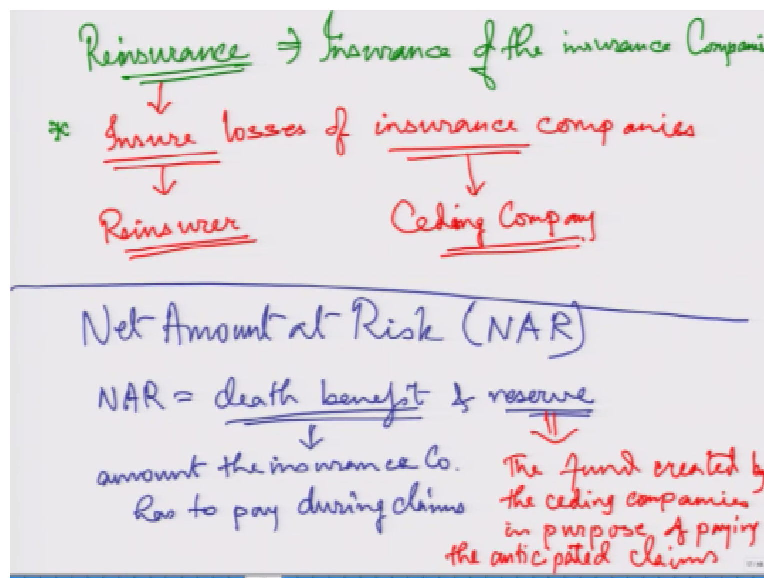

So, now we will discuss about reinsurance, so what is reinsurance? Reinsurance is basically, the insurance of the insurance companies; is the insurance of the insurance companies, yeah, so what these reinsurance means or why do they do reinsurance because the insurance companies also make losses yes, as we learned in terms while we were learning actually fare premium and also that means that there is misappropriation or mis-estimation by the insurance companies and then they make losses.

So, the reinsurance companies are the ones which take care of the losses of the insurance companies you know the, so in reinsurance companies insure losses of insurance companies, those who insure these losses they are known as reinsurer, those who insure the losses are known as reinsurer, those which are insured they are known as ceding company yeah, so they are sharing the risk now.

So, these basic insurance companies who are being insured are known as ceding company and those who insure this ceding companies are known as or you know take care of the or share the risk with these ceding companies, from the ceding companies known as reinsurers. Now, when

we talk about that okay sharing the risk or chance of making loss, the general idea or general concept what we; what we you know discuss upon is net amount at risk; NAR.

Net amount of risk is nothing but the difference between death benefit and reserve, now what is death benefit; death benefit is the amount the insurance company has to pay during claims, it is a kind of indemnity right, so the death benefit is the amount the insurance company has to pay towards his customers during the claims whereas, what is reserve; the reserve is; I will take a different colour.

The reserve is the money or the fund created by the ceding company, when purpose of paying the anticipated pay outs or anticipated claims. So, how they generate these reserves; through premium of course, so this fund; the reserve is the fund created to make the payment towards the claim and then the claim which is arising is basically the death benefit and therefore, the difference is the death benefit - reserve that means, by the difference between my revenue on the other way, when the reserve can be my revenue.

And this can be death benefit can be my indemnity, so and how that is how we learnt to estimate the losses, right, so, just taking an example, if the death benefit of an insurance company.

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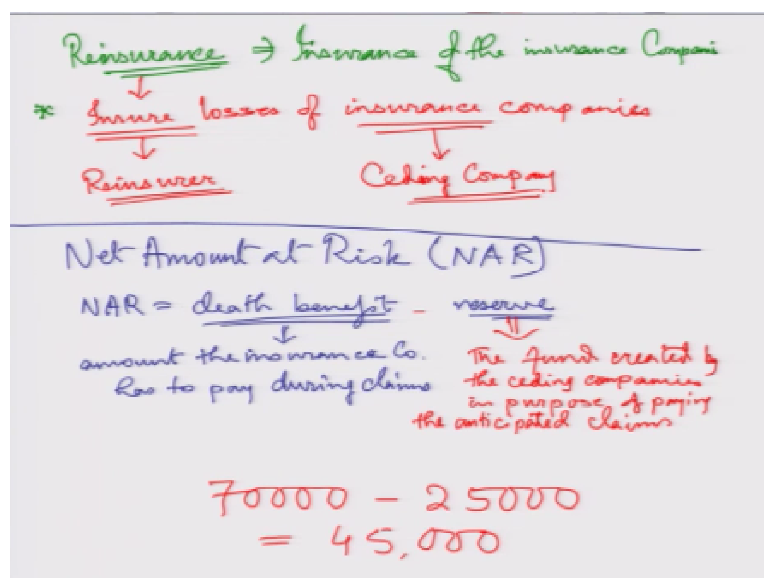

Say, the death benefit is 70,000 rupees and reserve is 25,000 rupees, so the net amount at risk it is in the negative way right, net amount at risk not in the reserve, so in the net amount of risk that is the potential loss is 45,000 rupees right, 70,000 – 25,000, so it is not basically is we are estimating the loss not the profit, so it is not revenue – cost, it is the cost - revenue or the death benefit – reserve.

So, this is the potential loss you know, the health insurance company is going to make but is it like every time they will make losses, their reinsurance companies will pay for that no, it never happens like that or it is not taken for that granted, so what happens that their insurance companies will ask the insurance companies about our retention limit; retention limits. So, what is this retention limit?

Retention limit is the maximum amount of loss, the insurance; the ceding company, the insurance company yeah, here we will say ceding company because here are 2 insurance companies, ceding company is willing; willing to incur, this is the maximum amount of loss, so this said okay, I will; 45,000 is my net amount at risk, so my retention limit is something close to 80,000 rupees.

That means, I know that even if I make a loss maximum till 80,000 rupees, I have a capability that in next cycle, I will you know, I will make it up, I will manage it, I do not have to you know ask for an insurance in this case, a reinsurance but what happens in case of retention limit, if it is < say, 20,000, the retention limit and then the net amount at risk is 45,000, then the reinsurer or the reinsurance company has to pitch in.

So and this applies for total net risk of all policies together you know, so it is not only one individual policies, the total policies because that is the total loss the insurance company is going to lose, it' is not policy specific mostly, so is the total losses they are may going to make and are making and then based on that what will be the retention limit yes, therefore if my death benefit is around 70,000 rupees and I have a reserve of around 25,000 rupees, I have net amount at risk of for 45,000 rupees.

Now, it depends that what will be you know, like depending upon the death benefit and then the reserve, you will estimate your, the potential loss as an insurance company or as a ceding company. Now, it is not that whenever the ceding company is making loss, the reinsurance company will insure for that loss so, the reinsurance company expects that the ceding company will you know can adjust its system till a certain amount of losses can manage by themselves.

So that that maximum limit till which the ceding company are supposed to arranged or make up their losses, make for their losses up then that is known as retention limit.

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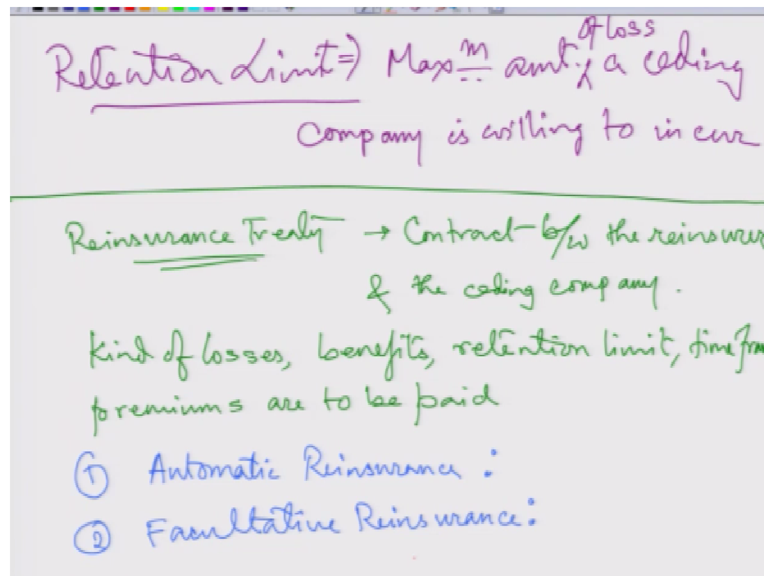

Therefore, retention limit is the maximum amount a ceding company is willing or maximum amount of loss are ceding company is willing to incur that is known as retention limit and the ceding company has to state this retention limit to its reinsurance company or the reinsurer and this retention limit is not specifically one for one particular insurance scheme, it is; it is basically for a group of insurer you know, altogether considering all the insurances together that what is the potential amount of loss or the net amount or at risk considering all the policies the insurance company has sold or the ceding company has sold to its customers.

Based on that the retention limit will be fixed and once, we you know fix the retention limit that means, we are moving towards the reinsurance treaty because retention limit has a very important component of reinsurance treaty, so what is this reinsurance treaty; a reinsurance treaty is again a contract and this contract is between the reinsurance company and then the ceding company.

So, a contract between the reinsurance company or the reinsurer and the ceding company, it shows that which are the losses the reinsurance company will cover you know, the kind of losses the reinsurance company will cover, what will be the benefits the ceding company will get, what are the retention limit the ceding company has to state, what is the time frame for which the policies are being reinsured.

And based on this and finally what premiums for this set of benefits you know, what premiums are to be paid and how to be paid by the ceding company to the insurance company. A reinsurance treaty is basically of 2 types; one is automatically insurance and another one is facultative reinsurance. The automatic reinsurance actually is the treaty which defines the

reinsurance treaty, which defines that you know it has to cover automatically all the insurances or the; which the ceding company has forwarded or has sold to its customers.

And you know, it; there is no choice for the reinsurance company, where the facultative reinsurance in case of facultative insurance, the reinsurance company can specifically choose that you know these are the based on certain criteria that these are the insurances, I am going to cover and that that you know, when this try to selectively or select the insurances, then they will consider one policy at a time individually.

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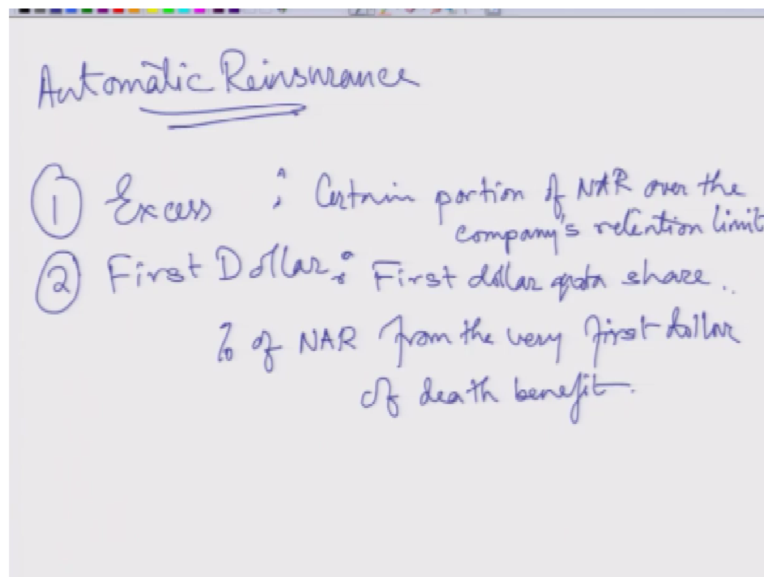

So, this automatically insurance is actually given enough, so when I am giving automatic reinsurance, it is generally in 2 ways; 1 is excess and 2 is first dollar. In excess is a when only a certain portion of the net amount at risk are being covered, it is a certain portion of net amount at risk are being you know, over the company's retention limit, so over the company's retention limit are being insured.

And in case of first dollar, it is the percentage of from the very first dollar you know of; under the; which is coming under the net; net amount at risk, so what we do in this; we call it a first dollar quota share basis, so it covers a certain percentage of the net amount at risk from the very first dollar of death benefit yes, so these are the 2 types of automatic reinsurance; 1 is exists where the over the retention limit, a certain percentage of you know, say if the retention limit is 1 lakh rupees.

And in the total net amount of risk is 3 lakh rupees and then and then, the first dollar will cover from the very first amount of the 2 lakh rupees, a certain proportion of that whereas, in case of excess they will say that I will cover 50% of that 2 lakh rupees, so 1 lakh rupees, it is like that.

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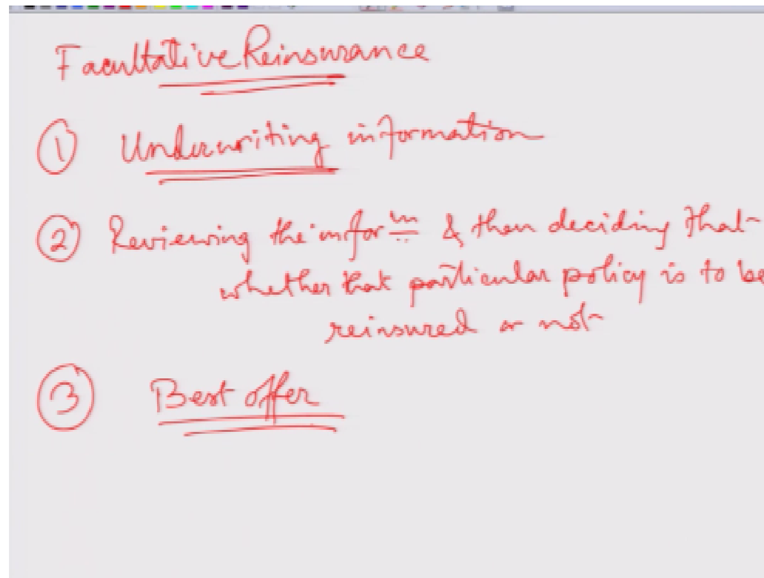

So, in case of facultative reinsurance, it works in a; in case of facultative reinsurance, it follows 3 steps; the first step being they, they want the underwriting information, this reinsurance company seek this underwriting information from the ceding company, now the underwriting information means the estimation of the probability of each of the individual or insured people's estimation of probability of falling sick for each of the; for each particular policy.

And then, they will see whether they have been any mistake in terms of underwriting and then that is why these you know, insurance companies are making losses or not, so one is this underwriting and then, the next is reviewing the information and then, deciding that whether and then deciding that whether that particular policy is to be reinsured or not because in facultative they actually, choose you know the individual policies.

So, they have this discretionary power, so they will look at it each policy and will then decide and then the third one is the company reviews all offers and then, choose the first in and best offer, you know they choose the first in and best offer and then decide that those are the you know the those are the insurances they are going to reinsure and as the insurance companies will play very safe you know because they really want to reinsured or very faulty insurance company or seek insurance company.

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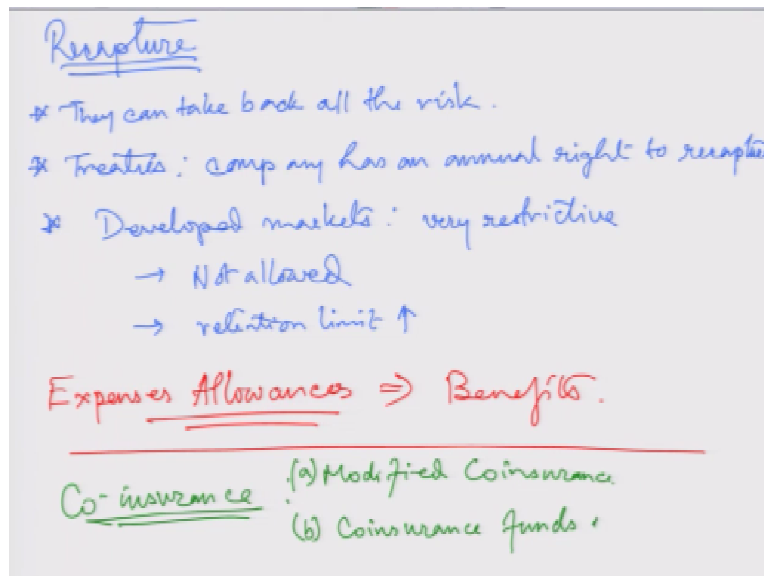

So, while they are going for this reinsurance, there is a concept of recapture; recapture which is floated in generally, recapture, so the; what happens in this case the ceding company also are getting some benefits you know they can take back all the risk, all of the risks. In less developed market what happens that often treaties give a statement you know, it is mentioned in the treaties that the company has an annual right to recapture.

That means, within a year they can recapture all the risks, you know and then the third point what; what happens in the more developed markets, it is very in the developed markets, it is very restrictive, it is more stringent you know, it is the recapture policy, so what happens that they are not allowed very restrictive, so what happens? First thing is that not allowed or only after a certain number of years, the recapture can take place.

So, if you have reinsured yourself you cannot take back the risks, you have to pay for the premiums and all, so not allowed immediately only after a certain number of years and then the second clause is amount limited to the increase of the in the company's retention limits, so that you know you have to take care of the retention limit and then if you can continuously increase your retention limit.

That means, you are taking care of your losses by yourselves you know that you are being slowly self-sufficient and trying to help yourself out rather than banking on the reinsurance company, then this retention limit increment actually convinces the reinsurer that you have this capacity to recapture it, this is you know this reinsurance treaties are generally made in terms of an annual plan, they are annually renewable.

And there are always an expense allowance which is generally paid under the premium is kind of the benefits the reinsurers often asked to compete on expense allowances because these are

the benefits that the ceding company wants to receive against their premiums and apart from that sharing the risk you know, so this expense allowances are which; which make the reinsurance companies to compete with each other.

Because these are the basically, the benefits extended to the you know, to the ceding company and against the premium or the percentage of the reinsurance premiums that I give you the benefits in terms of this many percentage, this much of percentage of the reinsurance premium and the simplest and purest form of reinsurance is coinsurance when you know 2 insurance companies together share the risk you know that is the coinsurance that is the simplest form.

But coinsurance is not basically, the reinsurance you know, it is the simplest form of coinsurance when 2 insurance company you know take; take a; you know offer risk, so the 80% of some company takes and 20% of some other company takes and that is how it works in a reinsurance format and the modified coinsurance is; so the coinsurance can be 2 types; one is the modified coinsurance.

And in a modified coinsurance, the ceding company pays interest you know, for the protection so and it has you know, it is a clear distinction about the ceding company and the reinsurance company and the other one the b can be coinsurance with funds in withheld that means that the funds of the ceding company will be withheld funds with coinsurance where you know with funds withheld, so where the funds of the ceding company would be withheld with the co insurer.

So that they have a kind of the reinsurance company has a control over the ceding company and the ceding company are accountable that they have to keep the retention, they have to keep their business in a sensible way, so that they are always within the retention limit unnecessary not extending this, so thank you.