

INTERNATIONAL OIL COMPANIES: SOME CONSIDERATIONS FOR THE DEVELOPMENT OF IRELAND'S HYDROCARBON RESOURCES

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INTRODUCTION

The purpose of this paper is to examine some of the implications of the development of Irish hydrocarbon resources by international oil companies. A number of introductory observations, however, are necessary in order to set this examination in context.

Hydrocarbons, of which the most economically important are oil and natural gas, are formed by the crushing of organic material under masses of sediment carried onto continental shelves or inland seas by rivers emanating from adjoining landmasses. We can infer, therefore, that hydrocarbons will be found to some degree in any part of the world where accumulations of sediment are present. Many such accumulations now form dry land, it should be noted, due to movements in the earth's crust. The distribution of oil and gas production is a function principally of the degree of accumulation of oil/gas into pools or reservoirs, the size of these reservoirs, and the cost of extraction. Cost here includes local taxation levels, risk factors, and transport costs, as well as direct extraction costs. Offshore extraction costs are of course much greater than those on dry land, so that offshore production on a wide scale was not feasible until the major price increases of 1973.

WORLD OIL/GAS INDUSTRY

Broadly speaking, it can be said that the geography of oil/gas production holds massive connotations for world economics and politics in that, with the exception of the Soviet Union and China, and to a lesser extent the United States, the major areas of world petroleum consumption are geographically separated from the major areas of production. One immediate result of this is that nearly two-thirds of all international trade, by volume, consists of shipments of petroleum. Thus Western Europe, representing over one quarter of total oil demand, is, with the exception of Britain and Norway, dependent on imports for over 95 per cent of its supplies. Japan, accounting for nearly 10 per cent of demand, is *totally* dependent on oil imports. The United States consumes 30 per cent of the world's oil, and imports nearly one-third of its requirements.¹ The introduction of Alaskan oil, plus increased domestic production, should give the U.S. near self-sufficiency in the near future. In fact, it has been suggested that the major U.S. oil companies were active instigators of the 1973 price rises, in that these enhanced greatly the profitability of their high-cost

domestic fields.² North Sea oil will give Europe relief in the medium-term — say, up to the 1990s — but even here political problems of a smaller scale are presented by the fact that Britain and Norway have a virtual monopoly of the supply. All the other Western Europe countries are now beginning to explore their offshore areas, but there will be little consolation for West Germany, which has a particularly small offshore area. The immediate position of Japan is quite bleak, although there may be possibilities of future finds in its adjacent seabed. Meanwhile, the smug self-sufficiency of the major socialist powers is giving many Western observers great cause for concern.

In the long term, the present political and economic implications of the world geography of oil demand and supply seem likely to remain. OPEC (the Organisation of Petroleum-Exporting Countries) still possesses two-thirds of the world's known oil reserves (compared with less than 11 per cent for the developed capitalist countries, 15.5 per cent for the socialist countries, and 9.3 per cent for the rest). More important, of the total *additions* to reserves in the period 1960-1975, two-thirds occurred in the OPEC countries, and over one-fifth in the socialist countries. The Western Countries, representing over 70 per cent of total consumption, contributed less than 10 per cent to known reserves in the last fifteen years.³

The great economic, and hence political, significance of this situation derives from the crucial role played by *energy* in an advanced economy. This role has now achieved such significance that it has been suggested that energy should be added to the traditional list of factors of production (land, labour, and capital). The contribution of oil and gas to total energy supply is immense: in 1980 oil supplied 44.5 per cent and gas 18 per cent (compare: coal 28.5 per cent, other 9 per cent).⁴ The leading position of oil/gas as energy sources is a very recent occurrence. In the period 1955-1965 their share of total energy consumption in West Europe rose from eighteen to forty-five per cent; for Japan, the respective figures are 18 per cent and 57 per cent.⁵ This rapid change was due to the price war which broke out in the oil industry in the mid-fifties driving oil prices down to rockbottom levels (and consequentially bringing OPEC into existence).⁶ Despite recent dramatic increases in oil prices, the structure of energy supply is unlikely to change significantly in the medium-term future. One forecast has it that by 1990 oil will still contribute 40 per cent of supply; gas will have increased its share to 21 per cent; coal will drop to 21 per cent and hydro-power to 5 per cent; nuclear power will stand at 11 per cent; and various new sources (tar sands, oil shales, geothermal and solar energy) will provide maybe 2 per cent.⁷

THE INTERNATIONAL MAJORS

It seems then that, for the foreseeable future, oil and gas will dominate the world's vital energy supply. It is in this light that we may introduce

the added dimension of the international oil companies. The importance of these may be gauged from the fact that the petroleum industry accounts for nearly 30 per cent of all foreign direct investment, with the proportion varying from 25 per cent in developed countries to 40 per cent in less-developed countries (including OPEC). More significantly, petroleum earnings represented nearly 40 per cent of all earnings from foreign direct investment in the late sixties, with the figure rising to nearly 60 per cent in the case of investments in the less-developed countries.⁸

We will devote our attention in particular to the seven international 'majors', which up to recently controlled 80 per cent of all oil production outside the U.S. and the socialist countries.⁹ Despite wholesale nationalizations of oil production by OPEC governments, the 'majors' still maintain a powerful position as regards refining and distribution. Their collective strength, therefore, both economic and strategic, is immense. Total assets of the five U.S. 'majors' in 1973 amounted to one-eighth of the combined assets of the top five hundred U.S. manufacturing companies; total profits amounted to one-sixth of those of the top five hundred. All five appear in the U.S. top ten.¹⁰ Taken as a bloc, then, the majors comprise quite a considerable economic and political force. Nor is it unreasonable to regard them as constituting a single bloc. Ever since the establishment of the infamous 'oil cartel' in 1934, the majors have succeeded in undertaking admirable concerted action on their own behalf.¹¹ This was never more apparent than during the oil crisis of 1973 when, under cover of simultaneous OPEC price impositions, and with the aid of co-ordinated supply restrictions, the majors managed to increase their profits by an average of 78 per cent over the previous year, ranging from 45 per cent for Texaco to 271 per cent in the case of BP.¹² We may in passing note the political connotations of the fact that five of the seven 'majors', which control the vital oil supply to Western Europe and Japan, are American.

THE CASE OF IRELAND

At this stage we can introduce a discussion of Ireland's place in the world of oil and gas. Most of the island of Ireland is made of sedimentary rocks, which may mean the presence of hydrocarbon reservoirs. In fact, onshore drilling has come across very slight gas 'shows'. However, much more promising are the sedimentary basins in the offshore areas under Irish jurisdiction, which are much larger in area than the island itself. Major reservoirs, if present at all, seem most likely to be found in deep water beyond the limits of present extraction technology, although at current rates of technological development this may not be long the case. Meanwhile, the areas of shallower water nearer the shore hold bright prospects for reservoirs which, though modest by international standards, could be quite significant in terms of the small Irish

economy. This question of the appropriate yardstick with which to judge the significance of Irish oil/gas reservoirs will form an important part of a later section of this paper.

The presence of hydrocarbons off the Irish coast has, of course, been well established. The majority of wells drilled have revealed at least 'shows' of oil and/or gas, and at least six of these have generated significant flows. One of the latter — the Kinsale gas field — was brought into production in 1978 with a rate of output equivalent, in energy terms, to about 14 per cent of national needs for a projected twenty-year lifespan. However, about 40 per cent of this output is being used, not for energy, but for the production of fertilizer at a new plant built by Nitrigin Éireann Teoranta in Cork Harbour. The bulk of the remainder is being used to generate electricity at a plant built especially for this purpose, also in Cork Harbour. A recent reappraisal of the Kinsale gas field reserves has led to a 35 per cent increase in these reserves: the output level is to be increased to supply the gas pipeline to Dublin which is due for completion late in 1982, with the possibility of further extension to Northern Ireland thereafter.

Mention of fertilizer production highlights another important aspect of the oil/gas industry, which is that its products can be used as the raw materials for a variety of manufacturing industries, such as plastics, synthetic fibres and pharmaceuticals (as well as fertilizers). The fact that over 90 per cent of all oil/gas produced is used as a fuel may yet be regarded by future generations as a highly wasteful use of a valuable raw material.

Apart from the Kinsale gas field, British Petroleum is currently appraising an oil field in the Porcupine Basin off the west coast where two wells have already flowed oil, while a field in the same Basin probed by Phillips Petroleum in 1981 may also prove ultimately to be a commercial proposition. These fields lie in water depths beyond the range of current extraction technology, but appropriate techniques are expected to be available if and when a decision to develop is made.

THE INTERNATIONAL OIL COMPANIES AND IRELAND

One of the most significant aspects of current exploration in Ireland's offshore areas is the level of interest shown by the 'major' oil companies. Five of these — Esso, Shell, BP, Chevron and Gulf — are principal operators (in the case of Esso, sole operator) in consortia which have received exploration licences. The remaining two — Texaco and Mobil — have been involved in exploration in the past but have discontinued this involvement. In addition, several members of the 'second tier' of international oil companies — Amoco, Marathon, Phillips, Elf — are also deeply involved in exploration in Irish waters. The fact that so many of the most successful oil companies in the business are engaged in exploration here engenders firm optimism

concerning the prospects of finding significant quantities of oil/gas.

At the same time, it can be contended that the presence of the international oil companies introduces several problematic considerations as regards securing the maximum economic benefit for the national economy from the development of the country's prospective offshore hydrocarbon resources. We may, for a moment, consider just what this 'maximum benefit' might be. As indicated earlier, the Irish economy is small relative to our potential offshore resources. One moderate oilfield producing 120,000 barrels per day would suffice to meet our current total energy needs. A reasonably successful exploration effort, therefore, could make Ireland a substantial surplus producer. This raises the question of the manner of disposal of this surplus. The main alternatives would seem to be to sell it, in either crude or refined form, to a ready market in Western Europe, or to keep it at home as the raw material for a petrochemical industry, which could in turn generate downstream manufacturing industries producing products of the kinds mentioned earlier, such as plastics and synthetic textiles. There seems little doubt that, in terms of value added and jobs created, the latter course is by far the more preferable alternative. It is in this context that we may discuss some of the problems which may arise due to the development of our offshore resources by international oil companies.

International corporations, by definition, operate in a global arena. The 'major' oil companies are particularly international, in that their operations are carried on in virtually every country in the world. The policy followed by each local operation is designed in terms of its contribution to the over-all profitability of the company. It does not necessarily follow that, if each local operation pursues an independent profit-maximization policy, maximum over-all company profit will ensue. One writer has used the term 'international synergy' to describe this situation, where over-all operations are made more profitable than if each component were operating independently.¹³

Thus, the development of any Irish fields will be subject to global company policy in the first instance, and there is no guarantee that such policy will coincide with the best interests of the Irish economy. Take, for example, the case of an oilfield which, because of small size or extraction difficulties, is of marginal or relatively low profitability. At any given time the international oil companies are likely to have before them an array of prospective fields scattered throughout the globe, and given that, despite the size of the companies concerned, financial and organizational resources are not in infinite supply, it follows that the least-appealing prospects may have to remain undeveloped. Some prospects may in fact find themselves in this position indefinitely, given that new finds are being made continuously. A.I. Levorsen, author of an important textbook on petroleum geology, has commented on this as follows:

Discounting of a potentially small pool is especially frequent among larger oil companies, whose crude oil requirements run into many millions of barrels per year, and whose operating expenses are proportionately large. They are not much interested unless the prospect has some chance of being a substantial help in their supply problems.¹⁴

There may be considerations other than financial or organizational which could lead to moratoria on the development of small Irish fields, including such things as future price and supply projections, or strategic distribution of global supply sources. Nevertheless, the ultimate effect may be that fields which, for strategic or purely economic reasons – again, bearing in mind the small size of the Irish economy – might be worthwhile propositions, might remain undeveloped by a big oil company. It should be borne in mind that, at least in the near future, any oil or gas fields located in Irish waters are likely to be of small size.¹⁵

The potential problems raised in the previous paragraph have recently been alluded to in newspaper coverage of the Irish offshore scene. Donal Musgrave, writing in the *Sunday Tribune* (October 18, 1981), agreed that any assumption that oil fields will be developed once they are deemed commercial is unrealistic. Thus, for example, he suggested that because the Phillips Company is currently concentrating its resources on North Sea development work, its 1981 Porcupine oil find, even if commercial, might have to wait several years before the company could devote due attention to it. He goes on:

This means that the London based engineering and design teams who would put a Porcupine development package together will be tied up for the next few years on North Sea work. This is their top priority right now and any Porcupine discovery will have to take its place in the queue (p. 3).

Similarly, Des Crowley, also writing in the *Sunday Tribune* (October 25, 1981), in discussing the development prospects of BP'S Porcupine field, suggests that "BP . . . has other possibly more lucrative irons in the fire outside Ireland and does not have massive funds to 'waste' on small developments" (p. 10).

Further problems arise in cases where fields are being developed by international oil companies. Again, they will wish to dispose of the product in terms of global policy, which may not coincide with Ireland's best interests. For example, we have already noted that over 90 per cent of the world's oil/gas is being used as a fuel, which means that the oil companies have a heavy commitment to this manner of oil/gas disposal. The location of oil/gas resources in Irish waters will no doubt be seen by other West European countries as a source of relief from dependence on imports from OPEC countries. This has already been indicated by the participation of several European oil companies, including some State-owned concerns, in oil exploration licences issued

by the Irish government. Given the extent of the international oil companies' stake in these European countries compared with their stake in Ireland, one can appreciate whose interests are likely to gain priority when it comes to deciding the manner of disposal of Irish oil/gas. If oil/gas is discovered by consortia with European participation, the European dimension is obviously going to be even more emphasized. It has already been argued that the best interests of the Irish economy would be served by the use of our potential oil/gas resources as the basis for home-based manufacturing industries. It can be seen that there are many considerations operating against these interests under present policy for the development of these resources.

A second factor likely to influence strongly the international oil companies where they are exploiting Irish fields is the need to maximize profits, if not in the short term at least in the medium term. Hence rates of extraction may be adopted which may not coincide with the national interest. Rapid extraction seems all the more likely given pressures arising from the demand side, for reasons referred to in the previous paragraph. Were Ireland's oil/gas resources to be directed to Irish processing industries, it seems that extraction rates should be geared to the pace of development of these industries. And given the small size of the economy relative to the potential extent of offshore resources, it seems desirable that Ireland should keep extraction at a relatively low level, in order to maximize the longevity of these resources. Even in a situation where oil was being exported, rapid extraction could cause severe inflationary and other dislocations within the economy, were output to reach inordinately high levels relative to the economy's size. Even though such a speculation may seem exaggerated beyond reason, it should be pointed out that just ten years ago nobody foresaw the massive scale at which North Sea oil was subsequently discovered.

An additional aspect of rapid extraction is that it tends to reduce the over-all rate of recovery from an oil/gas reservoir. These reservoirs have to be nursed carefully in order to maximize recovery, and such careful nursing may not be compatible with policies of rapid extraction. Many Middle East oilfields have been abandoned with large potential reserves left untapped because the associated gas, which should have been reinjected to maintain pressure, was simply flared off. With oil prices much higher nowadays, the oil companies are much more careful of maximizing recovery, but it is still possible to visualize situations where fields might be abandoned because the extra costs involved in further extraction (e.g. pumping) reduce profitability below acceptable levels, although from a national point of view further extraction might be desirable.

A further — and more sinister — negative aspect of the international oil companies is their notorious political machinations, which have been

well documented. Normally, these companies are content to act as a powerful pressure group, even in the most pretentious of democracies: as the *Los Angeles Times* wrote in 1973: 'The oil industry still boasts more lobbyists, better Washington contacts, more money for advertising and bigger political campaign donations than any other segment of the business world'.¹⁶ But where things are not going their way, the oil companies are not averse to helping bring about changes of government, as, for instance, in Iran in 1954, Indonesia in 1966, and Greece in 1967.¹⁷ An important dimension of this aspect of oil company activities is the ability to get their home governments to exert pressure on other, problematic, governments as required. Jack Anderson, the Washington correspondent, remarked on this in 1967: 'The State Department has often taken its policies right out of the executive suites of the oil companies. When Big Oil cannot get what it wants in foreign countries, the State Department tries to get it for them.'¹⁸

DISCUSSION

Given these various caveats, we may wish to question whether the international oil companies should be entrusted with the development of Ireland's hydrocarbon resources. Such a question is purely academic, as these companies already have been, and will continue to be, so entrusted. It may be argued that, in the licences issued to these companies, safeguards and controls have been inserted to ensure that their activities coincide with the best national interest. However, such control may not be easy to implement, not only because of problems such as concealment of information, but also because of the powerful pressures the companies are able to exert, as previously referred to. The former Minister for Industry and Commerce, Justin Keating, himself publicly acknowledged (at a Labour Party Conference some years ago) the great powers wielded by these companies.

In addition to this, it is a final argument of this paper that the interests of governments and oil companies may in fact *coincide*, in cases where both are simultaneously contrary to the best interests of the country generally. This is a possibility which, in time, should be a matter of great national concern. This possibility arises from the nature of the political process as it is practised in Ireland, which puts great pressure on governments to distribute largess in the short term, i.e. between general elections, if their survival is to be guaranteed. The subsequent tendency to produce short-term policies is augmented by an electorate which tends to compare present levels of welfare with *previous* levels, rather than hypothetical *future* levels.

This situation may account, at least in part, for the extent to which Irish governments have come to rely in recent years on foreign investment as a source of economic growth in Ireland. Not only can multi-

national corporations make factories available in the short term, but they also provide the bulk of the necessary finances themselves. The development of industries based on Irish resources (including not only hydrocarbons, but also minerals, fisheries, and agricultural resources) on the other hand, requires a more long-term approach, and involves the sacrifice of immediate consumption in order to make available higher levels of consumption in the long term.

In the area of oil and gas, then, there are pressures on the government of the day to generate a flow of dividends, taxes, and royalties as quickly as possible. This they can do by calling in the international oil companies, and then granting them access to the areas of highest potential. It may be that the government has already licensed out too much of our offshore area, because if it should happen that several important finds were made in rapid succession, there would be no alternative but to allow the subsequent output to be exported in a crude state, given the fact that all licences guarantee a production lease for all finds made, and given the length of time it would take to build sufficient refining facilities, not to mention downstream industries. Norway, which had previously restricted the areas of its offshore waters available for hydrocarbon exploration and development, has more recently found it necessary to restrict further the level of output from fields actually developed, in what it perceived to be the national interest.¹⁹ Norway, however, was in a much better economic state before the discovery of hydrocarbon resources than Ireland now is, and could easily afford to take such decisions. In the Irish case, it can be readily seen how government policy could coincide with the interests of the oil companies rather than of the national economy.

FOOTNOTES

1. People's Democratic Republic of Algeria (1975), *Memorandum Submitted to the Conference of Sovereigns and Heads of State of OPEC Member Countries*, pp. 263, 264.
2. Tanzer, M. (1974), *The Energy Crisis*, New York: Monthly Review Press, pp. 122-124.
3. Republic of Algeria, *op. cit.*, p. 248.
4. World Bank (1981), *World Development Report 1981*, Oxford University Press; Table 4.1, p. 36.
5. Counter Information Services (n.d.), *The Oil Fix*: London, p. 7.
6. *Ibid.*
7. People's Democratic Republic of Algeria, *op. cit.*, pp. 244-248.
8. Economist Intelligence Unit (1971), *The Growth and Spread of Multinational Companies*: London, p. 10. Manser, W.A.P. (1973), *The Financial Role of Multinational Enterprises*: London, Cassell, pp. 19-24.
9. Odell, P.C. (1974), *Oil and World Power*: Harmondsworth, Penguin, p. 11.
10. Tanzer, *op. cit.*, p. 28.
11. Counter Information Services, *op. cit.*, pp. 4-13.
12. Democratic and Popular Republic of Algeria (1974), *Petroleum, Raw Materials and Development*: Table IXf, p. 180. See also Ackerman, F. and A. MacEwan (1974), 'Energy and Power', *Monthly Review*, Vol. 25, No. 8, pp. 1-14.
13. Froggatt, J.D. (1972), 'Problems of Resource Allocation in an International Corporation', in Brooke, M.Z. and H. Lee Remmers (eds.), *The Multinational Company in Europe*, London; Longman.

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15. Hanson, T.J. and D. Hegarty (1976), 'Estimation and Significance of Ireland's Offshore Production Potential', *Technology Ireland*, Vol. 7, No. 11, pp. 12-15. See also *The Irish Times*, 10/4/1975, p. 14 and 4/10/1976, p. 15.
16. Quoted in Counter Information Services, op. cit., p. 10.
17. Tanzer, *The Energy Crisis*, op. cit., pp. 48-51; Tanzer, M. (1969), *Political Economy of International Oil and the Underdeveloped Countries*, Boston: Beacon Press.
18. Counter Information Services, op. cit., p. 8. See also Tanzer, *The Energy Crisis*, op. cit., ch. 3, and Tanzer, *Political Economy*, op. cit., ch. 5.
19. Lund, Rabbe (1974), 'Norwegian Petroleum Policy and the Resources of the North Sea', Paper presented to seminar on 'The Resources of the North Sea', Stord, Norway, Oct. 1974. See also reports in *The Irish Times*, 9/9/1974, p. 14; *Time Magazine*, 23/12/1974, pp. 40-41; *The Times*, 21/1/1974. See also Royal Norwegian Ministry of Finance (1974), *Petroleum Industry in Norwegian Society*, Oslo: Parliamentary Report No. 25.