A COMPARATIVE ANALYSIS OF OIL AGREEMENTS

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In recent years there have been many discussions about relative advantages of the various oil agreements that Irān has concluded with the foreign oil companies; and different, even contradictory views have been held. These discussions, regardless of their context, are useful in themselves, as they contribute to the illumination of the subject, and may be of help to all authorities as well as to the interested public. A measure of gratitude is,therefore,due to Mr. Stauffer,the American oil expert,for having launched the discussion on a scientific level.

In this article I will try to make a brief examination of Mr. Stauffer's views, and comments made on them by Irānian oil authorities.

Of course, at the present time, Irān's revenue (as well as the share of the operating companies) per barrel is much greater under the consortium agreement than under the joint operations contracts and contractors' agreements of the kind concluded with ERAP. This is because of the existence of vast oil reserves, a high level of output, lower costs of inland drilling, and the already largely depreciated assets and installations of the Consortium in Irān. These elements contribute to lower the production costs per barrel and increase the profits. However, comparisons between the Consortium Agreement, and the joint operations contracts and contractors'agreements, under the present conditions are not appropriate. To be fair, for comparative purposes, all the elements affecting costs and revenue should be treated as common for all the three types of agreements. In other words, only the provisions of various agreements should be compared, and other elements such as the amount of investment required,the volume of reserves, and annual production should be considered as equal in all cases.

Since, apart from economic and financial considerations, there are ususally other elements which cannot be quantified (e.g. politically it may be preferable for Irān to depend on more than two or three countries or oil companies), and even the economic and financial factors cannot always be foreseen, it is commonly held that the oil agreements do not easily lend themselves to comparison. Of these non-economic factors,we may cite the desire for independent action, greater intervention in the management of the industry, and penetration into foreign markets. Due to such considerations, joint operations contracts and contractors' agreements, in which the Irānian side is entitled to a greater measure of intervention in the management of the industry, and a share in oil which could be offered in the world markets, are preferred to agreements of the 50:50 (i.e. the consortium) category.

Non-economic factors, however, should not be exaggerated, and it is untrue to say, for example, that the Irānian side has actually no right of intervention in the management of the Consortium, or conversely, that it has absolute authority and independence under the joint operation contracts and contractors' agreements.Undoubtedly when one or more foriegn companies invest in a country, they undertake risks that, regardless of the form of the contract, compell them not to give up all rights to management; nor would they expect to act unilaterally and solely according to their own interests. In the case of the joint operations contracts and the contractors'agreements too, where the Irānian side is either a partner or the employer, in effect and under the agreements, the management of the industry is vested in the other side which acts as "the contractor" or "the agent".

The share of oil offered on the world market may also be a useful method for gaining information about the market situation and price,but Irān's present knowledge in these matters has not been obtained by such methods. In the past, information on oil was shrouded in mystery and secrecy and only a few international giants (mostly British and American)in the know were informed of manipulations, and news which leaked to the outside world was haphazard and scanty.

After the Second World War, especially during this decade, such affairs have lost their mystery and today large amounts of oil literature are printed annually and are accessible to all. In particular, OPEC has played an effective role in the collection and publication of information on oil in the Middle-East.

However, Mr. Stauffer, while bearing in mind the significance of non-economic factors, has examined the subject purely on the basis of the more easily quantifiable financial and economic factors. From this point of view, he maintains, comparison of various types of agreements on the basis of Irān's share of profits or revenue per barrel, would be insufficient; in addition, attention should be paid to Irān's investment, the date of the receipt of revenue, and the future volume and rate of growth of production.

We shall examine each of these factors in turn.

Irān's Revenue Per Barrel and Share in Profits

Mr. Stauffer believes that it would be misleading to compare shares of profits on the basis of press reports and official statements. That is to say, it would be improper to take Irān's share of the profit as 50 per cent, 75 per cent and 90 per cent under the Consortium Agreement, the Joint Operations Contract, and the Contractors' Agreement respectively, and to state their relative advantages in this way. We must concede that there is no doubt in this respect. Even about thirteen years ago, Mr.Page of ESSO said very much the same thing; namely, that we must examine "what 50 per cent and 75 per cent mean". These ratios are comparable only when the method of calculating profit is the same.

Mr. Stauffer does not think they are comparable, because: (a)the method of calculation is not the same; (b) part of Irān's revenue in the Joint Operations Contracts and Contractors' Agreement results from Irān's investment (non-existant in the 50:50 Consortium Agreement), not from oil; and (c) Irān's revenue under the 50:50 Agreement is received sooner.

In order to calculate Irān's share of profits under the 50:50 Agreement and the Contractors' Agreement on a common basis, Mr. Froozān has formulated the financial provisions of these agreements. In his ratios the denominators and profits per barrel for both contracting parties are the same; the dividends being Irān's share of profits per barrel.

Mr. Froozan's assumptions are as follows:

p posted price in Irānian port.

c variable operating costs of production per barrel.

e amortization of exploration expenditure per barrel.

d development expenses per barrel.

a OPEC's discount allowance.

a' real discount on posted price.

i cost of money per barrel.

Thus Mr. Froozān obtains the formulae:

Irān's share of the profits in the 50:50 Agreement

$$\frac{0.5625p-0.5(c+d)-0.25e-0.5a}{p-a'-(c+d)-0.5e-i}$$

Irān's share in the Contractors' Agreement (of ERAP type)

$$\frac{0.9(p-a')-0.896(c+d)-0.396e-i}{p-a'-(c+d)-0.5e-i}$$

These formulae contain an error which should be corrected in order to make any comparison possible. To calculate profits for both parties, Mr. Froozān has substracted only half of the cost of exploration in the denominators, where as if according to his assumptions e is equal to explorations expenses per barrel, its total value should be accounted for. Respective correction should also be made in the dividends. The above formulae would be applicable where e is equivalent to explorations' expenses for two barrels, not one. Because, not withstanding who pays for explorations expenses, calculation of total profits per barrel should be based on all explorations costs, not half.

For useful comparisons, reasonable substitutes should replace the symbols. Mr. Froozān has substituted the following values (in U.S. cents):

$p = 180$

$c + d = 20$

$e = 10$

$a = 6.5\% \times p = 10$

$a' = 40$

$i = 10$

With these assumptions he concludes that Irān's share in the ERAP Agreement is more than that of the 50:50 Agreement. This is correct.

Mr. Stauffer has, however, assumed the market discount (a') as equal to 50 cents and has omitted OPEC's discount, because it is temporary and should be eventually eliminated. We should compare Irān's share under two agreements, on the basis of Mr. Stauffer's and Mr. Froozān's assumptions. As was mentioned above, we shall take e as equal to explorations expenses for two barrels, i.e. 20 cents:

	50:50	ERAP
According to Mr. Froozan's axioms	80%	90%
According to Mr. Stauffer's axioms	96%	90%

As may be seen, taking Mr. Stauffer's assumptions, the 50:50 Agreement would be more advantageous to Irān, where as according to Mr.Froozān it is the reverse. The discrepancy between assumptions may be summarised as firstly, OPEC's discount assumed as 6.5 per cent of posted price by Mr. Froozān and omitted by Mr. Stauffer on the grounds that it will be eventually eliminated (presently it stands at 4.5 per cent of the posted price); and secondly, the real market discount on the posted price has been assumed as 50 cents by Mr. Stauffer, and 40 cents by Mr. Froozān. As far as I know, at the moment this figure is closer to 40 cents than 50 cents.

Assuming the posted price to be $1.63 (for heavy curde oil of the Gachsārān type) instead of $1.80 (for light crude oil of the Āqa-Jāri type), and omitting OPEC's discount, Irān's share would be the same under the 50:50 and ERAP Agreements when the discount is below 40 cents per barrel which is actually near the present figure.

Meanwhile, should the writing off of explorations expenses prove to be higher (which seems to be the case) than the 10 cents per barrel, assumed by Mr. Froozān, the conclusion changes in favour of the 50:50 Agreement. In the case of ERAP, it is not worthy that, should Irān decide to utilise its half of the profits (sometimes referred to as the national reserve) by building pipe-lines, wharves, and reservoirs,her expenses per barrel under the 50:50 Agreement and Joint Operations Contract would increase thereby further reducing revenue.

From such discussions it may be concluded that, in the present circumstances,differences between the 50:50 and ERAP Agreements are not substantial. But in case of a fall in the price of petroleum, Irān's share would decline under the latter, and remain stable under the former, where it is based on the posted price. In contrast, a rise in the price of oil would raise Irān's share under ERAP, but is unlikely to affect it under the 50:50 Agreement - as the present gap between the posted price and the market price is rather wide.

Before concluding this section a reference should be made to the joint operations agreements, known as 75:25 agreements. Mr. Stauffer considers these to be more advantageous to the oil producing countries, but has recently modified this view in the case of Irān (on the grounds that in the joint operations agreements signed in Irān, there is no royalty involving specific payments). I see no reason why there should not be specific payments made to Irān in these agreements.

Further Date of the Receipt of Revenue and the Interest

The previous comparison is made solely from the point of view of Irān's revenue per barrel and share of net profits. Mr. Stauffer believes this does provide sufficient grounds for comparison. Another important element is the futute date of the receipt of revenue; i.e. in which type of agreement the oil revenue is received sooner. This is because delays in the receipt of revenue entail foregoing the possibility of its productive and remunerative re-investment for a period of time. He believes that under the ERAP Agreement, because of the shortness of the periods of amortization of loans and investments, in the first several years there is no net revenue for Irān; but after this stage, revenue accelerates and overtakes the 50:50 Agreement. In the third stage, when all initial assets are depreciated, the revenue rises under the 50:50 Agreement and declines under the ERAP Agreement, until they become approximately equal.

In reply, Mr. Minā states that this conclusion is not justified because firstly, Mr. Stauffer has disregarded the "national reserve", and secondly, Irān may immediately sell the discovered "national reserve" and receive its cash value.

Mr. Minā's first objection is unfounded, since Mr. Stauffer's view is based on the quick utilisation of the national reserve.His second reply is not convincing either. Assuming that there is somebody to buy the national reserve in a lump sum, and pay in cash, in fixing the purchasing price, he will take notice of the "present value" of future revenues to be derived out of the utilisation of the national reserve, making use of the same rate of interest (discount) as Mr. Stauffer. Moreover, he would require a profit margin, which under direct utilisation would have accrued to Irān.

Mr. Minā states that as under the ERAP Agreement, expenses are covered by the oil income, or loans from the foreign partner, Irān has nothing to lose. This no doubt accounts for the postponement of Irān's receipt of revenue for the first several years.

Mr. Froozān on the other hand, in order to refute Mr. Stauffer's claims regarding the "present value" of future revenues, has made some calculations and drawn several tables, and has concluded that from this point of view, too, the ERAP type of Contractors' Agreement is more beneficial to Irān. These calculations and tables are based on the assumptions referred to above, and so far acceptable; but by substituting Mr. Stauffer's assumption, different results are obtaind.

The Volume and the Rate of Growth of Oil Production

This is another important economic factor mentioned by Mr. Stauffer. In other words we should also investigate the number of barrels produced per day under each agreement. If production is faster under the Contractors' Agreement, then despite its financial provisions, it may be more advantageous than the 50:50 Agreement.

Mr. Minā says that the foreign companies participating in the Consortium Agreement have substantial outside interests and may not increase production in Irān sufficiently; whereas under the Contractors' Agreement and Joint Operations contract, Irān may, out of her own share, sell as much as the market can absorb, thereby increasing her sales and revenue.

Mr. Minā has emphasised this "surplus sales" several times. Those in favour of this view believe that subterranean oil is not beneficial to anybody, and is better excavated and sold at any price - so that its revenue may be used more quickly in the implementation of development programmes.

Mr. Stauffer states, however, that firstly, production plans,despite their importance may not be anticipated; and, secondly, should this policy be followed by all the oil-producing countries, what surplus is produced and sold under these agreements, is inevitably offset in the long-run by a decrease in production and sales under the 50:50 Agreement due to the limited capacity of the market. This policy, therefore, may only lead to a fall in prices and consequently revenues of all countries. The worst course of action for the oil producing countries would be to compete instead of to co-operate, and weaken OPEC and price control.

Nevertheless, in Mr. Stauffer's opinion, in the short run, this policy may be beneficial to Irān. Mr. Minā's reasoning about the "surplus-sales", would certainly apply in the short run, but this is only one side of the coin. The large international companies participant to the Consortium Agreement are the major producers and suppliers of the world markets and their actions largely determine the levels of production and price. Other companies participant to the contractors' agreements and joint operations contracts, are of secondary importance and supply an minor portion of the world market, competing with the major companies.

If we assume that these small, and so-called independent companies have a marginal effect upon the market and cannot increase the world supply of oil by so much as to bring about a fall in prices, then surplus sales would not be detrimental to the oil producing countries. But if either limitless competition results in a sharp fall or even a gradual decline in prices, it would be unfortunate for all oil producing countries.

Penetration into the free world markets, to the detriment of other countries, may only be attained by offering exceptional discounts. In practice, in order to avoid giving large discounts, Irān has sold or exported her share of oil to or through the other party, to the Joint Operations Contract. Other Irānian oil transactions have largely been concluded with the East European countries under bilateral agreements for imports of goods.

We may conclude from this discussion that the discount weapon for "surplus sales" and surplus revenue, may be used only within limits, and would obviously have limited results.

Fortunately, not only the oil producing countries are interested in the stability of the price of oil, some large countries who are net exporters of oil, are also in favour of it. At the present time Middle-East oil effectively helps the balance of payments of the United States and Great Britain, and it may be said that the stability of the U.S. dollar and the pound sterling to a large extent, depends on it.

Mr. Minā states that through joint operations contracts and contractors'agreements, our opportunities to penetrate the oil markets and expertise have increased,enabling us to raise our oil revenue.

Mr. Minā's statements concerning penetration into the markets are in principle correct, but statistics show the increase in the revenue is largely due to sales through the Consortium, in which Irān has played no part. In fact the revenues of other countries which have no joint operations contract (contractors' agreements)have also increased.

Moreover, if according to Mr. Froozān and Mr. Minā, revenues under the contractors' agreements are greater than under the Consortium

Agreement, it follows that the other parties draw less benefit, i.e. pay more for oil, than the Consortium, and consequently would be in a less advantageous position to compete with the Consortium in international markets. The Consortium is, at any rate, more powerful by virtue of its capital and profits. Once again we are led to the conclusion that penetration into the Consortium's markets by these companies is only possible through large discounts, a possibility which is limited and against the interests of the oil producing countries.

To sum up, it may be said that the studies carried out so far on the relative advantages of various agreements have not been sufficiently comprehensive. The conclusion may prove to be that non of the customary agreements in the Middle-East guarantee the best interests of the countries concerned. We may be able, then, to draft new agreements which could,bearing in mind the required capital and risks involved, be more beneficial to the oil producing countries.

Oil is so vital in the economic and political life of the oil producing countries, that its affairs should be constantly, scientifically and thoroughly studied by teams of experts who are neutral to publicity and propaganda. It seems to me that for this purpose, Irān has reached the necessary level of social maturity and economic understanding.