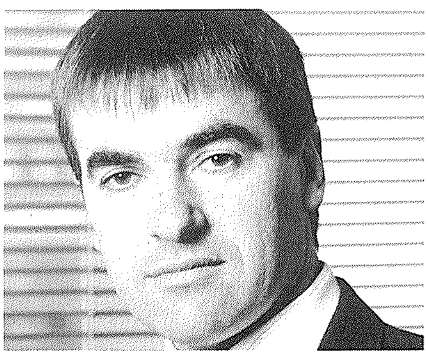
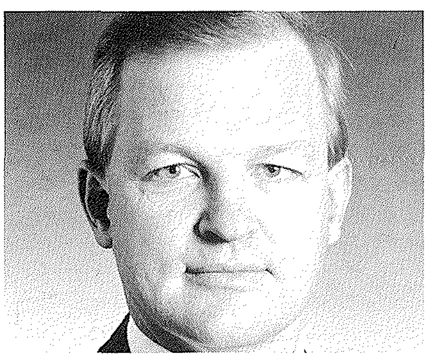
# OIL EXPLORATION AT BOTTOM OF THE BARREL

## WHY GOVERNMENT SHOULD BACK THE JUNIORS



Mark Epper



John Charters

*By MARK EPPER and JOHN CHARTERS*

***The Gulf war proved how vital Australia's oil resources will be. But unless the government acts to stimulate exploration activity, the industry will wither for want of investors.***

IN the infectious excitement of the 1987 bull market, new oil exploration companies were being floated at an increasing rate. The oil index reached a record high level for the 1980s of 1014.30 in August 1987. Since those heady times, the number of listed companies engaged in petroleum activity has fallen from more than 80 to fewer than 50 and the oil index has slumped. It fell to 642.10 in June 1990 and was only 694.10 at 30 June 1991. No new petroleum exploration companies have been listed on the Australian stockmarket since February 1989.

The environment for raising funds for petroleum exploration has never been more difficult than it is at the beginning of the 1990s. But when has the need been greater?

### Funding exploration in the 1990s

The oil exploration industry may be divided into two broad segments – the major and the junior explorers. We have not attempted to define those segments precisely but have assumed that the majors have significant production capabilities to support their exploration programs whereas the juniors have mostly relied on injections of new shareholders' equity to fund greenfield exploration.

Our review of the annual reports of 12 major petroleum exploration companies highlighted their ability to fund their exploration programs out of revenue from production operations (see Table 1). Further, because of the strength of their balance sheets and the diversification of their activities, they have access to a variety of other sources of funding (including direct borrowing and project finance), have the capacity to service borrowings and are able to attract additional funds from the sharemarket.

In contrast, the annual reports of 30 junior explorers indicated that 76 per cent of their exploration expenditure was funded by absorption of working capital—most of it gathered from initial public subscriptions before the 1987 stockmarket collapse—and the sale of assets (Table 2). Junior explorers have fundamental problems in financing their activities:

- they have not matured to the point where they can generate funds from production operations, so exploration costs must be met from other sources;
- the absence of funds from production activities precludes any normal debt-servicing.

Traditionally, the largest item in

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the balance sheet of a junior will be exploration expenditure incurred and carried forward as an asset. The unproven and speculative nature of these assets fails to qualify them as acceptable security for lenders or leasing companies. Project finance is not available because of the uncertainties about the extent of cashflows resulting from current or future exploration activity. Junior explorers must therefore rely largely on support from shareholders to fund exploration.

Major institutional and larger corporate investors have not been keen to invest in speculative explorers, particularly in the post-crash environment. They prefer explorers with proven or at least probable reserves which promise a reasonably certain return on their investment. Unfortunately, these reserves are often acquired from junior explorers who, because of their poor negotiating positions and lack of liquid funds, are forced to sell down their exploration interests to generate cash for continued activity. The prices paid in these instances will reflect the strength of the parties involved.

## Investment in the nineties

Until October 1987, junior explorers thrived in a buoyant equity market. The position today is very different. The two main factors affecting the Australian investment community in 1991 are the absence of widespread investor confidence in equity markets and the introduction, with the new Corporations Law, of new rules for raising funds which are expected to increase substantially the costs of issuing a prospectus. Changes in investor trends and the extreme volatility of oil prices in 1990 have added further to the uncertainty surrounding investment in this and other sectors.

To gauge the level of support in the market for junior exploration companies, we reviewed those few which were able to float successfully during 1988 and 1989. Table 3 shows the substantial discount between the original issue price of these stocks and their current market price. In two instances, the companies are no longer listed. No junior exploration companies floated in 1990. Clearly, given this performance, the market will not rate investment in junior petroleum companies very highly.

**TABLE 1: MAJOR EXPLORATION COMPANIES**
**Sources of funds compared to exploration**

| | Funds from operations 1990 $m | Exploration expenditure 1990 $m | Proceeds From Share Issues 1990 $m | 1989 $m | 1988 $m |
|---|---|---|---|---|---|
| BHP Petroleum | 1250 | 210 | — | — | — |
| Woodside | 157 | 23 | — | — | — |
| Ampol Exploration | 74 | 62 | 160 | 176 | 106 |
| Santos | 511 | 109 | 184 | — | 331 |
| Bridge Oil | 125 | 38 | 77 | (2)77 | |
| Crusader | 33 | 4 | — | 20 | — |
| Oil Company of Aust | 10 | 14 | (1)15 | — | — |
| Vamgas | 62 | 6 | — | — | — |
| Sagasco | 102 | 69 | 2 | 15 | 167 |
| OilSearch | kina (m) 4 | kina (m) 9 | kina (m) 5 | kina(m) 38 | kina(m) 13 |

(1) Proceeds from call of 15 cents on all partly paid shares.
(2) Proceeds from exercise of options.

**TABLE 2: JUNIOR EXPLORATION COMPANIES**
**Source of funds for exploration**

| Sources of Funds | Percentage for Exploration % |
|---|---|
| Decrease in working capital | 59 |
| Sale of Assets | 17 |
| Share Issues | 10 |
| Funds from oil related operations | 9 |
| Other | 5 |

Market sentiment for the major petroleum exploration companies also appears weak if the discounts offered in the two most recent share issues by major listed petroleum companies are compared with earlier issues. Santos and Ampol Exploration made share issues in 1990 at discounts offered substantially greater than in previous years (see Table 4). Other major petroleum exploration company issues in the past two years are shown in Table 5.

The performance of the Oil and Gas Index compared with both the market as a whole (All Ordinaries Index) and oil prices in general illustrates the erosion of investor confidence in the oil industry (see Figure 1). Investor confidence has not yet recovered from two major upheavals – the 1986 oil-price collapse and the 1987 stockmarket crash.

The Oil and Gas Index improved substantially after the oil shock of 1979 but underperformed the industrial market in the period leading up to the 1987 stockmarket collapse. Since that collapse, the industrial sector has recovered much of its lost ground but the oil sector has slipped further behind.

The Persian Gulf crisis of 1990-91 had only a limited effect on oil prices and on the Oil and Gas Index—-a further demonstration of the weakness of investor confidence. Oil prices now are $US1 or $US2

**TABLE 3: NEW PETROLEUM EXPLORATION FLOATS (1988 & 1989)**

| Name | Date of Issue | Amount Raised $m | Issue Price cents | Post Listing Price cents | Market Price 30/6/91 cents |
|---|---|---|---|---|---|
| Mosaic Oil NL | 23/2/89 | 6 | 25 | 20 | 5 |
| Pacarc Nuigini NL | 23/2189 | 3 | 26 | 30 | 5 |
| Arabex Petroleum NL | 29/3/88 | 4 | 26 | 30 | * |
| Kundu Petroleum Ltd | 23/3/88 | 28 | S0 | 35 | # |

* No longer listed (last sale at $ 1.10). A takeover offer was received for Arabex from its major shareholder in December 1989. The offeror's shares are quoted on the unlisted securities market of the International Stock Exchange in London and Dublin.

# Kundu was subject to a scheme of arrangement finalised in May 1990. The shareholders received shares in another petroleum exploration company equivalent to 1.2 cents per Kundu share.

higher than before the invasion of Kuwait on 2 August 1990 and the index is a little higher. The improvement in both price and index, however, has not generated greater investor interest in the petroleum sector. Even when the oil price reached around $US40 in the first two months of the Iraqi occupation of Kuwait – and some analysts were predicting that it would go to $US60 – the index rose by only 13 per cent.

Another influence which will affect equity raising in the 1990s is the decline of the private investor—formerly a significant supporter of petroleum exploration companies. In 1991, institutions and major corporations hold a significantly higher percentage of shares in companies.

The worldwide decrease in the number of individuals who own shares directly in companies may be explained by the fact that the amount of funds available for investment by individuals is shrinking, particularly in recessionary times, and the fact that there are attractive alternative investments. *The Economist* magazine reported last year:

American private investors reduced the net value of their equity holdings by around $550 billion between the end of 1983 and the end of 1989. Over the same period the decline for investing Britons was £17 billion, 32 per cent of their 1983 holdings. Were these trends to continue the last American to own shares directly would sell his last one in the year 2003.

The present outlook for raising funds for exploration is bleak. How do we overcome the obstacles?

## Role of government

The public equity markets have dried up as a source of exploration funding. It might seem an easy solution to cry out for government assistance – but justifying government intervention and support would be a hard task.

Interventionists would use the traditional argument that support for oil exploration is justified by economic benefits alone: revenue from royalties, the balance of payments effect and import substitution, reduced price volatility, employment opportunities, a more skilled workforce, infrastructure development, improved technology and the momentum which a vibrant industry provides to a nation. However, these arguments apply to most industries and cannot be used on behalf of the oil exploration sector alone.

### TABLE 4: ORDINARY SHARES OF SANTOS & AMPOL EXPLORATION

| Date $m | Amount $ $ % | Issue price | Pre-lisue price | Discount to pre-issue price |
|---|---|---|---|---|
| Santos(market price 30/6/91: $3.38) | | | | |
| Aug 90 | 163 | 4.00 | 4.93 | 23 |
| Nov 88 | 258 | 3.20 | 3.55 | 11 |
| Ampol Exploration (market price 30/6/91: $2.95) | | | | |
| Feb 90 | 160 | 2.10 | 2.50 | 16 |
| July 87 | 106 | 4.50 | 4.90 | 9 |

### TABLE 5: OTHER SHARE ISSUES

| Date of announcement | Company | Amount Raised ($m) | Discount |
|---|---|---|---|
| 13/8/90 | Cultus Petroleum | 18 | 9% |
| 7/8/90 | Command Petroleum Holdings | 21 | 34% |
| 31/5/90 | Bridge Oil | 77 | Nil* |
| 13/12/89 | Consolidated Petroleum | 21 | Nil# |
| 20/9/89 | Oil Search | 55 | 24% |
| 7/3/89 | Comada Energy | 28 | Premium* |

* The share issues of Bridge Oil and Comada Energy were both underwritten by their respective major shareholders.

# The share issue of Consolidated Petroleum was part of the reverse takeover by Command Petroleum. At the time Consolidated Petroleum shares were suspended.

One fundamental reason stands out in support of Australian government assistance for the oil exploration industry: national security.

Last year's events in the Middle East, when the entire world was shaken by the dramatic movement in oil prices, showed clearly how vital it is that Australia establishes a degree of energy self-sufficiency. The Gulf crisis further underscored the reasons for the lack of investor confidence in the oil sector. Private-sector investors have generally been cautious in the absence of national energy policies which might contribute towards an assurance of adequate returns on investment.

High taxation and unpredictable changes in taxation policies provided a real disincentive to look for new oil in the 1980s. Little has happened to provide a more hopeful outlook for potential investors in the 1990s. If the few initiatives announced in the 1990 budget – including the widening of exploration deductibility, the extension of resource rent tax (RRT) to Bass Strait and the introduction of income tax deductibility for platform removal expenditure – demonstrate the depth of the Commonwealth's commitments to encourage petroleum exploration in this country, we must all be disappointed.

The recent revisions to the RRT have been hailed in some quarters as a stimulus for exploration capabilities. This may be true, but only for the majors with production capabilities. For the junior explorer, the presence of the RRT is no incentive for new exploration.

## Funds in the 1990s

Major exploration companies will continue to fund exploration activity from the same sources available to them in the 1980s. However, those issuing shares may have to continue offering substantial discounts to market price, as was the case in the 1990 issues by Santos and Ampol Exploration. The cost of raising equity and other charges will increase and lenders will demand far more stringent security for direct borrowing or project finance.

Junior exploration companies must continue to rely on shareholder equity because of the high risks associated with their activities and the more conservative environment prevailing in the 1990s. New incentives are clearly required for private investor activity to ensure continuing exploration and development and the consequent strengthening of national security.

Generating interest in investment

in the oil industry – which means improving the potential return to the investor – could be achieved by some innovative measures on the part of companies, combined with a little government support:

■ **Reinvestment by creditors and employees.** The advantage to creditors is that the funds reinvested would be available for further exploration which could in turn generate future services for the creditor. This may be particularly attractive to drilling contractors who are affected by cyclical supply and demand trends. For employees, the advantages are enhanced security of employment and greater involvement in the exploration program. These methods of capitalisation appear to be consistent with the Corporations Law requirements to facilitate equity issues to employees and private placements of equity to small numbers of investors.

Other measures could convert short-term creditors to medium-term debt, debt with an equity "kicker" (convertible notes or other options), preferred equity or ordinary equity.

Assistance from creditors and employees need not be in the form of debt-for-equity. Under joint-venture arrangements, suppliers could contribute their resources and technical or management skill, and employees their labour, in return for equity interests. Any tax implications of such schemes should not substantially erode their benefits.

■ **Forward sales of production.** Oil explorers have in the past sold forward production to fund development. For example, Midland and Scottish Resources of the UK sold forward all production of the Emerald Field at a fixed price. If exploration companies have undertaken sufficient groundwork and have faith in their exploration programs, this method of raising funds may be possible.

■ **Innovative equity offers or guaranteed returns.** The "Emu Lottery" was an example of this novel approach to raising equity. Emu Hill Gold Mines NL had sought in a difficult market to raise $3.75 million through a preference share rights issue. The directors announced a "shareholders' incentive bonus" scheme in which each preference share taken up by shareholders in the rights offer participated in special incentive draws (the Emu Lottery). The proposed issue would raise up to $7.5 million for Emu Hill, of which 50 per cent would be distributed to winning participants. The Emu Lottery has been abandoned following problems with the regulatory authorities. However, the concept has reappeared in a prospectus issued by SIBS Resources NL (the regulatory authorities are taking renewed interest).

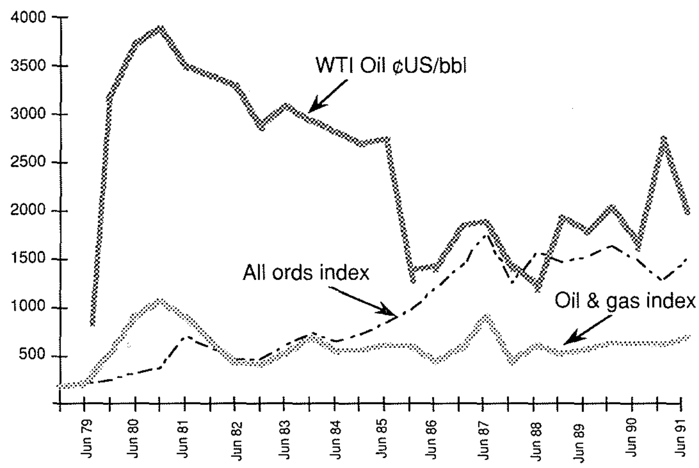
In the $50 million Compass Airlines float, successful subscribers were offered discounted airline tickets. Petroleum explorers could adopt a similar approach by through a back-to-back deal with an oil-marketing company offering fuel vouchers to investing companies or individuals. Company subscribers might also be interested in vouchers for other oil products.

In another variation, Continental Venture Capital (CVC) raised $30 million of venture capital in 1990, but half of the amount raised will remain in the bank to guarantee investors a capital return. The principle of returning capital to subscribers in the form of dividends or as guaranteed capital returns displays a conservatism inconsistent with the spirit of the oil exploration industry; it may underestimate the risks investors associated with oil exploration are prepared to take.

■ **Corporate sponsorship from majors.** Junior petroleum companies do the groundwork in high-risk or remote areas which the major companies would not normally consider. Should exploration under the sponsorship arrangements prove successful, the major exploration company (sponsor) would have first option to farm-in or may be entitled to a share of the production output.

This arrangement is similar to the existing farm-in/farm-out schemes. Examples in 1990 include Command Petroleum's farm-out in Papua New Guinea and Barrack Energy's development arrangement

## OIL PRICE COMPARATIVES




***New incentives are clearly required for private investor activity to ensure continuing exploration and development and the consequent strengthening of national security.***

in South Australia. Command won a 20 per cent stake in a Papua New Guinea permit by lining up three major equity partners. Command contributes nothing to the drilling of two wells and yet it controls all aspects of the work. Barrack Energy and Sagasco Holdings have entered a farm-in and development deal which should ensure development of one of Barrack's permits and enable two other prospects to be drilled.

### Government assistance

Government assistance or incentives for petroleum exploration companies could take the form of:

- grants or subsidies
- interest assistance
- loans with deferred repayment
- equity participation.

The government will of course be concerned with the effect on federal revenues of any form of assistance. However, part of the windfall gains generated through oil parity pricing could be used by an altruistic government for this purpose. In this paper we do not advocate this form of direct government assistance.

The most practical form of assistance is through the taxation system. At present, the tax legislation encourages oil exploration companies only to the extent of a 100 per cent deduction for exploration expenditure incurred. This is not much encouragement for companies which traditionally do not derive taxable income or otherwise manage to defer any taxation obligations.

Our review of the tax position of 30 junior petroleum companies, from their annual reports, indicates that only four paid tax in their latest year. The review also shows a total of more than $110 million of unused taxation deductions in these companies.

To encourage investment in oil exploration companies, the tax deductions should be available to the investors and not locked into the companies.

There are many precedents for the provision of special assistance to industry. In May 1985 the federal government announced new research and development incentives, despite some criticism of the 150 per cent tax deduction as being inconsistent with the government's general opposition to tax concessions as a means of providing industry assistance.

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Companies investing in approved research and development often do not derive taxable income in their early years; a 150 per cent deduction for research and development expenditure is not much of an incentive to companies without other income against which to offset it. However, research and development companies are given the option of a cash payment (by virtue of the Industry Research and Development Act and the Grants for Industry Research and Development Scheme) instead of the 150 per cent deduction. The government is effectively buying back future tax deductions.

The government could extend this to the oil exploration industry by simply buying back the normally available, but unused, exploration tax deductions. Of course, the government would not be expected to reward past failures, so such a scheme should apply only to new, bona fide exploration expenditure. Further, the rate paid by the government to buy back deductions could be negotiated according to circumstances.

This proposal would enable some exploration companies to raise further cash but it would not help companies which need an initial injection of funds; hence the need for incentives for investors.

Another possible aid for oil exploration companies is an exemption from taxes and charges which do not relate to income. This would free more funds for exploration. For instance, the government could exempt or reduce PAYE and fringe benefits tax applicable to employees working on exploration sites.

In addition, the federal government could encourage state governments to reduce some state taxes (and reimburse them if necessary). There is a precedent in New South Wales, where payroll tax reductions are used to encourage decentralisation.

### Incentives for investors

There is a way for the government to demonstrate its commitment to Australian national security, to demonstrate its recognition of the importance of petroleum exploration, and to encourage private-sector investment while at the same time protecting its revenue base.

All this can be achieved simply by allowing new investors to obtain the direct benefit of the tax deductions otherwise allowable only to the entity carrying on the exploration activities. An exploration company could elect to distribute its tax deductions to its shareholders in much the same way as industrial companies distribute cash dividends.

This point was taken up by the Australian Petroleum Exploration Association (APEA) following a challenge by Senator Cook, the then Minister for Resources, at the 1989 APEA conference in Hobart. APEA cited previous schemes that allowed deductions for petroleum expenditure to be passed to shareholders.

In the 1960s and early 1970s, taxation legislation allowed companies raising new capital to pass the tax deduction directly to subscribers; in the late 1970s, new concessions granted rebates to subscribers in the tax year of subscription. There were government concerns about abuses of the incentives and strict restrictions were attached which significantly reduced their attractiveness.

APEA recommended a scheme which would provide shareholders with a deduction in the same period that the company incurred the exploration expenditure. It seems likely that the matching of the timing of deduction and expenditure would be more acceptable to the government than a scheme allowing a deduction to the shareholder before exploration is undertaken.

However, if the government was not concerned about this matching concept, the APEA scheme could provide an even greater incentive.

The APEA recommendation incorporated similar principles to the dividend imputation system. Deductions to which the explorer is entitled are passed on to investors. The benefits of the scheme include minimal administrative effort for government and industry, no creation of artificial tax deductions and increased capital for exploration.

The government rejected APEA's recommendation on the grounds that it was not consistent with the strategy of "quarantining of deductions and losses to individual taxpayers with any resulting losses being carried forward". The Minister for Resources, Mr Griffiths, advised APEA that the proposal contravened this policy because it allowed the transfer of deductions from one taxpayer (the company) to another (the shareholder). However, the practice appears to be no different from what is allowed, if not encouraged, for unit trusts and joint ventures.

The government's position on assistance to the oil exploration industry through the taxation system (in particular, its rejection of APEA's recommended scheme for passing tax deductions through to the shareholders) is, in our view, not acceptable. The government should reconsider its stance on taxation incentives for petroleum exploration, particularly given the recent events in the Middle East.

## Types of tax incentives

Incentives which could be introduced for investors include:

***The government should reconsider its stance on taxation incentives for petroleum exploration, particularly given the recent events in the Middle East.***

- **Reintroduction of section 160ACA rebates.** Section 160ACA of the Tax Act, which was repealed as redundant in 1989, entitled subscribers to a 27 per cent (30 per cent before 1 May 1981) rebate on moneys paid on shares in certain petroleum exploration companies. The company's entitlement to taxation deductions for exploration expenditure was reduced by the amount of rebates declared. The rebate could be claimed by both resident and non-resident shareholders.

- **Capital gains tax exemptions.** Capital gains on assets acquired after 19 September 1985 are taxable on disposal of the asset. The prospect of having to pay tax on any capital gain certainly clouds the initial investment decision. An exemption from tax on capital gains from investment in petroleum exploration companies could induce some investors to commit funds to this sector rather than other types of investment.

- **Taxation benefits for unitholders.** In several unit trust arrangements in the petroleum exploration industry, unitholders are deemed to be conducting exploration activities and hence are entitled to the exploration deductions. The stringent taxation rules for the unit trusts discourage the establishment of similar structures. If the rules were relaxed, further trusts could be established, making investor funds available for exploration. In the US, unitholders in drilling trusts freely receive the taxation benefits.

- **Encouraging foreign investment.** Direct foreign investment could be encouraged by offering special tax and other incentives, such as exemption from withholding tax, reduced income tax rates, and a higher equity limit than the 15 per cent now permitted by the Foreign Investment Review Board.

# RESOURCE VALUATION CODE

THE Australasian Institute of Mining and Metallurgy has established a mineral valuation committee. The terms of reference include:

- producing a code and guidelines for valuing mineral resources together with mechanisms to ensure their effective and cost-efficient operation;
- providing a contructively critical comment on Release No. 149;
- formulating a rational and reproducible basis for resource valuation; and
- establishing and developing a relationship between practitioners and regulators in the area of resource valuation.

Any Securities Institute members who have views or constructive suggestions in regard to mineral resource valuation are invited to contact either Norman Miskelly (02 449 6236) or Ray Soper (02 251 3077).