BONUS PAYMENTS SYSTEM CHALLENGED BY GAFFNEY

ON WHAT basis should private firms be allowed to go prospecting for profits on the public domain?

The question assumes increased importance with President Carter's decision, announced on July 15, to restrain oil imports in favour of exploring for, and exploiting, domestic sources of energy.

The traditional US system has been for the Federal and State governments to invite firms to submit bids for bonus payments: the highest bidder received the right to pump up the oil.

These bonuses, paid in advance of exploration, constitute economic rent: the surplus over and above that income which is necessary to attract labour and capital into the enterprise. But is it the *whole* of the economic rent? This is certainly the orthodox view, which rests on the assumption of a competitive system. For example, Kenneth Dam has defended the established method of auctioning off licences in these terms:

"Not only does it capture the economic rent for the government rather than leaving it to a private party, but it also tends to select the licensee that is in fact most efficient in the sense of having the lowest costs. Efficiency in the economy is thus enhanced. The firm that is most efficient can afford to pay more, and it therefore will bid more, capturing the license."[1]

He admits that the full economic rent could not be captured at any one auction; sometimes the actual economic rent was higher than that bid by the firm, but at other times it was less. "This discrepancy should not be thought to be a weakness of the auction method, because the two possibilities tend to balance each other."

THIS hit-and-miss method has been challenged by Mason Gaffney, Professor of Economics at the University of California, Riverside.

In evidence to the joint hearings of the House Resources and House Finance Committees in Washington last March, he exposed the weaknesses of the "money up front" approach.

- The ability to find the advance money is highly concentrated, placing a premium in favour of firms rich in cash. Acreage is concentrated, leaving less for other firms. Smaller firms were at a competitive disadvantage, and so they were encouraged into joint bidding. "This, of course, damps the competitive edge of bidding by reducing the numbers."

  – The community, then, received smaller bonuses: part of the economic rent was captured by the private sector.

- Financial power rather than economic efficiency became the dominating factor. Firms which most resembled large banks had an advantage over those which most resembled oil producers. Efficiency moved down the scale as a factor determining the highest bidder.

  – The most efficient firm is the one that can pay the most money over time: this is not the firm normally which can pay the money "up front".

- A policy which favoured "big capital" penalizes local entrepreneurship and ownership. Initially, the inflow of outside capital

Britain plans to hand out billions of pounds to the oil giants

THE AMERICAN system of appropriating economic rent for the community has proved more efficient than the UK's mix of fiscal and bureaucratic policies.

Between 1953 and 1978 the cumulative US receipts from lease sales, royalties and rentals, but not including corporation tax on profits, amounted to 70% of the total value of oil and gas produced on outer continental shelf leases.

UK Government revenue (excluding corporation tax) since the beginning of North Sea oil and gas production has so far amounted to under 10% of the value.

The incomprehensible British situation arises from the discretionary allocation of licences by bureaucrats, the serious deficiencies of which are exposed when we examine public auctions as an alternative method.

In 1971, 15 blocks of North Sea licences were auctioned to the highest bidders. Over £37m. was raised for the exchequer. Simultaneously, 267 blocks were allocated on the discretionary basis – and raised a derisory £2.7m. Auctions have not since been used.

THE CASE for auctioning North Sea licences is documented by stockbroker Peter Lilley in *Oil Commentary. He declares:***

"The established British system of discretionary allocation is staunchly supported by the oil industry which, not surprisingly, approves of a system under which it receives in return for a peppercorn rent the rights to oil and gas reserves worth billions of dollars."

may improve the economic base of a community, but the outflow of profits would constitute a permanent leakage.

– The inflow of capital followed by an outflow of payments leads to swings of boom and bust.

● Large firms do almost everything in more capital-intensive, labour-saving ways, which may not produce the optimum combination from the viewpoint of the whole economy.

Oligopolistic power exercised by the large firms enables them to sidestep the adjustments in factor inputs which would be forced on them by free competition.

PROF. Gaffney, an expert on economics of resource extraction,[2] has no doubt that medium and small firms would bid much more if they could pay over time.

The high risk of bidding "blind" against firms with larger resources compelled them to require high target rates of return – i.e., reducing the economic surplus (= rent).

Other defects with the "front end bonus" system:

● Cash advances to the community reduces the capital available to develop lands. This hits the smaller firms at the time when they most need to husband their limited capital for exploration.

● Bonuses have to be calculated "blind": the system resembles a game of poker. It is inequitable because it falls indiscriminately on both the lucky and unlucky prospectors. Large firms, on the other hand, "can spread the risk around the world and bury it in statistical probabilities [and] set high target rates of return as a device of implicit collusion to lower bids."

● **Prof. Gaffney**

Some alternatives to the bonus payments, however, also have their defects. For example, fixed royalty at a uniform rate "would succeed in stifling marginal production while at the same time failing to collect much of the rent from bonanza producers."

THE SOLUTION, in his view, was a system which allowed the producers to pay as production proceeded out of income derived from current production. This encouraged competition, reduced private risks and increased the surplus available for collection by the community.

Firms would have to be allowed to deduct the costs of production, providing these were incurred on-site.

The 1978 Alaska Leasing Act gave the Commissioner of Natural Resources a new flexibility in selecting leasing terms. But Prof. Gaffney expressed concern about the Department of Natural Resources' failure to fully equip itself to use those powers.

"There is always this temptation to say it is all too complicated and go back to the simple old front money system. Yet, a lease for oil and gas is no more complex than the standard deal between a cinema distributor and a theatre owner. Businessmen are used to working with complex contracts, risk sharing arrangements, and joint ventures. It is we, the general public, who are too soon tempted to stop scratching our heads, grab the money and run. That is the worst mistake we can make."

REFERENCES

1. K. W. Dam, *Oil Resources*, University of Chicago Press, 1976, p. 7.
2. M. Gaffney, editor, *Extractive Resources and Taxation*, University of Wisconsin Press, 1967.

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He argues that economic rent – "the excess of the value of the oil revenues over the total of all relevant costs including the appropriate return on capital necessary to attract and compensate risk capital" – would be captured by the auction system.

Using a conservative basis for his calculations, he concludes that remaining licences could raise between £1.5bn. and £2.7bn., in addition to royalties, petroleum revenue taxes and corporation taxes (which are taken into account by bidders at an auction).

That money, under the discretionary allocation system, is to be handed over to the oil companies!

PRIME MINISTER Margaret Thatcher, however, not content with giving away the economic rent of North Sea oil and gas, has ordered the British National Oil Corporation to sell off £400m. of its assets.

Dept. of Energy civil servants, of course, would not admit that their intention was to *give away* the value of the nation's natural resources, although that is the result – or, as Lilley puts it, "In effect recipients are given presents worth in aggregate hundreds of millions of pounds."

Their contention is that their criteria (which have not been endorsed by Parliament) – for example, showing a bias in favour of UK companies – ensures that Britain gets the best overall deal.

But there is ample evidence that bureaucrats do not necessarily know what is best. In the US, for example, the Dept. of the Interior has consistently underestimated the value of its oil leases. Industry has been prepared to pay between two and 10 times the assessed value of the acreage under offer at auctions!

LILLEY argues that, because of the element of subjectivity involved in calculating economic rent in oil exploration, taxes alone cannot be used to extract the full economic rent.

But companies would be willing to pay the full economic rent for the right to explore. "Although taxes cannot be used to capture 100% of the economic rent they can perfectly well be used to capture a significant proportion of it. The remainder of the economic rent can be captured by auctioning the licences subject to a known tax regime for future discoveries."

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bonanza

market value of the resource is far above the cost of production. So what does it do?

In this particular case the gas industry decided that industrial and commercial consumers should pay the full market related value of any gas that they wished to purchase. But domestic consumers were charged at a rate sufficient only to cover the remaining costs of the Corporation. In other words, the charge to the domestic consumer is a balancing item. Charge the domestic consumer too much and the gas industry will make a profit, charge them too little and it will make a loss.

Admittedly, this worked quite well for a number of years. Then as time went by prices rose all round, but gas prices didn't rise quite as much; gas prices to the domestic consumer, that is – industrial and commercial consumers were charged the full whack. Gas in the domestic sector got cheaper compared to the alternative fuels. When oil, the principal alternative, became not only expensive but difficult to obtain, the rush of domestic consumers to convert their central heating systems to gas became virtually a stampede.

In the meantime, the Gas Corporation had been doing what they could to put prices up, to try to halt the rush. Current cost accounting helped here. They were able to apply some supplementary depreciation to augment the depreciation given by the historic cost method. That may be double dutch to most people, but the overall effect was that gas prices could be raised without gas corporation profits increasing: depreciation isn't profit, you see! Aren't accountants wonderful?

But this still was not enough. The next trick was to pay in advance some of the loans that the gas industry had received from the government. We are now told that very shortly the position will be reversed, and the gas industry will be lending money to the Government. Again all this achieves higher gas prices without higher profits being declared by the gas industry.

HAVEN'T WE lost sight of the initial objective, which was to determine who was receiving the benefits of ownership of the natural gas reserves? Well it must be blatantly obvious by now that virtually the sole recipient of this benefit so far has been the domestic consumer of gas, and the extent of his benefit has been in direct proportion to his consumption of gas. Only recently, with the pressure to raise domestic gas prices, has there been some benefit to the Exchequer.

Gas consumers are not by any means the whole nation. So somehow or other in this long and complicated story, the benefits of ownership of the natural gas resources, which everyone has agreed belong to the nation, have been restricted to those in the nation who consume gas in their homes, and not equally by every citizen! We may argue that the benefits of ownership of natural gas is better going to a fairly substantial section of the nation, rather than to a small number of private individuals and companies. With this we must agree.

But on the other hand if there is a quick, easy and convenient means by which the benefits of ownership can be conferred on the whole nation, would that not be even more desirable? Government has many means of persuasion. And there is no doubt that it could persuade the British Gas Corporation to increase the price of natural gas to the domestic consumer to its full market value.

At the same time, the government could fix a level of payment from the British Gas Corporation to the Exchequer which would represent the transfer of the benefits of ownership of natural gas from the gas industry to the nation. The payment would have to be given a name. It might simply be the rent of natural resources; it might be called a royalty; it might even be called a tax – now that rings a bell doesn't it? Weren't we reading something in the press recently about a tax on gas? Could it be that the politicians, civil servants and Government officials have discovered the principles of economic rent of land, and have decided that economic rent belongs to the nation and are setting out to collect it? Or is it just a happy coincidence of natural justice and pragmatism?

But there are dangers. For if the people of Britain come to understand that the benefits of ownership of natural gas can accrue to the nation as a whole, by collecting in one way or another the economic rent of that natural resource, might they begin to question the principles and benefits of all our other natural resources?

MULTI-BILLION POUNDS HANDOUT

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Auctions were a precondition of a free market in oil licences, which was desirable "because it would permit the companies which are most efficient, best financed, most knowledgeable about the geology and most anxious to explore to obtain licences from companies which have run out of money to explore, which do not consider any remaining prospects worth exploring or lack the latest geological expertise to identify them."

But the Government, reveals Lilley, is reluctant to permit companies to sell licence interests – "since cash sales draw attention to the value of what governments gave away for nothing."

WHATEVER the relative merits of the different systems, the real obstacle in Britain is a political one: an apparent desire – in both the Labour and Tory Parties – to leave oil companies with a large slice of unearned economic rent.

Government Ministers claim that discretionary allocation ensures rapid exploration. This is spurious, and Lilley draws on "an obvious analogy between the price of land and the price of oil acreage." He declares:

". . . . we have no lobby urging that land be given away free to responsible property speculators to encourage them to undertake more building! Why then should it be necessary to give away oil leases to encourage the oil industry to do the very thing that it would be prepared to pay heavily for the right to do?"

Lilley correctly identifies the substantial reason for the retention of bureaucratic discretion: "The exercise of discretion gives to officials individually and collectively prestige, power and a sense of importance which would be lost if they were reduced to the role of auctioneers."

**Oil Commentary*, London: W. Greenwell & Co., Dec. 1979.