

17-3-1975

Some reflections on the lessons for Scotland of the
experience of other oil producers

by Dudley Seers

1. This hurriedly prepared note discusses first the social impact of oil in mainly agricultural countries, and then the relevance of this experience to Britain, especially Scotland. It is not my purpose here to explore in depth all these interactions, still less to analyse the problems of any particular OPEC member; it is to provide an introduction to the consideration of the likely social impact of oil in Scotland, I shall therefore sketch in a summary way the more-or-less common experience of a dozen established oil producers, only quoting a few examples to illustrate various points.

2. There are some characteristics of petroleum that make petroleum exporting countries a special class. The main one is that petroleum is exhaustible. This means that the period of exploitation needs to be used to create a socio-economic structure that will be viable after its end - what the Venezuelans call "sembrar el petroleo". Yet the interplay of the economic and political characteristics of a petroleum exporter paradoxically make this particularly hard, perhaps impossible to achieve.

3. Secondly, petroleum generates very high incomes per employee and thus also high foreign exchange earnings, compared to other sectors, especially agriculture. When commercially feasible petroleum is discovered, it comes as a major and sudden intrusion into any socio-economic structure that is characteristically mainly rural and marked by the typical social evils of undernourishment, illiteracy, poor health, bad housing, etc. and by typical economic dependence on the exchange of agricultural products for manufactures. Venezuela in 1920 or Nigeria in 1960 are cases in point. Such a structure may well be strained by a labour force growing too fast to be absorbed in productive employment - which is held in check by shortage of capital and inadequate foreign exchange to buy technical and material inputs. There is some flexibility in this traditional type of structure. Its adjustment may be helped, for example, by the devaluation of the exchange rate, which

in conjunction with rather slowly climbing wages, cheapens labour relative to that of industrial countries, stimulating output and encouraging the adoption of labour-intensive techniques. Still the policy problems are formidable, and the task of achieving a tolerable society with modern living standards seems very difficult.

4. It is no wonder, therefore, that the discovery of petroleum appears to offer a miraculous end to the problems of underdevelopment'. The shortages of capital and foreign exchange, seen as the crucial constraints, are suddenly eased.

5. Petroleum incomes are injected into the economy in two distinct ways. One is the direct expenditure of the petroleum companies in the exploration, development and operation of the sector. This partly takes the form of salaries and wages, partly of purchases of materials, power, etc.

6. This first type of impact is a relatively minor one for a large country (though it may be important in particular areas). It is true that wages are high, because employees have strategic power in such a profitable industry. But few people are employed especially after the development phase is over: production is essentially a matter of turning taps on the pipelines (and even that is mechanised). Moreover the oil companies usually do not buy much locally, partly for the reason that there is little capacity to produce equipment. Because of the high requirements of experience and skill, the bulk of the salaries are in the hands of expatriates who purchase mostly imports, even of foodstuffs.

7. The main source for the creation of jobs and incomes is the other channel through which oil generates incomes, the spending of government oil revenues. In the first place, the bureaucracy becomes heavily swollen, and also highly paid. Governments with "money to spare" cannot easily resist the pressure of the unemployed for jobs or of the civil services unions for higher salaries. Secondly, the government uses the money for "social" infrastructure - especially schools and hospitals.

Thirdly, except in the mini-states, it tries to promote industry and agriculture through development corporations, infrastructural investment, etc. and also by supplying credit^{and}/cheap fuel (especially natural gas). This is done in the framework of a national development plan.

8. It may, however, find problems in administering the injection of large sums into production. It lacks the expertise to judge what sort of industrial products it wants to manufacture or what would be the most appropriate technique for doing so. This is shown by the passive role it plays towards foreign investment - it waits for the salesmen to check in at the local Hilton, and then concedes accelerated amortization allowances, "tax holidays", monopoly rights, etc. etc., often quite uncritically. If it was in control of its industrialisation, its officials would be conducting the negotiations in the head offices of the corporations that interested them - and exacting a high price for access to its lucrative market.

9. Moreover, and here lies the root of the paradox of the petroleum economy, it runs into special obstacles due to the very existence of the petroleum sector. One is that the exchange rate becomes and remains overvalued, because the foreign exchange earnings are so plentiful; imports of industrial and agricultural products become artificially cheap at the expense of local producers, and while these can be protected by high tariffs, it is not so easy to deal with another serious consequence, that the country's own products become too dear to export.

10. This can be seen in the continued dependence on petroleum. The long-established petroleum producers show little capacity for developing other exports, despite years of heavy investments, as the table on the next page shows.

Table: Petroleum as a proportion of total exports
in traditional exporters, 1955 and 1972

(percentages)

	<u>1955</u>	<u>1972</u>
Iran	74*	86
Iraq	91	91
Venezuela	94	93

Sources: International Financial Statistics (IMF);
Annual Statistical Bulletin (OPEC);
Yearbook of International Trade Statistics (UN);
Petróleo y otros datos estadísticos (Venezuela)

* Somewhat lowered then by the repercussions of the confrontation with the multinational corporations (the figure for 1960 was 86).

11. In addition, wages paid in the petroleum and government sectors are emulated elsewhere, setting levels that inhibit the development, or even the continuation, of labour-intensive activities. The new industrial sector consists largely of factories making products which take advantage of the ready supply of capital and energy, or of oil (or natural gas) as a material - steel, cement, refined petroleum, petrochemicals, fertilisers. Around this nucleus of heavy industry grows the 'screwdriver' assembly industries typical of protected industrial structures - vehicles, household durables, etc., but in a more exaggerated form than elsewhere. The only agriculture that flourishes is highly mechanised.

12. What is notable about this group of industries is that they too, like the petroleum sector, pay high wages but provide remarkably little employment. In fact petroleum economies are, contrary to what one might expect in view of their fast growth, characterised by heavy and chronic underemployment. Some of this is "open" ¹⁾, but "disguised" unemployment is also common in the form of needless jobs in ministries and public corporations.
13. While part of the explanation for this lies in the failure of employment to expand in the goods-producing sectors, part can be found in a fast growth of population and the rapid migration to the capital and the petroleum area from the countryside. The government usually finds that the easiest way to keep unemployment in check is by large-scale public works programmes in these areas, especially roadbuilding - which paradoxically increases migration to the towns and thus aggravates unemployment.
14. The social picture in most countries today is one of extreme contrasts - between apartment blocks and shacks, but more profoundly between "modern" and "traditional" cultures. They are especially marked in petroleum countries. Because foreigners, usually United States citizens, play a conspicuous part as technicians and consultants in the modern sector the whole life style of the natives in this sector becomes a copy of that of the middle class of the United States, with large automobiles, etc. At the same time, the traditional culture gets drained of its talent and self-respect, with for example traditional songs and dances preserved (in a stylish form) as 'folklore' turns in night clubs.
15. All countries suffer in a degree social dislocations due to industrialisation. Religious and other customs become weakened and formalised; material acquisitiveness grows. This is all much more noticeable in petroleum countries, however, because of the speed of the economic change. One specially severe

1) i.e. it takes the form of seeking work. In Trinidad, where regular and good labour force surveys are carried out, the rate of open unemployment has been in the range of 12%-15%.

symptom is crime. Part of this originates within officialdom - bribes for concessions and contracts, nepotism in appointments, made possible by the riches which are generated by oil. Part of it lies outside, especially delinquency among youths who are excluded (whether by lack of education or of connections) from sharing in the conspicuous consumption.

16. Although petroleum, therefore, provides the resources for fast economic expansion, this does not create an economic structure that is diversified or independent, or a social structure that is either equitable or stable. The petroleum producer has consequently little defence against the inevitable decline in oil revenues (just as a heroin addict finds the withdrawal agonising.)¹⁾

17. Since the explicit policy objective of the government is usually precisely to create a viable socio-economic structure - and on paper, of course, this would be perfectly possible - one might well wonder why political processes do not cure these distortions. In the first place, especially in the smaller countries, the authorities play a passive role vis-a-vis foreign corporations, which pay whatever salaries and wages they choose and with which the initiative on all major questions lies - where to explore and at what rate, and the rate of extraction. The pattern and pace are naturally set by the worldwide policies of the company not by the needs of the country concerned. Company managers can compel compliance with their wishes, by threatening to reduce exploration or extraction sharply, if "the climate for investment" is considered unfavourable. The government is essentially powerless to control them; not merely is it dependent on them for foreign exchange and revenue, it has less expertise in almost every respect - geological, engineering, chemical, legal, economic, financial, fiscal, even public relations. This is especially true of the smaller petroleum countries.

1) If one can make any prediction in the social sciences it is that the economic landscape of the 21st century will be littered with the relics of petroleum economies.

18. This picture is somewhat modified where governments have built up a technical corps and a public corporation runs the industry, especially where there is a strong personality (such as Mattei) in charge of this corporation. However, such a corps is essentially a satellite of the multinationals, not merely in its pattern of consumption and even its attitudes, but because it relies on overseas sources to replenish its expertise. Typically there are no research institutes locally in the petroleum field (even on the structure and objectives of the multinational), no professional periodicals, little reference to oil (still less the wider field of energy) in secondary education - and not much even in most university departments, which copy overseas syllabuses and import foreign teachers and textbooks.
19. The national petroleum corporation in any case relies heavily on foreign corporations to market the oil and on foreign consultants. Moreover, it is not necessarily really under state control - it can become "a state within a state", because of its strong bargaining position, determining the rate of extraction, setting its own salaries, branching out into other sectors. It can even make its own trade agreements, develop a security force and acquire assets overseas (not necessarily in corporate ownership).
20. The second political reason why a petroleum economy develops an unviable form is that there are ample resources to repress those who favour changes of strategy, and to repel invasion. Typically the number of tanks per million of the population is very high, and the police are provided with all that modern technology has to offer. In the mini states, political pressures can be flared off by providing all possible malcontents (except of course non-citizens) with a high level of living.
21. In fact, a substantial fraction of the population (including the petroleum workers) lives in such comfort, or has expectations of doing so, that it has little desire for change. Indeed the mood of public life in petroleum

country is euphoric ¹⁾ (oddly so in view of its intractable problems) - like that of a group which has collectively won the big prize in a football pool. ²⁾

22. The capacity for political adjustment is also reduced by the tranquilising effect of paternalism. The citizens of a petroleum country find that the way to obtain a house or a professional education or even a major surgical operation is not to organise political pressure to obtain access to the social services for one's area, tribe, class, etc. nor even to work and save for it, but to acquire the skill of manipulating the bureaucracy. Despite all this, in most petroleum countries there are sections of the public with a grasp of the country's basic problems, and the will to try and solve them, especially to achieve a degree of national autonomy.

23. But a final political constraint is the heavy foreign influence. Governments of petroleum exporters are dependent on a few foreign countries for markets, technology and armaments, and do not have a great deal of room to manoeuvre, whatever the appearances. In particular, even if they wished to do so, they could not use their resources to create a lasting power base - by, for example, making petroleum supplies conditional on a degree of control over atomic energy development. ³⁾

1) The euphoria may, however, have an intangible (and unmeasurable) economic effect, by inducing entrepreneurial attitudes (the "super-multiplier" referred to by Mackay).

2) In other respects this analogy fits. There is little in their past experience to prepare either oil exporters or the pool winners for the total change in circumstances and they may well dissipate their windfall in a level of consumption that cannot be sustained, especially since they are likely to have no real plan for acquiring assets (some of which are worthless IOUs written by distant relatives).

3) The pattern of foreign investment by the mini-states in particular (a bundle of loans, bonds, equity shares in a dozen countries, etc.) seems to show little sign of a coherent set of objectives, even nationally let alone regionally. The high profits of the "energy crisis" will therefore provide neither strategic influence in the economies of the industrial countries nor a new centre of industry and technology in the Middle East. They seem not to care whether history once more passes them by.

24. The appropriate model for analysing these problems is one of "dualism" (without necessarily accepting all the analysis carried out in its name). Socially, just as economically and politically, the focus of the analysis lies in the intrusion of a foreign-oriented (in some cases foreign-controlled) sector into a traditional community, and on the tensions which are generated. While the model may throw light on policy issues, it is not fundamentally policy-oriented: in it the attitudes and decisions of policymakers are dependent variables, determined by forces over which they have little control and indeed which deprive them of the wish for control. Nevertheless, the oil producer is a fascinating subject for the social scientists because it shows marked dependence and false perception in every field.

Application to Scotland

25. How much does this scenario apply to Scotland? It would be presumptuous of me to suggest any conclusions but I can at least raise some questions.

26. In some obvious ways Scotland is basically different from OPEC members. The fact is that she is not a primarily rural country at the start of oil development. She is much better placed for the social impact, and has the capacity to develop the engineering sector to be a supplier to the oil industry not only in Scotland but elsewhere too.

27. As in most countries, "dualism" can be found in Scotland - with the Highlands and Islands showing lower wages and higher unemployment than the Lowlands, and different cultural patterns. In contrast, however, to say Venezuela or Iran at the time of the impact of petroleum, Scotland's rural areas are well supplied with teachers and doctors.

28. Another major difference is political. Scotland does not have sovereignty. From the point of view of the United Kingdom as a whole, oil production offers the prospect of much needed relief to the balance of payments, and Scotland presumably benefits to the same extent as all regions of Britain - but

no more so. Moreover, Scotland has no greater claim on the oil revenues than any other region, and thus enjoys less social and economic development than she would if all the revenue flowed to her.

29. Scotland's share of the oil revenue depends largely on political developments. At one extreme, she may emerge as an independent country with total control of the revenues; at the other she would remain in the United Kingdom and do no better than say Devon and Cornwall. There are various other possibilities between - she could receive a specific share of the revenues (though the Treasury would strongly resist this), or she could acquire the power to levy taxes or quasi-taxes (as Alberta does, and now Shetland), or she could receive a larger share of oil revenues than other regions by explicit or implicit concession that she had some right to it (as Sarawak does in Malaysia for example). The last is the most likely outcome, at least in the near future; it is foreshadowed by the relatively generous provision for the Scottish Development Agency.¹⁾

30. Can anything be said about the likely future relation between Scottish nationalism and the Parliamentary scene at Westminster? - only perhaps that steps like the setting up of the Scottish Assembly usually tend to reinforce rather than assuage the power of nationalism. Other imponderables hang over the political future. Would the capacity of Scotland to reconstruct its economy be inhibited by British membership of EEC (allowing of course, for the possible future form of the Community)? Would the bargaining power of a seller of oil be weakened by the obligation to offer it to other members of the Community? And will these restrictions be more or less serious if Scotland were herself a separate member of EEC?

31. Despite the special characteristics of Scotland, the discussion above of the experience of other oil producers raises some pertinent questions. Will, for example, the country's

1) It could be argued that the setting up of the corresponding agency for Wales shows that petroleum has nothing to do with this - but this could be a case where Wales has benefitted indirectly from what the Government decided to do for Scottish nationalism, the strength of which reflects the oil boom.

"dualism" be deepened? The first impact of oil in Scotland has been in fact to modify what dualism there is, since most of the harbours and construction sites affected by oil development lie in Highland and Islands. However, when the construction phase runs down and the oil is flowing in volume, this region will not necessarily get any greater benefit than say Clydeside. It may well get no larger share of oil revenues, and be bypassed by the industrial expansion that readily accessible oil and gas make possible.

32. It is true that the Scottish Assembly, especially if it acquires real power, could consciously attempt to moderate dualism. But is this in fact likely? Will not Lowland political interests dominate it? The urban sector dominates the political scene in most other oil producers, even in those where the bulk of the population still live in rural areas (which is certainly not the case in Scotland).

33. There are several reasons, however, why dualism is unlikely to increase greatly, even in an independent Scotland. The fiscal system is highly developed, and will spread the oil revenues around, wherever they are paid. In addition, wage levels, even in rural areas, are already such that it would be unthinkable for the petroleum sector, or the industries which supply it, to pay wages 20 or 30 times as high as the going wage. Wage control, which is bound to continue in some form, whatever the constitutional future, will prevent very high wages being paid, especially in those industries which benefit from oil but are already in existence. In any case, the highly organised trade union system will insist on the maintenance of "relativity" between wages in different areas and in different jobs.

34. The question is rather whether there is sufficient flexibility to permit the structural changes necessary if Scotland is to take full advantage of the development of oil to build a new and viable economic structure. It may be difficult to pay nurses or bus drivers enough to induce them to move to a different part of the country. Firms constructing modules or making petrochemicals may not be able to pay workers from industries which are stagnant

enough to attract them - especially if the latter industries are kept alive artificially by government subsidies such as injections of capital. If Scotland received the full force of the oil revenues, this would be a still more acute issue.

35. Will diversification be inhibited by an overvalued exchange rate? This is unlikely so long as Scotland shares the same currency with Britain, which has a foreign exchange crisis so fundamental that the oil revenues will merely help prop up the pound. The currency of an independent Scotland could well, however, become overvalued. It is true that the bigger structural change which would occur if Scotland received the whole of the oil revenue would probably mean faster inflation, in view of the rigidity of the socio-economic structure, but this would not necessarily weaken a currency supported by huge oil revenues.¹⁾

36. Will Scottish political processes be shaped by oil euphoria? The dangers and opportunities alike are fewer. It would seem, however, that the greater the devolution of power, the greater the risk of this happening. Britain as a whole shows little signs of oil euphoria. Indeed the problem is quite the reverse: the British public shows little interest in the implications of discovering a new source of energy, and still less understanding of the issues raised by this.

37. Will the multinationals dominate the oil sector? Certainly the United Kingdom government has the technical capacity to deal with them²⁾ even if it has not been very successful in finding the right terms for exploration licenses. Would an independent, or more autonomous, Scotland be more likely to control the multinationals or would it fall to a degree under their domination? Provided it avoided this fate, it would no doubt exercise the power it had, e.g. over the rate of extraction, more in Scotland's interest - which would presumably lie in a slower rate than suits Britain as a whole. (A slower rate would give more time to absorb the social impact and to build up oil-related industries, as well as postponing the day when output starts to fall).

1) In Nigeria, civil service salaries and wages have approximately doubled in the past year, stimulating big increases in other sectors, but the exchange rate does not reflect this.

2) This is made somewhat easier by the fact that one of the chief companies is British (BP) and another partly so (Shell). BP is in fact in part government-owned.

38. Will a national planning organisation emerge, that would seize hold of this opportunity - with the resources, professional expertise and leadership to decide which industries to develop where? The greater the degree of political autonomy the bigger the chance of this happening, though the probability of a really able industrial leader appearing is naturally less the smaller the population.

39. To sum up, the danger of Scotland's long-term future being shattered by oil is much less than for OPEC members. However, the greater the autonomy she gets, the greater these dangers will be - though the greater will also be the oil revenues and the opportunities.

40. It is, of course, very rash for a "foreigner" to venture into the political minefield of Scottish nationalism. However, this seems the only way of opening up the real issues of the research needs.

41. Clearly these are huge. Clearly also, they are interdisciplinary - the social impact depends on economic and political developments. It is obvious too that while some research needs to be policy-oriented, some also needs to be on longer-term strategic issues and some more fundamental - indeed to study the processes of policymaking and the makers themselves.

DS/BMT
17 March 1975.