
FRBSF WEEKLY LETTER

July 20, 1984

Oil Merger Worries

The recent surge in mergers among oil industry giants has raised concerns about their impact on domestic oil exploration and on the credit markets. Having increased their oil reserves, the surviving firms could cut back on domestic exploration and thereby make the U.S. more dependent on foreign oil supplies. The enormous amounts of money involved in financing the mergers could reduce the supply of credit left over for productive investments and drive up interest rates in the process. This *Letter* will debate whether these concerns are justified.

Anti-competitive effects are less worrisome as none of the mergers will result in a firm with more than 10 percent of the U.S. market. The Federal Trade Commission is dealing with potential problems by requiring the merged firms to sell off some refineries and gas stations to prevent concentrations of market power and any anti-competitive effects on the regional level.

Why merge?

Conservation and the use of alternative energy sources have created a soft market for oil in the last few years, leading to a scramble by the oil industry to maintain profits. One industry response has been to cut costs by reducing employment. Since 1981, the top dozen oil firms have cut about 14 percent of their combined workforce. This drive to increase productivity is one reason for the recent merger activity since the existence of any economies of scale in the discovery, refining, and sale of oil will allow the enlarged firms to operate more efficiently. The industry believes additional gains are possible, as indicated by Chevron's announcement, after its purchase of Gulf, of plans to cut 10-15 percent of the combined workforce because of expected gains in productivity. Texaco also has predicted a reduction in its workforce resulting from its merger with Getty.

Another possible motivation for the mergers was the attractiveness of significantly increasing stocks of domestic oil reserves without having to undertake the risks involved in exploration. The industry was reminded of these risks after \$1.7 billion was spent on a futile effort at Alaska's Mukluk field. In the acquisition of Gulf for a record \$13.2 billion,

Chevron bought 700 million barrels of proven domestic oil reserves, and thereby increased its stock of U.S. reserves by 65 percent. In addition, it acquired 1.2 billion barrels of foreign oil reserves. Texaco increased its domestic reserves by 118 percent, while Mobil increased its U.S. reserves by 15 percent, with their recent acquisitions.

Effects on exploration

For a country wishing to ensure itself against any disruption in its supply of foreign oil, these mergers become a concern if they adversely affect the industry's efforts to find new oil. The large jump in the price of oil in the past ten years and the lowering of the cost of finding new oil through more favorable tax treatment have had the desired effect of dramatically increasing the amount of money spent on exploration. Still, increased expenditures for exploration have not prevented a drop in U.S. reserves from 35 billion barrels in 1973 to less than 30 billion barrels today, although they have certainly helped to keep the level of reserves higher than it would have been otherwise.

To finance the mergers, the firms involved increased their debt burden committing a larger part of their revenues to interest rate expenses. The result may be that they will be less inclined to take on the financial risks inherent in searching for oil. Chevron, for example, raised its debt from \$2 billion to possibly as high as \$15 billion, depending on how much of its own cash it uses and how many of its assets it sells. Since the debt is tied to floating rates, it increases the uncertainty of the merged firm's profit stream by making profits more vulnerable to movements in interest rates. Following the merger announcement, Standard and Poors lowered Chevron's credit rating from AA+ to AA-. A firm already has to rationalize exploration expense in the face of the uncertain world price of oil (presently \$29 a barrel) in comparison to the discounted cost of exploration. Thus, in the short-run, a merged firm might rationally decide to minimize the downside potential of its earnings by reducing the amount of funds spent for exploration.

Increased financial leverage could be an important factor in reducing the combined firm's exploration

FRBSF

activities below what the total for the two independent firms would have been. However, any reduction in this regard probably would be only a temporary phenomenon. After merging, the surviving firm will move to an optimal financial capital structure (combination of debt and equity) that may differ from the optimal structure for the separate firms. The merged firm normally will replace bank borrowing and other short-term debt with longer term debt and with new equity issues. Thus, even if it is important in inhibiting a firm's willingness to undertake exploration, the undesired increase in leverage is likely to be short-lived. For example, the bank lines of credit extended for the mergers mentioned are scheduled to be paid back completely within eight years.

The impact of the increased debt burden on the recently merged firms' exploration is minor compared to the role played by the price of oil. Since 1981, the number of new wells drilled has levelled off because of the limited number of prospects judged to have a sufficient chance for success. The mergers will not alter the definition of a good prospect; that will continue to depend on the industry's forecasts of oil prices in the future. Furthermore, in the long-run, the merged companies will need to maintain their supplies of reserves to meet the demands of their expanded wholesale and retail markets.

Moreover, there are even possible benefits from this merger activity. The new firms, by having access to two lists of possible oil sites, will be able to devote their resources to the most likely candidates. In addition, the pooling of talents and the end to redundant efforts may lead to economies of scale in discovering new sites.

Effects on credit

All three of the recent major oil company mergers involved financing by a syndication of a large number of domestic and foreign banks. The initial credit packages or "facilities" used in financing acquisitions were actually lines of credit, which are commitments from the banks to lend in the future at agreed upon terms, such as loan size, maturity and pricing. The commitments give the borrower the option to borrow, but by themselves are not loans. They offer flexible credit arrangements to firms by providing access to billions of dollars at relatively low contract costs. In the case of the Chevron merger, the credit facility set up a revolving line of credit for two years that will be

converted to a term loan of six years. The revolving loan gives Chevron the use of funds while searching for more attractive borrowing opportunities in debt and/or equity markets, or while selling unwanted assets. After two years, when the revolving credit terminates, Chevron will determine the amount of the term loan.

The flexibility of these credit packages is one reason bank financing has been used. The magnitude of funds required and the short time available to prepare a deal (in the case of Chevron, a matter of days) were also important considerations. The bank credit facilities enabled the acquiring firms to commit huge sums of money in the effort to purchase other companies without forcing them to overextend their own positions in the financial markets. If a firm's bid fails, as in the case of ARCO's attempt to purchase Gulf, it pays a "drop dead" fee (in that case, 1/16 of 1 percent) and avoids the costs of raising the funds and then having to find an alternative use if the money is not needed.

While the magnitudes required to finance these mergers are too large for a single lender, the domestic and foreign institutions involved in loan syndications can raise these funds quickly through world financial markets, e.g., certificates of deposit, commercial paper, Federal funds, and Eurodollar CDs, without significantly affecting interest rates. In addition, the credit risk is also spread out among a wide base of lenders. In the record Chevron commitment, the maximum single bank participation was still a sizable sum of \$500 million, but most institutions limited themselves to \$100-200 million, a small fraction of the amount Chevron would have had to raise on its own.

It is because of these advantages that bank financing was used. Contrary to some speculation, these mergers are not an "unproductive use of scarce capital." They also are not likely to significantly affect the availability and cost of capital for other borrowers who depend on the banking system. These financing arrangements have only a transitory impact on the credit markets because they are essentially transfers in the ownership of financial assets. For instance, the Chevron purchase of Gulf will not put pressure on the overall credit and equity markets (although it will alter the debt-equity mix), since the credit extended to Chevron will simply be used to make payments to Gulf shareholders. Little reason exists for these

loans to cause interest rates to rise and borrowers to be crowded out as long as the payments to Gulf shareholders are reinvested (at least temporarily) in financial instruments such as bank deposits, debt instruments, and the stock market. Investment is reduced only to the degree that the Gulf shareholders fail to reinvest their capital gains, that is, to the extent they spend their gains on consumption.

Conclusion

In its economic aspects, beyond considerations of competition, the recent rash of mergers in the oil

industry probably will not have a significant negative impact on the industry or the economy. Money spent on exploration will likely continue to depend more on the price of oil and the number of good prospects, than on the size of a firm's oil reserves. Furthermore, these mergers alone should not disrupt the financial markets because they represent only a transfer of ownership, not a non-productive use of investment capital.

Thomas Klitgaard and Gary C. Zimmerman

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

Editorial comments may be addressed to the editor (Gregory Tong) or to the author . . . Free copies of Federal Reserve publications can be obtained from the Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 974-2246.

Alaska Arizona California Hawaii Idaho
Nevada Oregon Utah Washington

San Francisco
Bank of
Federal Reserve
Research Department

PRESORTED
FIRST CLASS MAIL
U.S. POSTAGE PAID
PERMIT NO. 752
San Francisco, Calif.

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding	Change from	Change from 12/28/83	
	7/4/84	6/27/84	Dollar	Percent Annualized
Loans, Leases and Investments ^{1 2}	183,113	1,530	7,088	7.7
Loans and Leases ^{1 6}	163,817	1,404	8,462	10.4
Commercial and Industrial	49,503	116	3,540	14.8
Real estate	60,389	80	1,490	4.8
Loans to Individuals	28,666	168	2,015	14.5
Leases	5,030	41	33	- 1.2
U.S. Treasury and Agency Securities ²	12,152	230	355	- 5.4
Other Securities ²	7,144	- 104	- 1,019	- 24.0
Total Deposits	194,341	7,627	3,344	3.3
Demand Deposits	50,259	6,776	1,022	3.9
Demand Deposits Adjusted ³	28,883	433	- 2,448	- 15.0
Other Transaction Balances ⁴	12,808	984	33	0.4
Total Non-Transaction Balances ⁶	131,275	- 132	2,290	3.4
Money Market Deposit Accounts—Total	38,625	144	- 972	- 4.7
Time Deposits in Amounts of \$100,000 or more	39,431	- 708	1,266	6.3
Other Liabilities for Borrowed Money ⁵	20,975	1,163	- 2,032	- 17.0
Weekly Averages of Daily Figures	Period ended 7/2/84	Period ended 6/18/84		
Reserve Position, All Reporting Banks				
Excess Reserves (+)/Deficiency (-)	140	45		
Borrowings	96	131		
Net free reserves (+)/Net borrowed(-)	44	- 86		

¹ Includes loss reserves, unearned income, excludes interbank loans

² Excludes trading account securities

³ Excludes U.S. government and depository institution deposits and cash items

⁴ ATS, NOW, Super NOW and savings accounts with telephone transfers

⁵ Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

⁶ Includes items not shown separately