This is an abbreviated version of our traditional publication Oiltrends and is designed for those who are interested mainly in an overview of the oil industry as well as an investment perspective on oil securities. The complete version of Oiltrends in its traditional format, with all statistical charts on production, demand, and prices, will be automatically distributed to all oil analysts on our client list. A complete copy of Oiltrends is available upon request to any other parties who desire one.

CURRENT PETROLEUM TRENDS
by
John H. Lichtblau*

OVERVIEW

The world oil situation at the beginning of 1978 seems very different from that of a year ago. Last year, oil demand and imports were soaring in the U.S. and moving up at a fair rate in Europe and Japan. All OPEC members had increased their sales prices, causing a temporary split between the eleven who hiked prices most and the two making more moderate increases. Domestic production of oil and gas continued its long-term decline, while the nation eagerly awaited the new Administration's energy policy, which the President has called the most important item on the agenda for his first term.

By contrast, U.S. demand in fourth quarter 1977 was down year-to-year and is expected to increase minimally in the first quarter of 1978. The debate over the Administration's National Energy Plan has become bogged down in a political morass, with traditional constituent interests and pressure groups taking priority over the President's warnings of a looming global energy crisis in the absence of drastic action to curb demand. Meanwhile, the impact of the warning itself was being eroded by continuing short-term evidence of a surplus and by a groundswell of expert and industry voices that the process of adjustment to higher energy prices is already under way and that no major crisis is likely by the mid or late 1980s.

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On the domestic supply side, since September, crude production has been increasing for the first time in six years due to the start-up of North Slope production and should increase further after the second quarter of 1978, when North Slope production reaches its temporary ceiling. For natural gas production, the three year decline was arrested in 1977, despite earlier forecasts to the contrary, as production virtually stayed even with that of the previous year.

In the last 4-5 months of 1977, oil demand was falling fractionally in Europe and was rising at a relatively modest rate in Japan. European imports declined more sharply because of the growth in North Sea oil production. In 1978, the demand situation is not expected to change significantly in either Europe or Japan, while imports into Europe will decline further as regional oil production continues to rise.

Several of these factors, particularly those on the supply side, have been anticipated and, hence, did not surprise OPEC. However, they had an influence as evidenced by OPEC's failure to increase prices at its Caracas meeting. At the same time, Saudi Arabia's decision to reinstate a production ceiling will effectively curb OPEC's usable oil surplus and could result in a tightening of the supply/demand balance by late this year or early 1979.

U.S. DEVELOPMENTS

Policy Matters

The inability of the House-Senate energy conferees to reach a compromise on the natural gas price issue before the Christmas recess does not mean the President's energy bill is dead, although it could end up that way. We believe the chances are still slightly in favor of a compromise in early 1978 because: (1) the conferees were not very far apart on the issue by the time of the recess and (2) all parties have lately been talking about the need for "compromise." Reportedly, Secretary Schlesinger is eager for a compromise on the gas controversy, since without it, the entire energy bill—including its centerpiece, the Crude Oil Equalization Tax (COET)—is probably doomed. There are also indications that the two principal antagonists on the gas price issue among the Senate conferees, Johnston and Jackson, would favor some form of compromise. Both have actually offered compromise plans and for different reasons would probably like to see some sort of energy bill enacted. So would other members, such as Wendell Ford, who is one of the 18 conferees deadlocked in a 9 to 9 stalemate since October.

What the compromise, if achieved, would look like is anybody's guess at this juncture. But it would have to contain two features to be acceptable: (1) the price of new interstate gas would have to be higher than the $1.75/Mcf proposed by the Administration and accepted by the House, either immediately or through designated escalations, adjusted for inflation, and (2) the extension of controls to new intrastate gas could not result in any roll-back of intrastate prices. Thus, any acceptable compromise would give gas producers substantially higher prices for new interstate gas than the $1.46/Mcf they are now getting and somewhat higher prices than the House-approved Administration Bill.

If no gas price bill is enacted, new interstate gas prices are still likely to move up somewhat. The DOE's semi-independent Federal Energy Regulatory Commission (FERC) could raise prices if it finds that exploration and production costs have significantly increased since the FPC's last price determination, which was based on pre-1975 data.
The other big issue, the COET, may be somewhat more amenable to agreement if and when the gas price controversy has been resolved. The compromise may involve changing or abolishing the Statutory Composite Price for domestic crude oil contained in the Energy Policy and Conservation Act of 1975. The industry and its Congressional supporters insist that under this Act, the promise of world market prices for "new" new oil and oil produced through tertiary recovery could only be implemented by correspondingly restricting the price of controlled (upper and lower tier) oil from existing production. There is some indication that Secretary Schlesinger agrees with this criticism and is willing to seek a change in the law, such as exempting "new" new oil or certain other categories from the composite price. However, the DOE is apparently also trying to use the composite price mechanism as a tool to obtain support for the COET. By permitting only minimal increases in upper and lower tier prices, it can accumulate excess funds which can be returned later to the industry in exchange for support for COET from oil state legislators. (A more detailed discussion of recent upper and lower tier price increases follows.)

Whether any of this will satisfy such powerful opponents of COET as Chairman Long of the Senate Finance Committee remains to be seen. In the past, the Senator has insisted that part of the COET be earmarked for commercial development of non-conventional energy sources. Without substantive compromises on the Administration's part, President Carter's energy bill has a long way to go before it becomes law, particularly since the urgency for drastic massive action is beginning to be questioned by some. Thus, the ultimate success or failure of the energy bill is likely to depend on the Administration's and its Congressional supporters' degree of flexibility.

Meanwhile, a number of the DOE's recent or pending policy actions will have a significant impact on the U.S. oil industry. Following is a brief discussion of two of these.

1. Upper and lower tier prices have been raised monthly by a 0.407% inflation factor (reflecting an assumed annual U.S. inflation rate of 5%) in the three months, December through February. As a result, lower tier prices will rise by $.04/bbl to $5.32 between November and February, while upper tier prices will be raised by $.15/bbl to $11.90. This is about 2 percentage points below the authorized maximum increase in the statutory composite price, which includes an incentive factor. Accordingly, the actual composite price in each of the three months will be about $.50/bbl below the authorized statutory composite price. According to DOE's computations, the difference amounts to $376 million for the three month period. Since the incentive increase is not mandatory, the DOE can withhold it indefinitely or use it any way it wishes to, such as raising the price for "new" new oil or for certain types of high cost oil from existing fields above the upper tier level. To stimulate additional production, the DOE is currently planning various ways to use the accumulated shortfall between the oil producers' actual receipts and their authorized receipts under the statutory composite price ($1.1 billion by the end of February, 1978). At the same time, the ability to withhold or pay out the accumulated amount gives the DOE a powerful bargaining instrument in gaining the support of oil state legislators on the COET.

2. The DOE's recent decision to increase the value of lower tier heavy California crude (below 26° API) as of January 1, 1978, will be a boon to the local refineries using this oil, but will have some negative impact on California refiners using imported and North Slope crude. The action, which will affect 360,000 b/d of lower tier production, has been taken because this type of crude oil has had to be sold to refiners at only $4.70/bbl, or $.50-$60 below its lawful ceiling price. This is because
refiners' entitlement benefits on these crudes were insufficient to make them competitive with Arabian Light and, more recently, North Slope crude. The adjustment in entitlements ordered by the DOE has the net effect of increasing entitlement benefits for processing the heavy California crude by $1.74/bbl, while reducing entitlements on imported and North Slope crude to all California refiners by an estimated $0.55/bbl.

The action was taken by the DOE after several years of complaints by the affected producers and followed the reported shutting in of some 25,000-35,000 b/d of heavy crude and the likelihood of substantial additional shut-ins as well as a threat by California state officials to halt all heavy crude production on state lands unless price adjustments were made.

The intended beneficiaries of the change in entitlement regulations are, of course, the producers of this particular crude oil. Stripper well production will also benefit because of the additional entitlement obligations on competing imported and North Slope crude.

However, the principal beneficiaries will be the refiners of lower tier heavy crude oil, since the additional entitlement benefits for refining this crude will exceed the amount by which the crude was previously overpriced. Conversely, foreign and North Slope crude will become less attractive to California refiners because of the additional entitlement obligations. The net result will be a maximization of lower tier local heavy crude and stripper production, the backing out of most heavy crude imports, and a slight increase in North Slope shipments to the Gulf or East Coast (probably by 20,000-30,000 b/d). Some discounts off the North Slope crude price may keep this volume from having to be shipped eastward with the resulting additional transportation cost. Some consumer groups are likely to object to the scheme, since it will cause the cost of crude to some large California refiners to rise. Their views could have an impact on the review hearings the DOE has scheduled for the end of the first quarter.

Market Developments

U.S. oil demand rose by 6.3% in 1977 to a record level of 18.5 million b/d. All of the increase took place throughout the first 10 months of the year. Since then, demand has been below the year-ago level, primarily because of weather-related factors. We expect this to be reversed in the first quarter of 1978 when oil demand will show a modest year-to-year increase of about 2%. For all of 1978, we expect demand to grow by 3.4%. Thus, the increase in the last three quarters will be substantially higher than in the first. Accordingly, the utilization rate of crude oil refining capacity is likely to about 86% during the first quarter, rising to about 90% in the last 8 or 9 months of the year.

A major aspect of first quarter demand will be the substantial decline expected in imports for consumption, both for crude oil and products. The former is expected to drop by 700,000 b/d and the latter by 500,000 b/d. The reasons for the decline in crude oil imports are to be found both in the increased domestic output (generated entirely by North Slope production) and in the virtually unchanged refinery crude runs, as high product inventories are being reduced. The first quarter decrease in product imports will reflect a decline of about 100,000 b/d in residual fuel oil and a drop of about 350,000 b/d in distillate fuel oil from last year's exceptionally high import level.

Altogether, total oil imports for consumption of some 8.1 million b/d in the first quarter will be about in line with those of the last quarter of 1977. In addition, there may be
another 225,000 b/d of crude imports for the government's Strategic Petroleum Reserve.

The three major refined products will share unevenly in the current first quarter's very modest demand increase, relative to the comparable 1977 quarter. Distillate fuel oil, demand for which soared last year as a result of widespread natural gas curtailments and other weather-related factors, will show only a very modest increase in this quarter. Gasoline is also expected to move up moderately — no more than 2%, while residual fuel oil is likely to register a relatively substantial increase — about 3.5%.* The latter will be due almost entirely to rapidly rising demand on the Gulf Coast (PAD III), which may be up by 15%-20%, or more than 100,000 b/d, as the region's industry and utilities continue to switch from gas to oil. By contrast, on the East Coast (PAD I), the traditional major U.S market for residual fuel oil, there will be no increase in the first quarter and might even be a slight decline — continuing a trend that began a few years ago. Thus, between the first quarter of 1976 and the first quarter of 1978, the East Coast's share of total U.S residual fuel oil demand has declined from 63% to 53%.

FOREIGN DEVELOPMENTS

The outcome of the OPEC meeting in Caracas has been widely reported and analyzed. However, a few additional comments may still be in order.

The failure of the OPEC members to agree on a new price has affected only the OPEC marker crude (Saudi Arabian Light) which, in consequence, remained unchanged and will continue to provide the base for determining the value of all other OPEC crudes. The latter can be freely adjusted to reflect their differential value from the marker crude at any given moment. Thus, contrary to some press references, OPEC oil prices were not "frozen" at Caracas. In fact, a number of them have already been changed since the meeting, or are about to be. So far, all the changes have been downward. This is likely to continue for the next several months at least, since a number of OPEC crudes are known to have been overpriced relative to the marker crude — particularly the African sweet crudes, which were assigned premium prices last spring in anticipation of sharp demand increases, primarily in the U.S. This was the case for a while, but now with declining U.S. import demand and a growing supply of sweet crude from the North Sea, the premium is clearly out of line. Libya and Algeria have already accepted this fact and have begun to reduce their official prices in recent weeks. Nigeria may be expected to follow suit. Thus, the composite OPEC price is likely to be lower in the first quarter of this year than in the last quarter of 1977.

Another point that has not been fully explored is that maintenance of the existing marker crude was less of a victory for Saudi Arabia, the principal force behind it, than a compromise in which all sides received something. The quid pro quo for price maintenance was the Saudis' reimposition of the Aramco crude oil production ceiling of 8.5 million b/d. This was more than a gesture, because it assured the other members that if and when export demand for OPEC oil starts to rekindle, the incremental supplies will come primarily from countries other than Saudi Arabia. It will also be instrumental in bringing about an end to the OPEC surplus. With Saudi Arabia's new production ceiling, OPEC's total allowed capacity in 1978 will average about 1.5 million b/d above required production of 31.5 million b/d. This contrasts with an excess of 7-8 million b/d in physical productive capacity. Physical capacity is a technical measure, while allowed capacity is more of a political measure. As discussed below, it is unlikely that OPEC's allowed capacity will be reached in 1978. However, it may be approached in the early part of 1979, making a year-end 1978 price increase a realistic possibility.

* The coal strike is not expected to have any impact on residual fuel oil demand, at least through January. If it lasts much beyond then, it could generate a marginal increase in demand.
Free World oil demand outside the U.S. rose by about 3% in 1977. Within this total, Europe registered a 1% gain, Japan 4.2%, and the less developed countries (including OPEC members) 6% -- all based on incomplete data. The near stagnation of demand in Europe was due to a combination of slow economic growth and an increase in natural gas supplies and nuclear power. The Japanese demand increase may appear high in the current world environment, but it reflects a decline of nearly 60% from the long-term pre-1974 growth rate, and is also about one percentage point below the growth forecast at the beginning of 1977.

We do not expect foreign demand growth to change significantly in 1978. Perhaps European demand will grow slightly faster than last year, thus raising total non-U.S. oil demand in 1978 by about 3.5% -- about in line with the expected increase in U.S. demand. Hence, total Free World oil demand would also grow by 3.5%, compared to somewhat over 4% in 1977.

With Free World oil production from non-OPEC sources expected to grow at 10%, or about 1.8 million b/d, requirements from OPEC in 1978 will remain virtually unchanged from last year. However, as demand is expected to rise throughout 1978, year-end requirements for OPEC oil will probably be somewhat higher than at the beginning of the year.

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OIL INDUSTRY
INVESTMENT PERSPECTIVE AND STRATEGY

SUMMARY

We have long taken the position that the energy area is one of the more attractive investment sectors and have recommended that the typical portfolio be overweighted with energy securities. Our positive outlook has been based on "built-in" domestic earnings growth -- at least over the next few years -- due to continuing increases in domestic oil and gas prices. Among the larger basic industries, we feel the energy group stands out as having better prospects for earnings growth, especially in a sluggish economy. We have suggested a large overweighting in domestic oils and the oil service sector and an underweighting in the international oils and the coal stocks. Our specific current recommendations in the oil industry are:

**Major Integrated**
- Atlantic Richfield
- Exxon
- Marathon
- Phillips
- Mobil
- Shell

**Producers**
- Louisiana Land
- Mesa
- Superior

**Nuclear, Coal, Petroleum**
- Kerr-McGee

**Special Situation**
- Standard Oil of Ohio

Oil stocks as a group outperformed the overall market averages for the first seven months of 1977, but heavy liquidation in August caused the group to substantially underperform that month. Over the final four months of 1977, both the domestic and international oils have modestly outperformed the Standard & Poor's 500 Industrials (see Table on page 6). The oil service issues did quite well throughout 1977.

In general, the weakness in oil stocks during August and the average market performance during the latter part of the year can probably be attributed to disappointing demand trends overseas, which have resulted in a surplus of foreign oil and concern over the impact such a surplus might have on industry operating trends and profits. Currently, the most important concerns that are probably affecting oil stocks are noted below along with our responses.

- **Crude oil prices** in foreign markets might come under considerably more downward pressure with the Organization of Petroleum Exporting Countries losing some of its power to move prices higher because of new production sources outside of the OPEC countries. In this regard, at its December, 1977, meeting, the OPEC oil ministers did not raise the basic price for oil exports.

While there has been considerable discounting in spot crude oil markets and even some erosion in the much larger contract market, the price weakness has mostly been confined to the $.10-.15/barrel area. Some low sulfur crudes, which were clearly overpriced relative to the Saudi Arabian marker crude, have declined as much as $.30-$ .40/barrel. In our opinion, the price erosion in crude oil markets has been modest to date, with much
of the erosion representing a realignment of prices to better reflect current market values.

- Earnings in the U.S. refining/marketing sector have risen to unsustainably high levels and will probably decline because of competitive conditions in the marketplace. In addition, the Administration's energy proposals call for a large new tax on domestic crude oil production that may not be fully passed on because of current market conditions.

Given that U.S. crudes are still priced well below imports, that refinery operating rates are relatively high, and the pressures on management to maintain profitability rather than market share, we expect that earnings from this area will continue at a good level relative to historical standards with little likelihood of significant growth or major erosion. During the fourth quarter of 1977, operating margins for domestic refiners were being squeezed primarily by weakness in fuel prices. We suspect this pressure will not last beyond the first quarter.

- Potential new domestic legislation and regulation are most worrisome and difficult to analyze.

The political environment is perhaps the most difficult problem to evaluate and certainly impossible to forecast. Since energy costs have created a political furor and the cost of oil imports is a major economic problem, government involvement will continue indefinitely, a fact of life that investors in oil securities will have to accept. In reality, government rules and regulations have effectively lessened competition in the marketing of refined products, and this area has experienced a dramatic improvement in both earnings and return on investment. The lower P/Es presently being accorded oil stocks as a group can probably be attributed to the onus of present and potential government regulation.

- Recent quarterly earnings have been disappointing, and earnings estimates for both 1977 and 1978 have been lowered.

Despite the recent earnings disappointment which we largely attribute to a sharp jump in exploration charges and a steady inflationary rise in operating costs, we believe most companies will report higher fourth quarter 1977 earnings, with further gains likely in 1978. (For our specific 1977 and 1978 earnings estimates, please refer to our Oil Industry Commentary of December 9, 1977.)

OUTLOOK
While there are admittedly many uncertainties in the oil industry, we believe it unlikely that operating conditions in either the domestic or foreign areas will deteriorate much further from current levels.

- Overseas, most integrated processing and marketing facilities are operating at either a nominal profit or at a loss -- a condition that will probably continue at least through the spring months and possibly longer, but could improve modestly next fall.

Supply and demand trends will be the primary determinants of how long the current worldwide surplus of oil lasts. As of the moment, the outlook for Free World demand is not too encouraging, but it could improve if overall economic activity in the principal European countries picks up. Perhaps more important with respect to the current surplus are the announced production cutbacks by both Saudi Arabia and Abu Dhabi that together might curtail output by as much as 1.0 million b/d. Another factor worth considering is the stockpiling planned by the U.S. government to meet the mandated goal of the Strategic Petroleum Reserve
of 1.0 billion barrels of crude oil in dead storage by the early 1980s. This stockpile, now about 5 million barrels, is scheduled to be increased to 200 million barrels by the end of 1978. To attain this latter goal, stockpile purchases could very well approach a level of 500,000 b/d, or more, by the end of 1978. Finally, it appears that OPEC crude oil prices may not change much during 1978 and, therefore, there may be no incentive for the industry to stockpile in advance of a price increase which has occurred several times in the past few years.

Our analysis of the trends in overseas supply and demand, as well as the internal pressures arising from the losses being incurred in downstream operations, leads us to believe that margins from integrated production, refining, and marketing of crude oil overseas may be at an unusually depressed level right now. Most likely, the next major movement will be toward some improvement, perhaps by the latter part of 1978.

The exceptions to the current lackluster outlook for overseas oil profits are those companies that have new oil production coming onstream in the North Sea or else some involvement in foreign natural gas production, two areas that enjoy above-average profit potential at present.

In the domestic industry, both crude oil and natural gas prices should continue to rise, although by how much cannot be determined until Congress finalizes the National Energy Plan. In addition, there are ample signs that the long-term decline in both natural gas and crude oil output might moderate during 1978. If output is maintained close to 1977 levels and prices rise as expected, earnings from producing activities should go up significantly.

In the year just ended, profit growth from higher natural gas prices was offset by the decline in crude oil production and a surge in exploration expenses charged against income. Crude oil prices were held under tight controls throughout the year. In the year ahead, we believe exploration charge-offs will rise at a slower rate, allowing higher prices for both crude oil and natural gas to have a more meaningful impact on producing profits. Our basic assumptions are that profits from producing activities will advance handsomely in 1978 while earnings from refining/marketing will be relatively unchanged. Overall, this should result in profit growth of 7%-10% from integrated oil and gas operations. Non-oil activities may be more seriously affected by the slowing in economic growth envisioned for 1978 and, hence, the profit outlook for such activities as chemical manufacturing, coal mining, and nuclear operations may not fare as well as the basic oil industry. Because of these non-oil activities and no growth in downstream and overseas earnings, some of the larger oil companies may be hard pressed to expand 1978 profits as much as 10% over those expected in 1977.

The major variable and uncertainty in the outlook for 1978 revolves around returns from domestic refining/marketing activities. We think earnings from this area were at an all-time peak in 1977, and this sector has become an important profit center. Due to excessive oil imports, inventories are now well above a year ago and are probably excessive relative to current demand. There has been some modest weakening of gasoline prices, and residual oil is now at a very depressed price level. As a result, refiners' profit margins were weakening in late 1977. We are anxiously waiting for oil imports to be cut back, as they will have to be in the near future. Investors should monitor the level of imports closely, as this will probably signal a healthier environment for the entire refining/marketing sector.
RECOMMENDATIONS

In the oil industry environment we envision for 1978 and 1979, the common shares of many of the larger oil companies should continue to be relatively attractive over both the short and longer term. We consider many of these issues to have considerable potential for capital gains and to be at least as attractive as most other large basic industries. For the typical larger investment portfolio, our specific recommended portfolio weighting continues to be roughly as follows:

<table>
<thead>
<tr>
<th>PORTFOLIO MARKET WEIGHTING (Percentage)</th>
<th>LFRUT</th>
<th>S&amp;P Sept. 30, 1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internationals</td>
<td>5.00</td>
<td>9.29</td>
</tr>
<tr>
<td>Domestic</td>
<td>10.00</td>
<td>5.60</td>
</tr>
<tr>
<td>Oil Service</td>
<td>7.00</td>
<td>2.30</td>
</tr>
<tr>
<td>Coal</td>
<td>---</td>
<td>.28</td>
</tr>
<tr>
<td>Total Energy</td>
<td>22.00</td>
<td>17.47</td>
</tr>
</tbody>
</table>

Our enthusiasm for the energy area is importantly influenced by a number of factors, the most important of which are: low P/E ratios accorded most of the stocks; anticipated gains in cash flow and earnings; and low dividend payout ratios, which would allow for significant dividend growth over the next few years. Furthermore, the quality of reported earnings has improved considerably in recent years, with effective income tax rates much higher now than in the past. The growth in cash flows expected over the next few years should further strengthen the currently strong balance sheets of most of the larger oil companies.

Perhaps overriding all other investment considerations is the "clearing of the air" that could take place with the enactment of a "National Energy Plan." Final proposals are still under active discussion in a House/Senate Conference Committee. Hopefully, the opposing factions will reconcile their differences and final legislation might be enacted sometime in the first quarter. Most of the proposals being discussed are acceptable, and if a final agreement is reached along the lines that are currently anticipated, the impact on most oil securities should be quite positive.

Many facets of individual oil companies' operations loom as very important for investors, but in our view, the key ingredient for success over the next few years may well be individual company exposure to rising domestic oil and gas prices and to future domestic exploration. Our primary selections among the bigger oil companies are as follows:

- Atlantic Richfield (ARC, 49, NYSE) - One of the best rounded companies in the industry. Earnings in 1978 will benefit importantly from Alaskan production, which, in turn, should provide ample financing for an interesting exploration program in Alaska and other areas. The stock has been affected by concerns over Alaskan profits and a downgrading of the outlook for chemical earnings. Our earnings estimates are: $5.70 per share in 1977 and $6.60 in 1978.
- *Exxon (XON, 45 5/8, NYSE)* - Earnings in 1978 will be favorably impacted by increased oil production from Alaska and the North Sea. Also, refining capacity in the U.S. was recently expanded by 200,000 b/d. Earnings in 1977 were negatively impacted by losses in translating foreign currencies to dollars. Hopefully, currency translation will be less of a problem in 1978. Our earnings estimates are: $5.60 per share in 1977 and $6.50 in 1978.

- *Kerr-McGee (KMG, 46, NYSE)* - Attractive domestic uranium and coal properties, coupled with interests in North Sea oil and large natural resource chemical operations make KMG one of the most attractive energy/natural resource companies. While new chemical capacity is likely to spark improved earnings in 1978, rising natural gas and coal production plus higher uranium output and prices should contribute meaningfully to earnings beginning in 1979, which we believe will result in above average earnings growth into the 1980s. As the largest producer and largest holder of uranium reserves in the U.S., KMG should benefit from the above average growth in nuclear power that we foresee. Our earnings estimates are: $4.80 per share in 1977 and $5.75 in 1978.

- *Louisiana Land and Exploration (LLX, 20 7/8, NYSE)* - Based on substantial volumes of new gas production from the Gulf of Mexico over the next 2-3 years as well as higher domestic oil prices, we expect LLX's earnings and cash flow to increase sharply over the next few years. In addition, the company has an attractive exploration exposure in the Overthrust Belt in the Rocky Mountains, the Gulf of Mexico, and deep drilling in Louisiana. Our earnings estimates are: $2.60 per share in 1977 and $3.10 in 1978.

- *Marathon Oil (MRO, 47, NYSE)* - Domestic oil production should be enhanced over the next year or so by an increased allowable expected for the Yates Field in Texas. Also, some new natural gas should come onstream from the Gulf of Mexico. Results from current drilling in the North Sea (Brae Field) will have an important impact on near-term stock prices, but over the next few years, a number of projects promise to add importantly to earnings. Our earnings estimates are: $6.40 per share in 1977 and $7.35 in 1978.

- *Mesa Petroleum (MSA, 37 7/8, NYSE)* - The company has enjoyed rising earnings for several years. New production of oil or natural gas is expected from the Gulf of Mexico in 1978 and 1979 and from the North Sea, perhaps in 1980 or 1981. We anticipate earnings and cash flow will continue to grow at an above average rate and probably exceed that of the recent past. Our earnings estimates are: $2.45 per share in 1977 and $3.00 in 1978.

- *Mobil Corp. (MOB, 60 5/8, NYSE)* - The turnaround apparently underway in MOB's domestic oil and gas production combined with attractive projects overseas (North Sea and Indonesia) should result in above average (10%) gains over the next four to five years. With the current low P/E ratio and high dividend yield, the shares represent one of the most attractive values in the group. Our earnings estimates are: $9.50 per share in 1977 and $11.00 in 1978.

*IN CONNECTION WITH ARBITRAGE ACTIVITIES, THE FIRM IS LONG AND SHORT KERR-McGEE OPTIONS AND IS LONG MESA PETROLEUM COMMON AND SHORT THE OPTIONS AND MAY FROM TIME TO TIME BUY OR SELL THE ABOVE MENTIONED SECURITIES.*
o Phillips (P, 29 1/2, NYSE) - For many years, Phillips has been spending huge sums of money to develop the Ekofisk Field in the Norwegian North Sea. Production of both oil and natural gas is now rising rapidly, which should result in above average earnings gains over the next few years. With increased cash flow, we anticipate a more aggressive exploration effort and a considerable upgrading of domestic operations. Our earnings estimates are: $3.40 per share in 1977 and $4.50 in 1978.

o Shell Oil (SUO, 30 7/8, NYSE) - There are no unique or dramatic developments taking place at Shell. However, we regard it as a well run, efficient company whose operations and results generally mirror those of the industry. We anticipate the recent decline in oil and gas production will moderate over the next few years and, as a result of higher prices, earnings will expand. Earnings from its large chemical operations held up quite well in 1977 but this area could be troublesome in 1978. Despite reservations about near term chemical prospects and our feelings that petroleum prospects are only average, the current P/E ratio impresses us as unusually low and the stock has attraction on this basis. Our earnings estimates are: $5.10 per share in 1977 and $5.60 in 1978.

o Standard Oil of Ohio (SOH, 70, NYSE) - Production from the North Slope of Alaska started in the summer of 1977 and should rise sharply beginning in the second quarter of 1978. Large gains in cash flows expected over the next few years should permit a rapid improvement in the company's debt-to-equity ratio as well as an aggressive exploration program. We anticipate that Sohio will continue to be one of the most interesting and controversial issues in the oil industry. Our earnings estimates are: $4.15 per share in 1977 and $12.00 in 1978.

o Superior Oil (SOC, 236 1/4, NYSE) - The largest independent oil and gas producer, the company should benefit importantly from the rising prices for oil and natural gas anticipated over the next few years. Production of oil and gas has been declining for several years but natural gas production was sharply higher in the third quarter of 1977. We think production trends may become more positive in the next few years. Our earnings estimates are: $16.00 per share in 1977 and $19.00 in 1978.

(Priced at close on January 6.)

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST