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Some Financial Implications of Divestiture Legislation

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SOME FINANCIAL IMPLICATIONS OF DIVESTITURE LEGISLATION

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Abstract

Those critical of divestiture legislation emphasize both the relative lack of concentration and the advantages of grouping the development of two or more energy materials under the management of one corporate business. Many of these arguments are extremely difficult to evaluate without harder evidence than appears to be available at present. This paper purports to deal with some of the financial and legal consequences of different possible methods of accomplishing divestiture.

1. INTRODUCTION

The anger of consumers at the increase in oil prices following the 1973 embargo has resulted in a search for political measures to lower all prices by enforcing conditions of competition in the oil industry. Over thirty pieces of legislation have been introduced into Congress calling for the break up of the largest oil companies. The advisability of this measure poses a complicated question made up of many different but interrelated facets that should be studied carefully.

2. LEGISLATIVE REQUIREMENTS

The consumer resentment resulted in the proposal of three bills in the first two months of 1977. Two house bills (H.R.683, introduced in January and H.R.3370 introduced in February) are identical.* They are known as the Energy Industry Divestiture Act and provide for amendment to the Clayton Act requiring of every oil company above a certain minimum level of production:

(1) Horizontal divestiture by which energy companies are prohibited from controlling more than one energy source.
(2) Vertical divestiture by which energy companies are prohibited from engaging in more than one stage of production.
(3) Prohibition of joint ventures between major companies developing energy resources unless they receive federal permission.

The Federal Trade Commission is empowered to approve submitted plans for compliance with these requirements and may conduct hearings and call for evidence or information sufficient to evaluate plan merits and compliance.

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*U. S., Congress, House, A Bill to Amend the Clayton Act to Prohibit Undue Concentration in the Energy-Producing Industries, and for Other Purposes, H.R.683 and H.R.3370, 95th Cong., 1st sess., 1977.

A third bill called the Petroleum Industry Competition Act (S.795) was submitted to the Senate January 4th of this year, and is identical to a bill that was approved almost a year earlier by a very close vote of the Senate Subcommittee on Antitrust and Monopoly of the Senate Committee on the Judiciary.* It differs from the two House bills in the following respects:

(1) It calls for vertical integration, only, requiring (with some exceptions) the separation of energy extraction refining, transport, and marketing assets.
(2) The Federal Trade Commission would play the enforcing role (more thoroughly spelled out in this than the two House bills), along with legal prerogatives of the Securities and Exchange Commission.
(3) Actions representing appeal from administrative decision may be brought only in the Temporary Petroleum Industry Divestiture Court, with appeal only to the Supreme Court.

3. ENFORCEMENT PROCEDURES

It has been established that although only the Justice Department can enforce the Sherman Antitrust Act, the Federal Trade Commission and the Justice Department have joint enforcement jurisdiction with regard to both the Clayton and the F.T.C. Acts of 1914. In addition to its own enforcement powers, the F.T.C. may also be designated as a "master of chancery" to determine appropriate relief in a suit instituted by the Attorney General.** Since about 1948 these two agencies have cooperated to avoid effort duplication. Each case is assigned according to its characteristics as well as to the capabilities of the respective agencies.***

*U. S., Congress, Senate, A Bill to Restore and to Promote Competition in the Petroleum Industry, and for Other Purposes, S.795, 95th Cong., 1st sess., 1977. In addition, there have been many deconcentration bills proposed or introduced into Congress in recent years, aimed sometimes at individual industries and sometimes at Big Business in general. See Concentrated Industries Act (S.2614), introduced by Senator Fred Harris in 1971, and Phil C. Neal et al., "Report of the White House Task Force on Antitrust Policy," Antitrust Law and Economics Review 2 (Winter 1968-69): 11-76. Senator Philip Hart introduced a general deconcentration bill and indicated target industries in the following order of priority: chemicals and drugs, electronic computing and communication equipment, energy, iron and steel, motor vehicles, and nonferrous metals. This priority was based on these industries' comparative contribution to inflation. Remedies included divestiture by spinoff, replacement of long-term supply contracts by frequently negotiated ones, alteration of a firm's financial backing commitments, elimination of exclusive dealerships, alteration of advertising expenditures, licensing of patents and trademarks, and divestment of certain assets. See Industrial Reorganization Act of 1972 (S.3832) and Philip A. Hart, "Restructuring the Oligopoly Sector: The Case for a New Industrial Reorganization Act," Antitrust Law and Economics Review 5 (Summer 1972): 35-49.

**"Comments: Aspects of Divestiture,", pp. 139-140. That the duality of enforcement is pervasive is indicated by the following rule of thumb summarizing the civil jurisdiction of the two agencies: (1) Price fixing, boycotts, vertical restraints and market division agreements which are per se illegal and other agreements in restraint of trade which are in being and demonstrable in effect--FTC and Justice; (2) Trade practices constituting potential or incipient restraints of trade--FTC only; (3) Price and other trade discrimination--FTC and Justice, although the Antitrust Division does not initiate proceedings involving only this section of the statute; (4) Exclusive dealing and tying arrangements--FTC and Justice; (5) Mergers, acquisitions and joint ventures--FTC and Justice; (6) Director interlocks--FTC and Justice. (David Roll, "Dual Enforcement of the Antitrust Laws by the Department of Justice and the FTC: The Liaison Procedure," The Business Lawyer 31 [July, 1976]: 2077.)

***Ibid., pp. 2076-77.

4. HORIZONTAL DIVESTITURE

The proposed House bills prohibits any energy company from controlling more than one basic energy source. This is proscribed in the theory that if the now-existing energy companies (oil, coal, etc.) are allowed to become energy-source diversified then competition among coal, gas, uranium, oil, and the more exotic sources as they develop, will ease, resulting in higher prices charged to consumers.

Oil companies, in defense, argue that their concerted expansion into coal and uranium beginning about 1965 was the result of after-tax profit considerations. Actually, concentration levels in fossil fuel industries are relatively low, evidenced by the fact that there are 25 other U.S. industries with higher concentration ratios than energy.*

Oil apologists assent that the record belies the belief that oil companies would ignore the necessary expansion of other forms of energy while exploiting oil and gas. The record seems to indicate that there are nine oil companies controlling substantial development activity in coal, while all but four in the top 20 oil companies are in uranium development with Kerr-McGee and Standard of New Jersey apparently the leader in uranium mining activities.** Also, according to oil proponents there are also some managerial advantages accruing from the movement of oil to acquire coal and uranium interests. First, there are possible economies involved in the better utilization of management by "spreading it thinner." Because of the complementary nature of the technologies involved, this is especially true in regard to oil and gas expansion into coal. Also, the research that the oil companies have engaged in should be of great value in developing a workable coal conversion technology because both oil and coal are hydrocarbons.***

5. VERTICAL DIVESTITURE

The rationale for limiting each energy corporation to one stage of energy production is that many producers dealing with many transporters dealing with many processors dealing with many retailers will result in lower prices than when all stages are controlled by one firm. The claim is that vertically integrated firms are able to control the market to the detriment of both the non-integrated energy competition and the consumer. It is also claimed that the bills will restrict the ability of the international oil companies to ration Mid-East oil to consumers by passing on to them the high royalty payments rather than bidding them down. It is thus alleged that Big Oil's supposed efficiency is based on the technique of monopolizing raw materials: that integration guarantees other levels of the integrated operation a supply of something to buy or sell. It should be mentioned, however, that the evidence indicates that small producers do gain access of offshore oil.****

There seem to be three basic kinds of benefits commonly recognized as a result of integration. The first is economics of scale resulting from the superior organizational efficiency in any one large production unit or firm than in a small one which is made possible by the greater profits accruing from the other integrational benefits. The survivor techniques of comparing industry domination by firms of different sizes at different times has revealed big-firm cost advantages in crude oil and natural gas production, coal mining, and uranium mining, but not so much in oil refining. Second, cost savings from integration are likely where the use of independent firms would involve frequent and difficult bargaining due to uncertainties and complex technologies. In this situation integration could increase the degree of internal coordination and efficiency.*****

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*T. D. Duchesneau, Competition in the U.S. Energy Industry (Cambridge, Mass.: Ballinger, 1975), p. 96, and Dismembering the Oil Companies (Washington, D. C.: American Petroleum Institute, 1976), p. 1.

**Cordell Moore, Energy: U.S. at the Crossroads (Charleston, Ill.: Eastern Illinois University Energy Resource Management Program, 1975) and Duchesneau, pp. 8 and 86.

***Moore, passim.

****Duchesneau, p. 101; W. P. Tavoulareas, "Is Divestiture the Answer?" St. Louis Post-Dispatch, 3 February 1976, p. 2B.

*****Duchesneau, passim.

Third, integration could also have beneficial effects where the costs of obtaining information and/or the costs of enforcing contracts are high.* Another benefit to vertically integrated firms can come from shifting profits from one level to another.**

Have Big Oil companies, indeed, enjoyed higher profits from their advantages? Ratio analysis has been used to compare the dividend experience of petroleum company stockholders with those holding Standard and Poor's 500 Stock Composite Ratio analysis has also been used to compare average accounting return on invested capital. Both these methods indicate that petroleum stockholders received lower than normal dividends and that return on invested capital was at least no higher than for other sectors of industry.*** The abnormally high 1974 profit was largely due to the effect of the use of the FIFO method of inventory valuation which inflated valuation of oil inventory.****

One argument for integration is the proposition that it brings a degree of revenue stability to the oil company so structured. That non-integrated firms experienced average monthly fluctuations in gross margins four times greater than an integrated refiner has been revealed by recent research. Evidentally, because integrated firms hold what amounts to diversified asset portfolios, they tend to be able to reduce the risks attendant to investment and can therefore attract capital at less cost.*****

Considering that the Alaskan pipeline cost $7 billion, a single North Sea drilling platform $750 million, and a competitive refinery $500 million, it seems doubtful that breaking down the large integrated oil companies from 18 to 72 would facilitate the raising of the required huge capital sums.****** Indeed, even in their present size may have difficulty, according to recent studies, generating the estimated $315 billion required in the next decade to maintain 60 percent national self-sufficiency.******* Although governmental mechanisms exist to assist capital markets--such as raising (or decontrolling) energy prices, the reinstitution of depletion allowances, subsidization, or out-and-out nationalization, we must be wary lest the cure turn out be worse than the disease.********

On the international front, OPEC will probably survive, perhaps even nurtured by the implementation of divestiture. If divestiture implementation decreases U.S. productive efficiency, either we will become more dependent on foreign aid or consumers will suffer from substantially higher energy prices or both. A recent F. T. C. staff report indicates, on the one hand, a larger number of customers might contribute to lower prices by making it easier for oil-producing nations to cheat on cartel prices, whereas on the other hand the F. T. C. conjectures that removal of the major oil companies' structure and size would be likely to increase foreign oil prices by sacrificing the oil companies' efficiency of operation.*********

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*Richard Posner, Economic Analysis of Law (Boston: Little, Brown & Co., 1973), p. 175.

**J. E. Inman, "Price Decontrol and Competition in the Oil Industry," Business Law Review 9 (Spring 1976): 19-27.

***J. E. Hass et al., Financing the Energy Industry (Cambridge, Mass.: Ballinger, 1976), p. 49.

****Moore, p. 19.

*****Stark Ritchie, "Petroleum Dismemberment," Vanderbilt Law Review 29 (Winter 1976): 1136.

******"Forced Divestiture in Oil?" Morgan Guaranty Survey, June 1976, p. 9.

*******The Petroleum Situation (New York: Chase Manhattan Bank, 1976); Hass, p. 21; Hass et al., p. 21.

********Gitman et al., "A Forecast of Capital Demand and Supply in the Domestic Petroleum Industry 1975-1985." Paper read at Financial Management Association Meeting, Montreal, 1976.

*********"Oil Company Breakup," in Energy Management (CCH Issue No. 194).

Some critics of divestiture predict even more dire consequences. As experts in corporate law warned the Senate Anti-Trust Subcommittee, any long-term contracts entered into between the prohibited U.S. overseas subsidiaries and foreign companies or foreign governments would have to be terminated.* Foreign countries might even impose their own restructuring or even nationalize foreign oil assets.**

6. JOINT VENTURES

The third part of the proposed House bills calls for an end to joint ventures between major oil companies developing energy resources unless they receive government permission. A significant number of oil and gas joint ventures occur in offshore, production, pipeline ownership and operation, and international operations.*** Both advantages and disadvantages can accrue to society from joint venture relationship.

Joint ventures permit the entry of small businesses into activities requiring large capital investments. Also involved is the willingness of many firms acting together to take a big risk where they would be reluctant to do so alone. And last, large investments may benefit more than just the direct joint venture participants, while separate operation by any one individual firm might be economically inefficient. It has been argued, however that the very existence of some joint venture relationships will result in a great deal of collusion between parent companies wholly outside the area of joint venture. One company would be reluctant to endanger in any way another company's benefits.****

Because little is known about the economies of scale involved in joint ventures, it would appear that permitting the continued operation and formation of joint ventures under government supervision might not be bad policy until further evaluative information can be obtained. These have, however been testimony and evidence that the people who run the government energy-supervising agencies have or have had close ties with energy industries.***** This would, if true, indicate the need for addition of experts with a more objective point of view to those regulatory bodies.

7. DIVESTITURE PROBLEMS

If divestiture legislation should be passed by Congress, there probably would be much legal machination and financial confusion during the implementation phase. In the long term capital market, for example, the split-up of assets among the newly formed companies would in many cases reduce the security counted on at time of purchase perhaps enabling bondholders to demand acceleration unless the FTC were allowed by the courts to summarily rewrite these covenants.

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*Forced Divestiture in Oil?" p. 9.

**J. L. Katz, "Department Discusses International Aspects of Legislation," Department of State Bulletin, 28 June 1976, pp. 821-25.

***W. A. Johnson et al., Competition in the Oil Industry, Energy Policy Research Project (Washington, D. C.: George Washington University, 1976), p. 66.

****Johnson et al., p. 56; S. H. Ruttenberg, The American Oil Industry (New York: M. E. B. A., 1973), p. 45.

*****Walter Mead, "Joint Ventures: Anti-Competitive and Pro-Competitive Effects," in Market Performance and Competition in the Petroleum Industry (Washington, D. C.: U.S. Government Printing Office).

Furthermore, the new companies resulting from the break-up of Big Oil would probably experience difficulty raising the capital so necessary to continued exploration and production for at least four reasons: (1) New companies would have no financial or operating history from which to project future earnings. (2) The absence of any such financial history might preclude through the operation of state law any investment in the securities of new companies by state-regulated fiduciaries. (3) It might take some period of time even after the new companies were formed for the legal processes to determine fully which assets were to go to which new corporation. (4) The increased uncertainty would make the cost of borrowing higher for the new companies than would have been the case for Big Oil. Although divestiture has at times in the past increased stock prices of the divesting company, this involved the voluntary divestiture of an unprofitable operation in the company interest. In contrast, proposed legislation calls for involuntary divestiture, implying that it is not in the company interest.*

Indeed, as an argument for divestiture, some commentators point to the ease with which the Standard Oil spinoff was accomplished in 1911, without noting a basic difference: all of the 33 companies divested were complete legal units, so that there was no legal problem of identifying the assets of each company.** The spinoff device used to "unmerge" Standard Oil of New Jersey resulted in no change of ownership: just a change in the form of ownership. The record seems to indicate that the successor companies to Standard Oil for two decades or so came to dominate regional markets and reintegrated control of production during this period. The court evidently did not anticipate the ensuing development of regional monopolies, which had abated by 1947, when only eight of 20 industry leaders were successor companies.***

Another factor complicating divestiture today as compared with the Standard Oil spinoff is that the Federal Securities and Exchange Acts of 1933 and 1934 would have to be complied with. In S.795 the powers of the Securities and Exchange Commission are explicitly preserved, and the SEC is written into the Act as advisor both to the Federal Trade Commission in its function of approving submitted divestiture plans and to the new Divestiture Court in its entertainment of appeal from the FTC. Although there is no mention of the SEC made in the House bills, neither do they contain anything that would suggest at all any intended diminution or modification of SEC prerogatives. In the divestiture process, the SEC would be primarily concerned with the requirement to disclose the financial condition of any company whose stock was circulated for the first time in accordance with a plan approved by the FTC or the Divestiture Court.****

Furthermore, any discussion of oil concentration is complicated by the fact that the biggest companies do not operate independently, but rather through a complex web of criss-crossing business deals that tie them together at dozens of points. They exchange oil and tankers, share pipeline space, and swap refined products. Probably the greatest argument against divestiture is the short-run

*John R. Griffith, "Some Financial Effects of Divestiture," a paper prepared for delivery at the 9th Annual Conference of American Institute for Decision Sciences, October 19-21, 1977, Chicago, Illinois.

**S. R. Reid, "Petroleum Mergers, Multinational Investments, Refining Capacity, and Performance in the Energy Crisis," Financial Management, Winter 1973, pp. 50-56; "Why Break Up Oil Companies?" Reprint from Oil and Gas Journal, 10 May 1976.

***Stephen Fraidin, "Dissolution and Reconstitution: A Structural Remedy, and Alternatives," George Washington Law Review 33 (1965): 914.

****John R. Griffith, "Dimensions of Divestiture Legislation" a paper presented at the 54th Annual Meeting of the American Business Law Association, August 21-25, 1977, Miami Beach, Florida.

confusion attendant on its implementation and the price of this transition period in terms of lost energy. During the transition, economic and financial losses could be staggering. Until a divestiture plan was agreed upon, until the inevitable litigation was settled, and until actual dismemberment was carried out, no one could at all assess the form or potential of the post-divestiture oil industry. Oil officials estimate that if dismemberment had taken place during the 1976-77 period, it could have increased unemployment by 1.5 million, caused a loss in GNP of $85 billion, added $100 billion to the payments drain from 1975 to 1985, and adversely affected millions of investors.*

8. INTERLOCKING DIRECTORATES

Since the turn of the century, reformers--primarily legislators and representatives of Federal regulatory agencies--have been voicing great concern over the evils of the integrated structures within the petroleum industry. The question of anticompetitive behavior of the vertically integrated company is still in dispute.** In theory, however, the charges against vertical integration are groundless; if one level in the structure is competitive, all levels should behave equally competitively. Lateral integration, on the other hand, is intolerable under an antitrust philosophy, and direct integration of this kind is expressly prohibited by law.

The interlocking corporate directorship is a salient link in the establishment of intimate intercorporate relationships. Directorships may interlock in several ways, but usually they are characterized--according to the directness of the linkage--as primary or secondary. The primary interlock simply provides for overlapping directorates between oil companies; a director of one firm site on the board of a competing firm, and _vice versa_. Primary interlocks are explicitly declared illegal in Section 8 of the Clayton Act: no person shall, at the same time, sit on the board of directors of any two corporations who, owing to the character of their business, are directly competitive. As straight forward as this pronouncement may seem, the concept is open to interpretation in a few instances, most notably that where an oil company director sits on the board of a coal company or a utility. A study by the Marine Engineers' Beneficial Association identifies four instances of such intimate association of major oil companies with coal companies not owned directly by them.*** Further, this study alleges to identify an outright violation of Section 8 in the case of one director who serves on the board of directors of both Standard Oil of Ohio and Diamond Shamrock Corporation. The report goes on to point out six cases of direct interlock between major oil companies and large utilities, prominent among those in the midwest being Standard of Indiana and Commonwealth Edison.****

A subsequent furor brought forth a rash of bills in the Congress in 1974, sponsored by Senator Abourezk, Messengers Dingell, Ford, Abzug, _et. al._, condemning the energy industry's integrated structure as collusive and suppressive of free competition. All of these bills (a total of some 30) demand the immediate dismantling of the integrated petroleum industry through the legislation of divestiture. To date no proposed divestiture legislation has been enacted into law.*****

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*John R. Griffith. "Dimensions of Divestiture Legislation." a paper presented at the 54th Annual Meeting of the American Business Law Association on August 21-25, 1977, Miami Beach, Florida.

**_The Energy Industry, Part 9: Hearings Before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary_, United States Senate, January, 1975.

***MEBA, _The American Oil Industry: A Failure of Antitrust Policy_, New York, NY, 1973, pp. 81 ff.

****_Ibid._, pp. 81, 82.

*****cf. S.3318, April 5, 1974; H.R.10418, September 20, 1973. H.R.12902, February 20, 1974; H.R.13030, February 26, 1974.

Secondary, or indirect, interlocks are generally described as appearing in one of two forms:

1. Board members of competing firms sit on the board of a third company, e.g. a bank.
2. Board members of a third company sit on the boards of competing firms.

There are, of course, many variations on these forms, but legislative reformers as a whole tend to view indirect interlocks as inherently malevolent as the direct form. Angus McDonald goes so far as to assert that indirect interlocks form a "cozy and exclusive club" conducive to unlimited conspiratorial action.*

A recent paper on energy policy at George Washington University insists that there is a dearth of reliable information to support any attack on indirect interlocks. Further, "the issue is essentially irrelevant to a serious discussion of competition in the petroleum industry." It is the corporation's management, not its board of directors, who are in the better position to exert influence in the direction of suppressive or collusive behaviors.**

Finally, in calling for divestment of offending organizational components in the petroleum industry, no proposed legislation purports to address the question of a prescribed course of action for the board member who was, himself, the key to the interlock. Must he resign from the board of the divested firm? Must he liquidate his personal holdings or may he continue as before? There appears to be no serious attempt to have answered these, or several other, nagging issues.

9. CONCLUSION

Today in our more sophisticated economy, divestiture creates problems considerably different from those faced in the Standard Oil spinoff. The SEC was not established until the early 1930's, so there were no SEC disclosure regulations to comply with. The 16th Amendment was not ratified until 1913, so tax consequences did not have to be considered. Another important difference is the wide public ownership of industry today (2.3 million Americans own shares directly and 11.75 million own shares indirectly in the six largest oil companies), contrasted with the high degree of control in the hands of a relative few in the past. Today's average shareholder is innocent regarding his corporation's antitrust violations, and his interest should be given a high priority in drafting any plan for divestiture. And in this age of job specialization, special consideration should also be given to the contractual and social rights of affected employees, so as to minimize disruption.***

*McDonald, Angus. Interlocking Oil: Big Oil Ties with Other Corporations, Washington, D. C., 1974, pp. 7-8.

**Johnson, Messick, VanVactor, & Wyant. Competition in the Oil Industry, Energy Policy Research Project, The George Washington University, Washington, D. C., 1976, pp. 87-88.

***"Comments: Aspects of Divestiture," p. 142.

10. BIBLIOGRAPHY

"Comments: Aspects of Divestiture as an Antitrust Remedy," Fordham Law Review 32 (Winter 1963): 144.

Corrigan, Richard, "Energy Report/Oil Company Divestiture Gains Support in Congress," National Journal 7 (6 December 1975): 1658.

Duchesneau, T. D., Competition in the U.S. Energy Industry (Cambridge, Mass.: Ballinger, 1975), p. 96, and Dismembering the Oil Companies (Washington, D. C.: American Petroleum Institute, 1976), p. 1.

Duchesneau, T. D., p. 101; W. P. Tavoulareas, "Is Divestiture the Answer?" St. Louis Post-Dispatch, 3 February 1976, p. 2B.

"Forced Divestiture in Oil?" Morgan Guaranty Survey, June 1976, p. 9.

Fraidin, Stephen. "Dissolution and Reconstitution: A Structural Remedy, and Alternatives," George Washington Law Review 33 (1965): 914.

Gitman et al., "A Forecast of Capital Demand and Supply in the Domestic Petroleum Industry 1975-1985." Paper read at Financial Management Association Meeting, Montreal, 1976.

Griffith, John R. "Dimensions of Divestiture Legislation" A paper presented at the 54th Annual Meeting of the American Business Law Association on August 21-25, 1977, Miami Beach, Florida.

Griffith, John R. "Some Financial Effects of Divestiture" A paper prepared for delivery at the 9th Annual Conference of American Institute for Decision Sciences on October 19-21, 1977, Chicago, Illinois.

Hass, J. E. et al., Financing the Energy Industry (Cambridge, Mass.: Ballinger, 1976), p. 49.

Inman, J. E., "Price Decontrol and Competition in the Oil Industry," Business Law Review 9 (Spring 1976): 19-27.

Johnson, Messick, VanVactor, & Wyant. Competition in the Oil Industry, Energy Policy Research Project, The George Washington University, Washington, D. C., 1976, pp. 87-88.

Johnson, W. A., et al., Competition in the Oil Industry, Energy Policy Research Policy Research Project (Washington, D. C.: George Washington University, 1976), p. 66.

Katz, J. L., "Department Discusses International Aspects of Legislation," Department of State Bulletin, 28 June 1976, pp. 821-25.

McDonald, Angus. Interlocking Oil: Big Oil Ties with Other Corporations, Washington, D. C., 1974, pp. 7-8.

Mead, Walter, "Join Ventures: Anti-Competitive and Pro-Dompetitive Effects," in Market Performance and Competition in the Petroleum Industry (Washington, D. C.: U.S. Government Printing Office).

MEBA, The American Oil Industry: A Failure of Antitrust Policy, New York, NY, 1973, pp. 81, 82.

Moore, Dordell, Energy: U.S. at the Crossroads (Charleston, Illinois: Eastern Illinois University Energy Resource Management Program, 1975).

"Oil Company Breakup," in Energy Management (CCH Issue No. 194).

Posner, Richard, Economic Analysis of Law (Boston: Little, Brown & Co., 1973), p. 175.

Reid, S. R., "Petroleum Mergers, Multinational Investments, Refining Capacity, and Performance in the Energy Crisis," Financial Management, Winter 1973, pp. 50-56; "Why Break Up Oil Companies?" Reprint from Oil and Gas Journal, 10 May 1976.

Ritchie, Stark, "Petroleum Dismemberment," Vanderbilt Law Review 29 (Winter 1976): 1144

Roll, David, "Dual Enforcement of the Antitrust Laws by the Department of Justice and the FTC: The Liaison Procedure," The Business Lawyer 31 (July 1976): 2077.

S.3318, April 5, 1974; H.R.10418, September 20, 1973. H.R.12902, February 20, 1974; H.R.13030, February 26, 1974.

The Energy Industry, Part 9: Hearings Before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, United States Senate, January 1975.

The Petroleum Situation (New York: Chase Manhattan Bank, 1976); Hass, p. 21; Hass et al., p. 21.

U.S., Congress, House, A Bill to Amend the Clayton Act to Prohibit Undue Concentration in the Energy-Producing Industries, and for Other Purposes, H.R.683 and H.R.3370, 95th Cong., 1st session, 1977.

U.S., Congress, Senate, A Bill to Restore and to Promote Competition in the Petroleum Industry, and for Other Purposes, S.795, 95th Cong., 1st session, 1977.