Energy Economics and Policy
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Week - 07
Energy Market: International Oil Market
Lecture - 02
Oil Market: Pre-OPEC Era II

In this video, we are going to talk about the second phase of the Pre-OPEC Era and here we are going to start from 1928.

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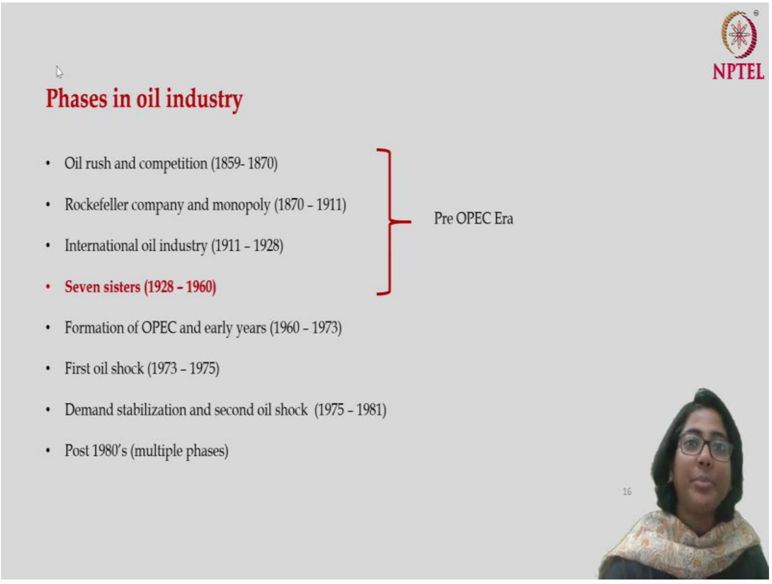

If we remember the timeline, we have already discussed about the oil rush for the first decade after 1859; then we talked about the Standard Oil Company and its monopoly, and then we talked about what happened when the Standard Oil Company broke down into five smaller companies and we saw the lack of monopoly power in the market.

We ended our previous discussion in 1928, where the ‘As-Is Agreement’ was reached among the leading oil supplying companies in the world. Today we are going to discuss a phase, which is a little longer, that is almost a period of three decades. This was the phase that was dominated by the seven sisters.These seven sisters are the seven big suppliers of oil in the world market.

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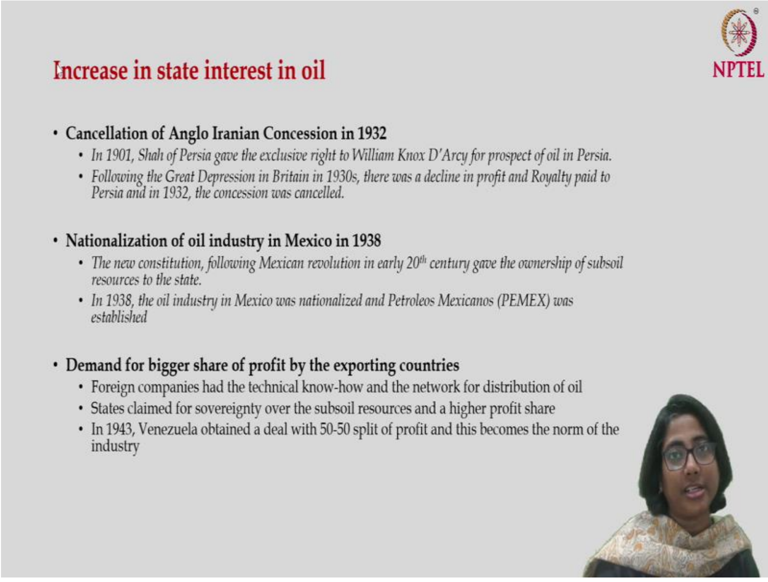

So, let us start from 1928 itself. Other than this As-Is agreement, what were the other things that were going on in the world oil market at that point of time? What characteristic features were emerging that were deciding the course of the world oil market?

The first one was a lot of interest of the state in the business of oil. It was manifested in different forms and we have picked up a couple of examples from that. For example, in 1932, there was cancellation of Anglo Iranian concession. What was this Anglo Iranian concession? Let me first give you a brief idea about the concession itself.

At that period of time, the underground resources were not owned by the states. So, what did the states do? The states permitted the foreign companies to come to their land and undertake different operations and take the oil out. If they take the oil out, then the oil becomes their property and they can sell the oil and run the business. As a fee against this operation they would pay a royalty to the state. That was the usual kind of concession related agreement that was in place.

Now, regarding this Anglo Iranian Concession in 1901. The Shah of Persia gave exclusive right to William Knox D'Arcy to the prospect of oil in Persia. Persia which is now Iran was receiving a royalty under this concession.

The UK company was earning the profit and Persia was earning the royalty. Now let us see what happened in 1930, after the great depression? Everything changed a bit. There was a lack of production, the profit margin declined and therefore, there was also a decline in the royalty that was paid to Persia. Triggered by this fact, there was a cancellation of the Anglo Iranian Concession in 1932.

However, redefined concession came into the force in the next year itself, but there the clause has changed a lot. Although this idea is a little debated whether it's only the Great Depression that triggered the cancellation or not, but of course, it was one of the important factors that did it. Here we see that the state showed interest and it intervened to cancel the private concession.

The second one is very important. As we were discussing that Mexico was a really big player in the international oil market in terms of export and they were exporting a lot of oil at that point of time. What happened in Mexico is that the new constitution was adopted after their revolution, in the beginning early 20th century. This gave the ownership of underground resources not to any private entity on the landowner, but to the state.

The land may be owned by a private entity; however, whatever underground resources are there, they are owned by the state. So, it could no longer be the case that a private company would come to Mexico, have ownership on the land and take all the resources out to the business and pay Mexico a royalty. That was not possible. This is the first step of state intervention. In 1938, the private oil industry in Mexico was nationalised and it was called the Petroleos Mexicanos. This in short is called the PEMEX, which was established in 1938. These two incidents along with many others gesture to the fact that the state was slowly getting engaged in the buying, selling and production of oil in the international arena.

The other very important thing that happened, the demand for a bigger share of profit by the exporting countries. This is one of the very interesting things about oil. The digging out of oil, that is the discovery, exploration, refining and distribution everything is very expensive. The moment the state takes up ownership of resources, there is a bifurcation of ownership in the production process.

What is this bifurcation? You see, the resources are owned by the host state who has the oil. Resource meaning the natural resource, the crude oil. However, the resources in terms of technological know-how, in terms of owning the distribution lines, and in terms of having financial assets are owned by the foreign companies.

Although the state exerted some power in terms of owning the resources, it had to allow the foreign partners or foreign companies to come and operate in their land in order to run the oil business. However, now that the state claimed ownership of the natural resources, they also claimed a higher share of profit from these operating companies.

The states now started saying that the small amount of royalty would not work anymore, the companies have to give them a share of profit. One of the rupture points in this context was in 1943 where Venezuela obtained a deal of 50-50 profit share and afterwards that became the norm. So, whenever a private company operates in a sovereign state, the profit that the private company earns, will be distributed on a 50-50 basis between the state and the private company.

This shows that there is a slight change in the nature of the oil market or the production of oil in the international level. There the state had started intervening. This is one very crucial observation during the 1930s and 1940s.

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At this backdrop what happens, one way the demand is increasing, on the other hand you see that the state has started becoming one of the important players in the market and thirdly what is happening in 1928, where the As-Is agreement was signed, we talked about three leading companies. Other than those three leading companies there were some other companies as well who participated in this agreement. So, they also agreed to keep their market share constant. If you look at the list, they include the Standard Oil Company of New Jersey which later became Exxon and then there was a merger with Mobil and then they are operating as ExxonMobil which is a known name to all of us. The second one was Standard Oil Company New York, later they became the Mobil and then they joined with Exxon and now you know them as Exxon Mobil. Others included in the list were Standard Oil Company of California (now the Chevron), the Texas Oil Company, the Royal Dutch Shell (the merger of the Royal Dutch Oil Company and Shell) and then the Anglo Persian Oil Company (which is now the BP) and then the Gulf Oil which was operating in Mexican, Gulf of Mexico and now this is a part of Chevron and BP.

The Standard Oil Companies of New Jersey, New York and California, these are three of those five companies that emerged out of Standard Oil Company in 1911. It is interesting to note that these are the three main off-shoots of Standard Oil Company that started their business in 1870. Now also they have big business and have a big market share, that is they are big players in the oil market, they are the off-shoots of those Standard Oil Companies. Look at this ExxonMobil or Chevron or BP is a big player in the oil market.

These seven companies were part of the agreement called the “As-Is Agreement” in 1928. Once they agreed to stick to the cartel, that is stick to this kind of an agreement where they say we are not going to deviate from our market share and we are going to increase the supply only when there is an increase in demand, then if you take all of them together then they enjoy a monopoly power.

But, this kind of market structure is better understood in the format of oligopoly. We will have a small discussion on oligopoly later. If you look at this era, post 1928 era, before OPEC was created. So, 1928 till 1960, these three decades were dominated by these seven companies. Thus, this is the period when we call the rise of Seven Sisters.

What did they do? They had a huge control and market power over the entire supply chain of the world market. If you see, they are the dominant player in the market when they act together. Although when they are divided, they may not have high market shares, but when they are taken together they have very high market share and control over the entire supply.

However, there was a surge of supply from the Middle East with a high rate of discovery of oil. This is the time period where the seven companies started dominating but the Middle East was gradually coming into the picture. What is very interesting is that, you see, when we discussed the Gulf oil pricing we saw that the world oil market at that point of time was dominated by the US and Mexico. Now, the situation started changing, post during 1930, 1940s, the demand for oil in the US grew up to a large extent.

The US was a little scared whether the domestic supply would be enough to support that increase in demand or not. Therefore, they started relying on imported oil. The moment you rely on imported oil and become a net importer from a net exporter, the objectives with regard to price formation changes. If I am a net exporter, then my objective is such that I will be happy if the world prices are high, since I am going to gain more out of it. However, if I am a net importer, I am buying oil from the world market, if you take the net value then I would like the price not to be so high.

So, the moment the US became a net importer from a net exporter they were looking for cheap oil in the world market, and they saw the opportunity is lying in the Middle East because in the Middle East the cost of production of oil was much lower. So, it was cheaper. The US was about to explore the options through which it can get oil from the Middle East at a lower price. We can see the objective of a player in the international market changes when it becomes a net importer from a net exporter.

Let me again take you back to the concept of this Gulf pricing. You remember that if the Middle East wants to supply oil under this Gulf pricing scheme to the US, then they are going to lose a lot of money in terms of freight because the distance between the Gulf of Mexico and any part of the US is very much smaller as compared to the distance between the Middle East country and some part of US.

So, they are actually going to lose a lot of money in terms of freight if the Middle East countries want to supply oil to the US. This was not a suitable situation at that point of time once the US became the net importer of oil.

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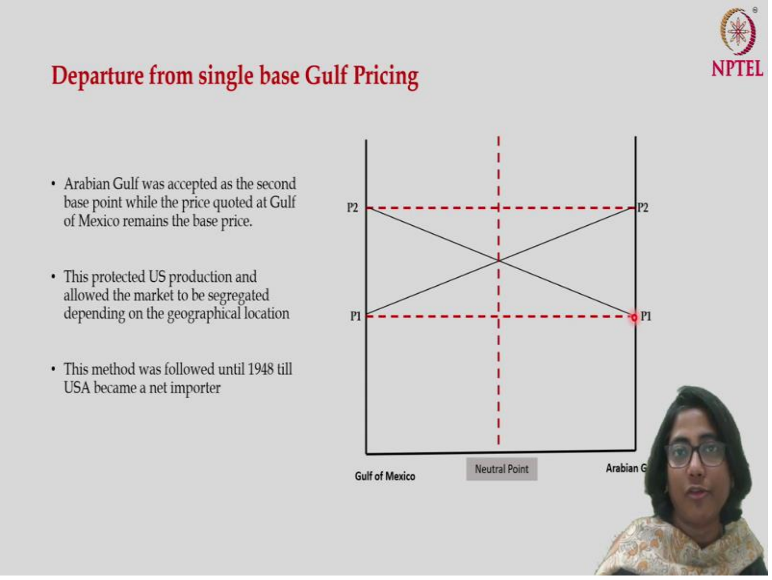

It was quite obvious that there is going to be a departure from the Gulf pricing scheme. What was the departure? The departure came this way. Initially the Gulf of Mexico was considered to be the sole base. Irrespective of the source wherever the oil was supplied to, the distance was calculated from the Gulf of Mexico. This is the exercise that we did in the last class. However, now what they did is that they recognised Arabian Gulf as the other base.

Now, what happens? If you look at this diagram unlike the other diagram what is happening? P1, the price quoted at Gulf of Mexico, will be considered as the base price, that is, that stays there. The Gulf of Mexico will actually charge a price which starts from P1 and follows this particular line. Instead of writing P1+αD, I have written it as P2. If you supply from the Gulf of Mexico, then this is the line that you follow. You can recall from the previous discussion, this is the base price plus the cost of transportation. Now, what happens, under this changed mechanism, we are saying that when he was supplying from a country which is not close to Gulf of Mexico, but which is close to Arabian Gulf, then you take the Arabian Gulf as base in order to calculate the distance from the source of supply and the source of demand.

If you're supplying from Arabian Gulf you start from the base price of Gulf of Mexico that is fine, but then you charge the transport cost from the Arabian Gulf. You do not have to stick to the Gulf of Mexico as your base.

Now, imagine what happens if Iran wants to supply oil, for example to Brazil. You don't have to calculate the transportation cost from the Gulf of Mexico to Brazil but you are going to calculate your transportation cost from Arabian Gulf to Brazil. That covers your transportation cost and you don’t have to lose in terms of freight.

Here you can see that this is the line that will be followed by the countries which are closer to the Gulf of Mexico and this is the line that is going to be followed by, I am sorry, so, this is again a mistake. If you see the diagram then, those countries who are close to the Arabian Gulf, they are going to follow this line while the countries which are close to Gulf of Mexico, they are going to follow this line. This point of intersection is giving a neutral point. This point represents the geographical location where the cost of supplying oil from the Gulf of Mexico is equal to the cost of supplying oil from Arabian Gulf. Hence, it is called a neutral point. It also gives you an understanding that if you are towards the left of the neutral point, that means, you are closer to the Gulf of Mexico and farther away from Arabian Gulf, then it’s better to supply oil from the Gulf of Mexico.

However, if you are to the right of the neutral point and if you are close to Arabian Gulf then it’s better for those countries who are close to Arabian Gulf to supply the oil. This is how the market was distributed based on the geographical location. So, the countries that are closer to the Gulf of Mexico were being supplied oil by the country closer to the Gulf of Mexico; while countries which are closer to Arabian Gulf were being supplied by the countries in the Middle East.

Now, this method was followed until 1948, till the US became the net importer. So, this was the change but not the entire change that took place. What was the second phase? Here you see although the base was changed for the calculation of transportation cost, the base was not changed for the initial quoted price. So, everybody was taking the quoted price of Gulf of Mexico as the base price.

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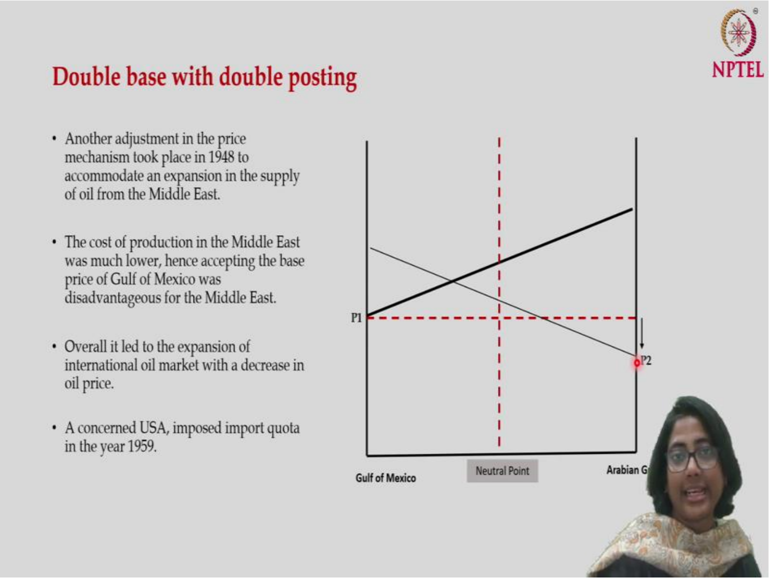

The problem is that the cost of production in Arab or in the Middle East was much less as compared to the cost of production in the other parts of the world. Therefore, if everybody takes the quoted price at Gulf of Mexico as the base price, then the Middle East countries are going to lose a competitive advantage.

Why? Because instead of charging the P1 which is the base price at Gulf of Mexico as their base price, they can charge a lower price because they can produce the oil at a lower price. Therefore, instead of charging P1, if Arabian Gulf can charge P2 (which is less than P1) as their base price then the whole price schedule comes down. Even the neutral point shifts towards the left and the price of oil supplied from the Middle East altogether comes down. Now, if this kind of a mechanism is introduced the net importers of oil will be benefited. Henc, this scheme was really welcomed by the US. However, overall it led to the expansion of the international oil market with decrease in oil price because now a lot of supply was coming from the Middle East countries.

A concerned US imposed an import quota in the year 1959. What happened at that point of time? You are getting a lot of cheap imported oil and that was supporting all the activities in the US. Therefore, you realise the tension; we discussed a little bit about the geopolitics at the very initial classes, we will also talk about energy security.

If all your domestic activities are based on the foreign supply of oil then there is a reason to be worried. So, what the US did was, it imposed a quota in 1958. Recently the quota was removed but it stayed there for a long period of time. We see that with the change in the market structure, with the rise of Seven Sisters, of all formation of the cartel which was again dominated by the US, the cartel was formed, They tried to check the price, and however, there was some initiation from the part of the government. They wanted to take part in the whole international scenario of the oil market. We also saw some of the countries became net importer of oil and the pricing mechanism changed a lot from the Gulf Pricing to the Double Base Double Posting Pricing where the Middle East were able to supply a lot of oil at a very low cost to the world. This went on till 1960, till OPEC was formed.

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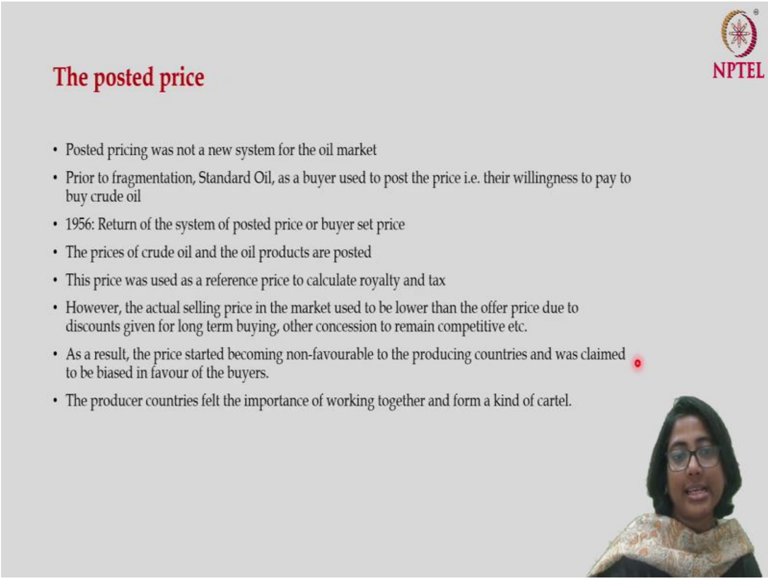

This 'Double Based with Double Posting Pricing' mechanism did not last till 1960, Just before OPEC was formed, there was one more pricing mechanism that came into the force, that is called the 'Posted Price'.

This posted price was not very new; I mean the posted price was there before as well. If you look at the early years of Standard Oil, there also the posted price existed. Standard Oil was the company who was looking at refining and transportation of oil. They were quoting a price at which they are willing to buy crude oil. So, that was their quoting, that was their posted price. Obviously, there was a departure from the posted price and the actual price at which it was sold. Now, in this context what happened? In 1956, we see that there was a return of the system of this posted price or the buyer set price. So, how did the mechanism go on? The buyers stated what is the price that they are willing to pay, both for crude oil and for final products. In this way the prices of crude oil and the oil products both were posted.

Now, this price was not the price at which the market transaction actually took place, but this price was taken as a base in order to calculate the tax and royalty. The actual price in the market was lower than this quoted price or this posted price. Why? Because the suppliers actually wanted to give some concession to their customers, to their buyers.

Why were they giving the concession? Because they wanted to ensure that they could supply oil to their buyers for a longer period of time. They wanted to gain this confidence that, okay I will supply you oil with a price concession and you allow me to supply oil for a longer period of time. Therefore, the market transaction price was lower than the quoted price.

As a result, the price started becoming non-favourable to the producing countries. The producing countries always tried to think what kind of concession should I give to our buyers, so that my market share is more and I can sell for a longer period of time and reduce my risk. Thus, the power was transferred in favour of the buyers and the supplying countries were not being able to control the price and they were not pretty much happy about that.

This is the period we are talking about; 1956, where the Middle East came up with the huge market share of oil supply in the international oil market. So, the dominance of the US and Mexico declined and we saw the rise of the Middle East. The Middle East countries, at this point of time realised that through this posted price they were not being benefited.

So, they decided that they need to do something. They have to come to some agreement so that they can check this reduction in price and they set-up some stable price which is favourable to them for a longer period of time. This is the genesis of the cartel formation among the countries which were exporting oil and it is called the Organisation of Petroleum Exporting Countries which was formed in 1960.

In the next lecture we are going to discuss that, but this is how the scenario emerged before the formation of OPEC in the global oil market.

Thank you.