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Internal Revenue Code § 482 and the Petroleum Industry: An Analysis of Arm's Length Methods for Transfer Price Reallocations

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COMMENTS

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INTRODUCTION

The ARAMCO Cases¹ expose an unsettled issue of international tax law: Under what method and with what justification should tax authorities be empowered to reallocate profits assigned by a corporation to a particular tax jurisdiction?² The Internal Revenue Service's primary concern under these circumstances is to prevent multinational corporations from avoiding United States taxation by allocating their income to foreign tax jurisdictions.³

A. The Problem Defined

The political and economic importance of crude oil as a commodity creates unique difficulties for government authorities trying to justify unilateral reallocation of petroleum industry profits solely for tax purposes.⁴ In 1988, prior to the outset of the ARAMCO Cases, a study conducted by the Treasury criticized current-law approaches to profit reallocation methodology in the income tax regulations⁵ promulgated pursuant to Internal Revenue Code § 482.⁶ International tax articles addressing this subject have traditionally focused on the theoretical debate of the practicality and viability of current tax law.⁷ This comment

1. For the purpose of this paper, the "ARAMCO cases" are the pending claims against Texaco, Exxon, Chevron and Mobil filed by the Internal Revenue Service [hereinafter the Service] in the United States Tax Court, No. 24855-89. These companies own the Arabian American Oil Company (ARAMCO). The ARAMCO shareholders are defendants in pending multi-billion dollar law suits recently consolidated. The claims arose from the Service's challenge to prices declared by the companies, for oil purchased from Saudi Arabia, and used internally, between 1979 and 1981. *WALL STREET JOURNAL*, August 17, 1990, at A4, col. 1.

2. Brief for Respondent at 6, *Texaco, Inc. v. C.I.R.*, No-24855-89 (U.S.T.C. filed Dec. 24, 1990). [hereinafter Brief of Respondent].

3. See *Id.* See also *Texaco Case Called Part of Growing Crackdown*, *NEW YORK TIMES*, Jan. 15, 1988, at D4, col. 1. "The I.R.S. . . . contends the oil should have been accounted for at a price closer to the world market price. [Not at the lower prices at which the companies were able to purchase it]." *Id.*

4. *Texaco Case Called Part of Growing Crackdown*, *NEW YORK TIMES*, Jan. 15, 1988, at D4, col. 1.

5. Treas. Reg. § 1.482-2 et seq (1991).

6. I.R.C. § 482 (1986). Section 482 states in part: "In any case of two or more organizations, trades, or businesses . . . owned or controlled directly or indirectly by the same interests, the Secretary may distribute, apportion, or allocate gross income, deductions, credits, or allowances between or among such organizations, trades, or businesses, if he determines that such distribution, apportionment, or allocation is necessary in order to prevent evasion of taxes or clearly to reflect the income of any of such organizations, trades or businesses." *Id.*

7. See, e.g., Stanley I. Langbein, *Transaction Cost, Production Cost and Tax Transfer Pricing*, *Tax Notes*, September 18, 1989, at 1391, (this article suggests a theoretical solution to tax transfer pricing problems); Marc M. Levey and Stanley C. Ruchelman, *Section 482-The Super Royalty Provisions Adopt The Commensurate With Income Standard*, 41 *TAX LAWYER* 611 (1988); Stanley I. Langbein,

analyzes practical problems of applying current § 482 methodology to the petroleum industry and the viability of suggested theoretical alternatives.⁸ These alternatives are: the *White Paper*⁹ approach and the transaction cost analysis proposed by Professor Langbein in his article, *Transaction Cost, Production Cost, and Tax Transfer Pricing*.¹⁰ This comment suggests a possible solution to comparable uncontrolled pricing methodologies. Since a practical analysis is the goal of this comment, the analytical framework relies on both factual and hypothetical illustrations of petroleum industry practices.

The United States regulated profit allocation as early as 1917, under the War Revenue Act.¹¹ Section 45 of the Revenue Act of 1928,¹² was the predecessor of present I.R.C. § 482. The purpose of code § 45 was to prevent tax evasion by corporations through the use of transfer pricing policies.¹³ Current regulations promulgated pursuant to § 482 were enacted in 1968.¹⁴ Apart from the addition to § 482 in 1986,¹⁵ of a sentence which established a standard for evaluating transfers of intangible assets, the intention of § 482 has not changed.¹⁶

The fundamental issue under scrutiny of tax experts is whether the methods prescribed by § 482's regulations achieve the statute's intended result.¹⁷ The method most susceptible to criticism is a comparison by the Service of the prices found in an arm's length transaction¹⁸ with the price actually used for the controlled¹⁹

The Unitary Method and the Myth of Arm's Length, TAX NOTES, February 17, 1986, at 625.

8. In Part IV, solutions to practical problems of applying current § 482 methodology to the petroleum industry are addressed. The viability of suggested theoretical alternatives is also discussed.

9. TREASURY DEPARTMENT, SECTION 482 WHITE PAPER ON INTER-COMPANY PRICING (October 1988) [hereinafter WHITE PAPER].

10. TAX NOTES, September 18, 1989, at 1391.

11. JOINT COMMITTEE ON TAXATION, PRESENT LAW AND CERTAIN ISSUES RELATING TO TRANSFER PRICING (CODE SECTION 482), (COMM. PRINT JCS-22-90) [hereinafter JCOT PAPER].

12. *Id.* at 3363.

13. *Id.* at 3363. "The purpose of that provision was to prevent [tax] evasion [by corporate] shifting of profits, the making of fictitious sales, and other methods frequently adopted for the purpose of milking, and in order clearly to reflect their true taxable liability." *Id.*

14. Treas Reg. § 1.482-2 *et seq.* (1968).

15. I.R.C. § 482 (1986).

16. *Id.*

17. Treas Reg. § 1.482-2 *et seq.* (1991).

18. "[A]n arm's length transaction [is] defined in law as a transaction between two unconnected parties, in which price is the sole consideration, and which does not involve provisions for resale to a third connected party." ROBERT MABRO ET. AL., *THE MARKET FOR NORTH SEA CRUDE OIL*, at 123-124 (1986) [hereinafter THE MABRO STUDY].

transaction in question.²⁰ The implementation of arm's length prices as a tax reference price provides the basis for much complex litigation.²¹

The Service's concern in transfer pricing cases, is that a corporation may shift income between tax jurisdictions by altering the price at which it transfers goods and services between affiliated groups.²² For instance, a corporation could set a low price for its internal transfer from a jurisdiction with a higher corporate income tax rate and consequently reduce its taxable income in that jurisdiction. Conversely, increased profit is realized in the jurisdiction which receives the low-cost product, thereby capitalizing on that jurisdiction's lower income tax rate.

The Service's cause for concern in these cases is that both parties to the transaction are controlled by the same corporation, especially where a parent company owns a number of affiliates incorporated in different tax jurisdictions. The parent company can dictate policies for inter-affiliate transfers based on considerations other than price.²³ Section 482 of the Internal Revenue Code of 1986 allows the Service to examine controlled transactions and reallocate income where profit shifting in affiliated organizations intends to avoid taxation.²⁴

Arm's length methods used to analyze transfer prices under § 482 have, and continue to be challenged from a theoretical perspective.²⁵ Their foremost critics contend that application of these methods fails to account for synergies arguably inherent in multinational enterprises.²⁶ The critics claim these methods result in a continuum of prices rather than a single price that would satisfy the requirements of § 482.²⁷ This continuum creates

19. An inter-affiliate transfer of goods is termed a "controlled" transaction. It is distinguishable from an "arm's length" transaction which occurs between two unrelated parties. See Treas. Reg. § 1.482-1.

20. Treas. Reg. § 1.482-2(e)(2) (1991).

21. See *supra* note 1.

22. JCOT PAPER, *supra* note 11, at 3359, 3360.

23. Cf. Treas. Reg. § 1.482-1(b) (1991).

24. I.R.C. § 482 (1986).

25. See, e.g., Stanley I. Langbein, *Transaction Cost, Production Cost and Tax Transfer Pricing*, *Tax Notes*, September 18, 1989, at 1391 (This article suggests a theoretical solution to tax transfer pricing problems); Marc M. Levey and Stanley C. Ruchelman, *Section 482-The Super Royalty Provisions Adopt The Commensurate With Income Standard*, 41 *TAX LAWYER* 611 (1988); Note, *Multinational Corporations And Income Allocation Under Section 482 of the Internal Revenue Code*, 89 *HARV. L. REV.* 1202 (1976).

26. See *infra* Part II.

27. See Langbein *supra* note 25, at 1392.

a residue of income which, under current law, is arbitrarily apportioned between the two entities.²⁸

This comment questions the applicability of current methods of determining arm's length prices for purposes of reallocation and the viability of suggested solutions to the continuum price problem in the taxation of international transfers of crude oil. Part (I) reevaluates present arm's length methods of analyzing multinational corporations' transfer prices for § 482 reallocation purposes. Part (II) discusses the major challenge to present methods used²⁹: the continuum price problem. Part (III) defines a model for the structure of the petroleum industry to evaluate the pricing bases for crude oil transfers and factors that influence price. Part (IV) examines the tax consequences of crude oil transfer pricing in light of the arm's length standard and the continuum price problem.

*B. Problems With Taxation and Transfer Price
Regulation in the Petroleum Industry*

The Challenge: Transfers of petroleum between affiliates in different tax jurisdictions are not freely negotiated.³⁰ Therefore, two related entities may set prices to avoid taxation³¹ or apportion prices so that income realized by each entity does not reflect its contribution to overall income.³²

For example, oil company X's United Kingdom affiliate extracts crude oil from the North Sea and sells it to the company's United States refining affiliate. If the tax rate of the selling affiliate in the United Kingdom is 95 percent and the tax rate of the purchasing affiliate in the United States is 33 percent, for every dollar of profit by which the sales price is decreased, company X's profit is increased by sixty two cents and the United Kingdom's tax revenue is reduced by ninety five cents. North Sea production is approximately 2.5 million barrels per day,³³ and prices have recently ranged between \$16 and \$40 per barrel.

28. *Id.*

29. Stanley I. Langbein, *Langbein Says Arm's-Length Method Is Unworkable*, TAX NOTES, September 3, 1990, at 1317.

30. See *supra* note 2, at 14. Crude oil was sold at non-arm's length prices resulting in a shifting of income between two commonly-owned and controlled entities. *Id.*

31. JCOT PAPER, *supra* note 11, at 3360. "Due to the variance in tax rates (and tax systems) among countries and possibly for other reasons, a multinational enterprise may have a strong incentive to shift income, deductions, or tax credits among commonly controlled entities to the entity in the most favorable tax jurisdiction in order to arrive at a reduced overall tax burden." *Id.*

32. Langbein, *supra* note 27 (a solution suggested to the transfer pricing problem would require each affiliate's income to reflect its percentage of contribution to generating that income); See also *infra* Part IV (c).

33. The 1983 figure was 2.36 mb/d and the 1984 figure was 2.58 mb/d. See THE MABRO STUDY, *supra* note 13, at 7.

A Theoretical Response: Transfer pricing methods have been studied by both tax and managerial experts.³⁴ Contrary to assumptions made by the Service, managerial studies of transfer pricing indicate that companies do not determine transfer prices solely for tax reasons.³⁵ Management theory contends that transfer pricing practices are influenced by both corporate strategy and administrative process.³⁶ Favorable economic results and corporate performance are significant to this model.³⁷ The effect of transfer pricing policies on lower-level management performance and evaluation is equally important.³⁸ Since companies expend substantial amounts of money and effort developing transfer pricing policies,³⁹ post-facto reallocations of profit by the Service negate these efforts and result in double taxation or unrecoverable costs.

The Complexity: The Service's response to the 1979 oil crisis illustrates how implementation of the present arm's length methods can produce problems.⁴⁰ In an effort to offset the effects of the 1979 oil price shock on consuming nations, Saudi Arabia sold crude oil to the ARAMCO⁴¹ group at prices substantially below spot market⁴² prices.⁴³ The sale was conditioned on savings being

34. E.g., ROBERT ECCLES, *THE TRANSFER PRICING PROBLEM A THEORY FOR PRACTICE* (1985); TREASURY DEPARTMENT, SECTION 482 WHITE PAPER ON INTERCOMPANY PRICING (October 18, 1988).

35. See generally ROBERT ECCLES, *THE TRANSFER PRICING PROBLEM A THEORY FOR PRACTICE* (1985). "[T]he role of transfer prices is to allocate resources within the firm, under the assumption that managers are motivated to maximize [pre-tax] profits of their division because at least some of their rewards are tied to divisional financial performance." *Id.* at 21.

36. *Id.*

37. *Id.*

38. *Id.* at 39.

39. *Id.* at 8.

40. See *infra* Part IV.

41. The ARAMCO group was initially founded by SOCAL (now Chevron Corporation) on November 8, 1933. It currently has four shareholders, Chevron, Texaco, Exxon and Mobil. Prior to 1972, ARAMCO owned certain rights in a concession agreement with the Saudi Arabian Government (SAG). In 1973, SAG purchased 25% of ARAMCO's assets. SAG purchased another 35% in 1974 and the remaining 40% in 1976. SAG now controls production, disposition and initial selling price of its oil by ARAMCO. See *supra* note 2, at 8.

42. The spot market is the name given to the totality of individual physical cargo purchases and sales of crude oil. About 5 to 15 per cent of the crude oil extracted and refined is thought to be traded on the spot market. It is not a market as such and is not physically located in any one place, though it is often associated with the port of Rotterdam. Spot purchases and sales occur worldwide, whenever and wherever buyers and sellers make a contract. Some spot transactions are done free on board (F.O.B.) the export loading ports. Many quantities of spot crude oil are bought and sold on a delivered basis to end-user markets such as Rotterdam, the U.S. Gulf coast and Japan. PAUL VERLEGER, *OIL MARKETS IN TURMOIL AN ECONOMIC ANALYSIS* 264 (1982).

43. Brief of Petitioner, at 5, *Texaco, Inc. v. C.I.R.*, No. 24855-89 (U.S.T.C. filed Dec. 21, 1990). [hereinafter Brief of Petitioner].

passed through to consuming nations.⁴⁴ It is reasonable to assume two primary reasons for this action: (i) to prevent a movement toward future conversion to alternative energy sources; (ii) to prevent balance of payments⁴⁵ crises among the nations dependent on foreign oil. The Service challenged the use of the Saudi contract price as the transfer price. The reallocations proposed use a tax reference price that more closely reflects market price.⁴⁶ At the time, however, the oil companies were effectively employed as agents of the Saudi government and so had to "pass-through" savings to consuming nations.⁴⁷ Inappropriate action by the companies would have threatened their continued operation in Saudi Arabia.⁴⁸ The companies' distribution structure was established, and, as such, alternative government-to-government deals were viewed as less efficient. Passing through the savings on a basis to which recipient consuming nations assented was essential to the oil companies' continued role in importing, refining and distributing in these countries.⁴⁹ Consuming nations or the Saudi government could have avoided or terminated the agreement by negotiating directly with each other. Notwithstanding

44. *Id.* at 5. "As part of Saudi Arabia's price moderation policy, the Saudi Arabian government required Texaco and Exxon's off-takers of Saudi crudes to resell those crudes to related and unrelated third parties at prices no higher than those established by the Saudi Arabian government during the years 1979-81." *Id.*

45. "Balance of payments" refers to the current account balance (CAB). CAB represents the difference between Gross National Product (GNP) and domestic absorption. For purposes of this paper, a nation's balance of payments may be understood as the degree to which internal tax revenues fall short of expenditures, forcing the government to borrow the balance. CAB represents a country's overall financial position. When CAB is positive, a country will purchase foreign securities. Conversely, when CAB is negative, a country must encourage foreigners to purchase its debt. To encourage foreign purchase of government securities a nation must raise its interest rates, an inflationary event.

Oil is traded in dollars, thus, increased oil prices increase dollar demand and value on world currency markets. A price shock exponentially increases the quantity of a country's own hard currency needed to purchase its oil requirements. This is a result of higher domestic inflation and increased value of the U.S. dollar. This problem is aggravated by the OPEC nations investment of profits in dollar-denominated investments, further increasing dollar demand and increasing burdens on consumer nations. The result is sudden increases in government spending by consuming nations. This creates a CAB deficit and requires increased interest rates to attract foreign investment.

46. Brief of Respondent, at 10. The Service contends that Exxon and Texaco, through their relationship with the Saudi Arabian government were able to realize large profits from the sale of crude oil which they were able to purchase at a reduced price. *Id.*

47. See Brief of Petitioner, at 4. By 1976, the Saudi Arabian government controlled all of ARAMCO's former assets. For convenience the ARAMCO shareholders were permitted to continue to exploit the Saudi crude. *Id.*

48. *Id.*

49. *Id.* at 5. "Many of the major consuming countries, including the United States, regulated product prices during all or part of the period 1979-81." *Id.*

the purchase arrangements, the Service contends that the ARAMCO shareholders should have sold their oil to consuming nations at the official OPEC market price.⁵⁰ The official price was as much as \$7 per barrel higher than that used by the ARAMCO companies.⁵¹ Increased profits realized in the United States would result in increased tax payments.⁵²

In addition to the Service's position, the industry has never before been challenged nor has it responded to an argument that their pricing methods do not reflect proper distribution of taxable income.⁵³ Industry practice is to attribute most, and in some cases all of the profits from producing, refining and marketing to the upstream affiliates.⁵⁴

Within this framework, arm's length methods⁵⁵ of determining transfer prices, and use of the spot market or other intermediary prices as a tax reference price, will be analyzed.

I. CURRENT-LAW METHODS OF DETERMINING ARM'S LENGTH PRICE

A. An Analysis of I.R.C. § 482

Internal Revenue Code § 482, authorizes the Secretary of the Treasury to redetermine the income that it believes is properly the income of a United States entity when it appears that an improper shifting of income between the United States entity and a commonly controlled entity in another country has occurred.⁵⁶ The code section makes no reference to specific reallocation rules that must be followed, aside from establishing general standards: the prevention of tax evasion and clearly reflecting income.⁵⁷

50. *Id.* at 10. "SAG [the Saudi Arabian government] . . . sold through ARAMCO to the four shareholders the remaining 6,645,000,000 (93%) [of the crude] at prices that were as much as \$7 per barrel less than oils . . . sold by other OPEC members to the shareholders and the shareholders' competitors." *Id.*

51. *Id.* at 10.

52. *See Id.*

53. *See* Langbein, *supra* note 32, at 1392. Transaction cost theory contends that every affiliate of an integrated organization serves an economic purpose. The actual profits or losses of an affiliate may not reflect its contribution to overall profits as its existence may protect revenues generated by a sister affiliate. *Id.*

54. *See* VERLEGER, *supra* note 42.

55. Treas. Reg. § 1.482-1(d)(3) (1991). Arm's Length, means the amount that would have been charged in an independent transaction between unrelated parties under the same or similar circumstances considering all relevant facts. *Id.*

56. I.R.C. § 482 (1986); *see also* JCOT PAPER, *supra* note 11, at 3363.

57. I.R.C. § 482 (1986). Section 482 states in part: "In any case of two or more organizations, trades, or businesses . . . owned or controlled directly or indirectly by the same interests, the Secretary may distribute, apportion, or allocate gross income, deductions, credits, or allowances between or among such organizations, trades, or businesses, if he determines that such distribution,

Treasury regulations adopt the arm's length standard as the method of determining whether reallocations are appropriate.⁵⁸ When reallocation occurs, the substituted price is generally referred to as a tax reference price. The purpose of § 482 is to place a controlled taxpayer on a tax parity with an uncontrolled taxpayer, by determining, according to the standard of an uncontrolled taxpayer, the true taxable income from the property and business of a controlled taxpayer.⁵⁹

Regulations promulgated pursuant to § 482⁶⁰ provide three methods for determining the arm's length price for transfers between controlled entities.⁶¹ Application of the methods must be attempted in the order in which they are found in the regulations.⁶² A subsequent method may not be employed unless the preceding method has been shown to be unsuitable.⁶³ The burden lies with the taxpayer to show that any of the three methods are inappropriate by establishing that another method is "clearly more appropriate."⁶⁴

(i) The Comparable Uncontrolled Price Method (CUP)⁶⁵

The Comparable Uncontrolled Price Method evaluates pricing of transactions between the affiliated companies by comparing uncontrolled and controlled transactions.⁶⁶ Under this method "[c]omparability exists if substantially the same products are sold under the same circumstances, or if differences in the property or circumstances either have no effect on prices or can be measured and eliminated with a reasonable number of adjustments."⁶⁷ The Service is authorized to use uncontrolled comparables to establish the controlled group's tax basis.⁶⁸ Tax reference prices are computed by altering the controlled taxpayer's transfer price to reflect arm's length prices.⁶⁹

apportionment, or allocation is necessary in order to prevent evasion of taxes or clearly to reflect the income of any of such organizations, trades or businesses." *Id.*

58. Treas. Reg. § 1.482-1(b)(1) (1991).

59. *Id.*

60. Treas. Reg. § 1.482-2(e) et seq.

61. *Id.* § 1.482-2(e)(2), (3) and (4).

62. *Id.* § 1.482-2(e)(ii).

63. *Id.*

64. *Id.* § 1.482-2(e)(1)(iii).

65. *Id.* § 1.482-2(e)(2).

66. *Id.* § 1.482-2(e)(2)(i).

67. Levey and Ruchelman, *supra* note 7, at 616.

68. *Id.*

69. *Id.*

(ii) The Resale Price Method (RPM)⁷⁰

The Resale Price Method determines arm's length price by comparing gross profit margins achieved in controlled and uncontrolled transactions.⁷¹ The resale price method reconstructs a market price by discounting the controlled reseller's price by comparable gross profit margins.⁷² The equivalent arm's length price is determined under this method by subtracting an appropriate profit markup⁷³ from the applicable resale⁷⁴ price.⁷⁵

(iii) The Cost Plus Method (CPM)⁷⁶

To determine the arm's length price under the Cost Plus Method, an appropriate gross profit mark-up is added to the seller's cost of production.⁷⁷ The Cost Plus Method is commonly used for transfers of unfinished goods that will have substantial value added to them by the controlled purchaser.⁷⁸

B. The White Paper Proposals

The Treasury Department's *White Paper* on transfer pricing acknowledges that the three primary methods prescribed by § 482 are difficult to apply and various unsatisfactory alternative methods are commonly employed to fill the gap.⁷⁹ The *White Paper* suggests ten proposals to aid the Service in applying § 482,⁸⁰ but fails to tackle the central dilemma of the "transfer pricing" problem: the need to establish an acceptable method of calculating an uncontrolled equivalent price for a particular controlled transaction.⁸¹

The *White Paper* reaffirms the goals of § 482, namely to distribute income in a manner that assures that related parties earn the same returns that unrelated parties would earn under

70. Treas. Reg. § 1.482-2(e)(3) (1991).

71. *Id.*

72. Levey and Ruchelman, *supra* note 67, at 619.

73. *Id.* (The appropriate profit markup is the gross profit that would be earned in an uncontrolled transaction).

74. *Id.* (The applicable resale price is the anticipated uncontrolled resale price of goods purchased at the controlled price).

75. Levey and Ruchelman, *supra* note 67, at 619.

76. Treas. Reg. § 1.482-2(e)(4) (1991).

77. Levey and Ruchelman, *supra* note 67, at 620.

78. *Id.*

79. Philip A. Stoffregen Et. Al., *The BALRM Approach To Transfer Pricing: One Step Forward, Two Steps Back*, TAX NOTES, March 6, 1989, at 1258.

80. WHITE PAPER, *supra* note 9, at 25-27.

81. *Id.*

similar circumstances.⁸² This theory is now referred to as market-based income allocation.⁸³ However market-based theory provides no incentive to affiliated groups to capitalize on economies of integration associated with affiliation.⁸⁴ The *White Paper* acknowledges this criticism,⁸⁵ but concludes that this does not warrant a rejection of the existing arm's length methods,⁸⁶ primarily for lack of workable alternatives.⁸⁷

Other commentators criticize the present arm's length methods because of inherent problems in applying a market-based approach to transactions of integrated businesses.⁸⁸ The *White Paper* ignores the "continuum price problem"⁸⁹ as irrelevant and concludes, "[t]ransfer prices are supposed to reflect the contribution of the activity and assets utilized in each location to economic income. Therefore, each affiliated member should earn at least as much as it could have earned as an unrelated party under alternative arrangements."⁹⁰ Concerns arise in controlled transactions because management, by setting transfer prices, can attribute profit in the exclusive interests of profit maximization, tax minimization, or other management reasons. This flexibility creates prices that may each meet the arm's length criteria.⁹¹

II. THE CONTINUUM PRICE PROBLEM

The controversy surrounding the present methods of calculating arm's length prices stems from their failure to acknowledge that corporations integrate for primarily economic reasons.⁹² As a

82. *Id.* at 79.

83. *Id.*

84. Langbein, *supra* note 29, at 1318.

85. *WHITE PAPER*, *supra* note 9, at 81.

Specifically, it has been argued that the flaw in an arm's length approach is that it does not allow a return to the form of organization. That is, because an integrated enterprise is presumably more efficient, it will be able to execute an integrated economic activity at a lower cost than a series of independent firms whose joint efforts are necessary to execute the same series of transactions. *Id.*

86. *Id.*

87. *Id.*

88. *See infra* part II.

89. *Id.* *See* text accompanying notes 107-110.

90. *WHITE PAPER*, *supra* note 9, at 81.

91. Langbein, *supra* note 29, at 1318.

92. *Id.*

result, the component companies do not act as independent units.⁹³ Advocates of the continuum price problem argue that due to economies of integration, part of income is a product of integration itself, and therefore impossible to allocate using a comparable uncontrolled price.⁹⁴ Therefore, each nation in which a multinational corporation operates, may have a valid claim to the total income generated by the economies of integration.⁹⁵ Assuming that multinational corporations select their transfer prices to avoid United State taxes,⁹⁶ the methods endorsed by tax regulations for calculating tax reference prices arbitrarily allocate the residue of income created by integration.⁹⁷

Each of the three primary methods established by the regulations presents its own problem. The CUP method is rarely used because it is often difficult to find comparable uncontrolled prices.⁹⁸ Similarly, results obtained by using either the RPM or the CPM are unacceptable because they arbitrarily allocate too much income to one or other of the affiliates of the related groups.⁹⁹ To adapt to these shortcomings, decision-makers do one of two things: Either (1) they relax nominally strict standards of comparability in applying the CUP method, or (2) they employ a fourth method, which entails a negotiated, arbitrary profit split.¹⁰⁰ The allocation of the residue of income remains a central issue in the controversy. The Service believes it is being

93. Eccles, *supra* note 35, at 125. "[Companies] only buy internally for strategic or huge cost reduction reasons. Strategy can make a huge difference to internal transfers." *Id.*

94. Langbein, *supra* note 29, at 1318.

95. Langbein, *supra* note 32, at 1391.

The essential proposition is that the defect of all current and suggested approaches ... is their reliance on conventional economic models of the production process. These models suggest that all income of a multinational [corporation] must be attributable to some "function" or "factor," or, if that is absolutely impossible, that "residual" income has to be allocated among components based upon criteria which are determined ultimately by reference to production inputs. *Id.* at 1392.

96. WHITE PAPER, *supra* note 9, at 1. "Section 482 of the Internal Revenue Code authorizes the Secretary of the Treasury to allocate income, deductions, and other tax items among related taxpayers to prevent evasion of taxes[.]" *Id.*

97. Langbein, *supra* note 32, at 1396.

98. Langbein, *supra* note 32, at 1395. The White Paper notes that in only 15 percent of cases has an uncontrolled price been determinable. When the figures were weighted by dollar amounts of the adjustments involved the percentages fell to 2 percent. *Id.* at 1395 n.19.

99. These problems are illustrated in: *Eli Lilly Co. v. Commissioner*, 856 F.2d 855 (7th Cir. 1988), *E. I. Du Pont de Nemours & Co. v. United States*, 608 F. 2d 445 (Ct.Cl. 1979).

100. Langbein, *supra* note 32, at 1395.

denied this income.¹⁰¹ This belief has spawned government inflexibility and has inhibited pursuit of a solution to the continuum pricing problem.¹⁰²

The conceptual difficulty of the continuum price problem may be best understood through the following example:

The problem is that, in many instances, this approach [utilizing § 482 methods of calculating an arm's length price] does not yield a determinate price, because the price one determines depends upon which component of the integrated enterprise one examines. For instance, assume that the producing arm's cost is 30; the distributing arm's, 20; and the price to outside firms (the revenue from the transaction) 100. Assume on these facts, one can determine the price that will induce the producing arm to enter the transaction is 40 [providing a margin to the producer of 10] or any greater price; the price to induce the selling arm, 70 [providing a margin to the distributor of 10] or any lower price. Thus, any price between 40 and 70 will induce both arms to enter the transaction. This leaves a residue of income of 30 which cannot be determinately allocated.¹⁰³

Frustrated with the inadequacy of prices determined under existing § 482 methods, the Service tends to recommend and the courts accept reallocations of income based on arbitrary prices.¹⁰⁴ Using the figures above as an example, the RPM would yield a price of 70, clearly under-allocating income to the purchasing/reselling arm, while the CPM would produce a price of 40 with the reverse effect.¹⁰⁵ The Service would split the profit, thus arriving at a tax reference price of 55.¹⁰⁶ Therefore, four or five years after companies have established and implemented transfer price policies, the Service uses its own method rather than the methods prescribed by the regulations.

101. Langbein, *supra* note 29, at 1317.

102. Consider the U.S. Treasury Department's failure to act on its acknowledgment of the Continuum Price Problem. WHITE PAPER *supra* note 9, at 44-45.

103. Langbein, *supra* note 32, at 1395.

104. Langbein, *The Unitary Method and the Myth of Arm's Length*, TAX NOTES, February 17, 1986, at 663; see also JCOT PAPER, *supra* note 11. (The Treasury acknowledges the existence of judicially formulated alternative methods). *Id.*

105. Langbein, *supra* note 32, at 1396.

106. *Id.*

After operating under this method for many years, the Treasury Department conducted an investigation of intercompany pricing, publishing their results in a white paper.¹⁰⁷ However, the *White Paper* fails to suggest an appropriate way of allocating the residue of income.¹⁰⁸ This results in an over-allocation of income to the parent (United States) entity.¹⁰⁹ While most favorable to the United States, it may in practice produce globally undesirable economic results.¹¹⁰ The Service must balance its goal of maximizing United States, tax revenues¹¹¹ with encouraging responsible behavior on the part of multinational companies.

As there is no single determinate arm's length price, there can be no accurate allocation of the tax base between two countries.¹¹² Thus, allocation is based on an ad hoc objective determination.¹¹³ Proponents of the continuum price problem contend that the residue is substantial¹¹⁴ because in practice there is almost always a large excess of revenue over the cost necessary to generate a marginal return to all the components of the integrated organization.¹¹⁵

Advocates of the Continuum Price Theory suggest a transaction cost approach to § 482 cases would remove the arbitrary nature of the analysis.¹¹⁶ Transaction cost theory would attribute income to each affiliate according to its contribution to overall income of the organization.¹¹⁷

Section 482 cases are essentially economic cases.¹¹⁸ Transfer pricing cases are inherently factual and subjective in nature. They require a great deal of cost, pricing and market data

107. WHITE PAPER, *supra* note 9.

108. Langbein, *supra* note 32, at 1413.

109. *Id.*

110. If the ARAMCO group had declared their profits in the United States, rather than in net consuming nations, a current account crisis may have occurred, as discussed above in note 45.

111. Langbein, *supra* note 29.

112. *Id.* at 1396.

113. *Id.* at 1320.

114. Langbein, *supra* note 29.

115. *Id.* at 1318.

116. *See infra* Part IV.

117. *Id.*; *see also infra* Part IV (C).

118. Statement of James M. Kammann, special trial attorney in the office of the Chief Counsel (Department of Treasury) before The Subcommittee on Oversight, Committee on Ways and Means, July 10, 1990 (discussing his experience with § 482 cases).

regarding the taxpayer and its competitors.¹¹⁹ An analysis of structure and pricing in the petroleum industry aids in understanding the applicability of § 482 methodology.

III. THE PETROLEUM INDUSTRY

A. Why Study The Petroleum Industry?

The petroleum industry is particularly important because of the magnitude and volatility of its effects on the economies of net importing countries.¹²⁰ Examination of supply disturbances that occurred in the industry during 1973-74 and 1979-81 illustrate its importance.¹²¹ In 1973, the price of crude oil increased an average of 350 percent.¹²² In 1979, a second shock in oil prices occurred following the deposition of the Shah of Iran.¹²³ The contract price of Arab Light¹²⁴ increased from \$12.79 to \$28.67, and the spot price climbed to \$36 per barrel.¹²⁵ These sharp price hikes had substantial impacts on the economies of most of the oil-importing industrial countries. The result was to significantly destabilize them.¹²⁶ The immediate impact of the 1973 and 1979 oil price shocks on the net importing countries was recessionary,¹²⁷ resulting in declines in real Gross National Product (GNP) and elevated unemployment.¹²⁸ Both of these episodes were followed by rising inflation rates.¹²⁹ The term stagflation, a combination of recession (stagnation) and inflation, was coined to characterize the general features of the economies of the industrial world following the oil shocks of the 1970's.¹³⁰ Not only do price shocks cause stagflation, but they also impact on a nation's current account balance and exchange rate.¹³¹ An

119. Statement of Fred T. Goldberg Jr., Commissioner of Internal Revenue, before The Subcommittee on Oversight, House Committee on Ways and Means, July 10, 1990 (discussing the Treasury Department's current efforts to implement § 482).

120. See FRANCISCO L. RIVERA-BATIZ AND LUIS RIVERA-BATIZ, *INTERNATIONAL FINANCE AND OPEN ECONOMY MACROECONOMICS* 353 (1985); See also WILFRED ETHIER, *MODERN INTERNATIONAL ECONOMICS* 145 (1983).

121. RIVERA-BATIZ AND RIVERA BATIZ, *supra* note 120, at 353.

122. *Id.* at 353. "[F]or instance, the price of oil, [based on the benchmark] Saudi Arabian [light grade crude], increased from \$1.90 per barrel to \$9.76, as spearheaded by the Arab oil embargo and the start of the OPEC price hikes during the last quarter of 1973." *Id.*

123. *Id.* at 353.

124. Saudi Arabia exports three crude blends from two different locations. Saudi Light is quoted F.O.B. Ras Tannurah.

125. RIVERA-BATIZ AND RIVERA-BATIZ, *supra* note 120, at 353/54.

126. *Id.*

127. *Id.*

128. *Id.*

129. *Id.*

130. *Id.*

131. *Id.*

increase in the cost of oil imports would, all else being equal, cause deterioration in a nation's current account.¹³² At a fixed exchange rate this would generate a balance of payments deficit.¹³³ Examination of the data from the 1973 oil shock reveals that the overall trade balance in the United States fell by \$6.2 billion, from \$0.9 billion in 1973 to -\$5.3 billion in 1974.¹³⁴

Another effect price shocks have on a nation's current account is increased tension between affected governments.¹³⁵ The balance of payment shifts have the greatest impact in Europe.¹³⁶ European countries are billed for Middle East oil in U.S. dollars.¹³⁷ Therefore, the higher the value of the dollar, the more they have to pay for oil in their own currencies.¹³⁸ In an effort to alleviate some of the price shock effects, European governments demanded that the United States lower interest rates to inflate the dollar.¹³⁹

B. Relevant Aspects of Petroleum Industry Structure

Petroleum production and distribution is an international industry.¹⁴⁰ Crude oil, the raw material, is abundant in less developed countries.¹⁴¹ In turn, it is exported to the industrialized nations as a fundamental component of their economies.¹⁴² The distances and transportation times between the wells and refineries are extensive: forty-five days from the Middle East to Europe or the United States and sixty days from the Middle East to Japan.¹⁴³ There is an additional time component of thirty days to refine and distribute the end products. As a result any change in demand or supply creates an imbalance that requires a

132. *Id.*

133. *Id.*

134. WILFRED ETHIER, *MODERN INTERNATIONAL ECONOMICS* 145 (1983).

135. PAUL C. ROBERTS, *THE SUPPLY-SIDE REVOLUTION* 154 (1984).

136. *Id.*

137. *Id.*

138. *Id.* at 154 n. 3.

139. *Id.* at 154/55. "The State Department, ever sensitive to the complaints of foreigners, had actually launched a campaign against the President's tax cuts on the grounds that international relations were at stake." *Id.* At the time the United Kingdom believed higher United States tax rates would have an anti-inflationary effect, by reducing interest rates. Lower interest rates will reduce dollar demand and thus the value of the dollar on world currency markets. *Id.*

140. See *THE MABRO STUDY*, *supra* note 18.

141. *Id.* at 8..

142. ETHIER, *supra* note 134, at 40. For example, in 1980, United States net oil imports represented an average of 30% of total imports, by far the largest import commodity. *Id.*

143. *THE MABRO STUDY*, *supra* note 18, at 9.

substantial period of time to correct.¹⁴⁴ Normally, swings are dampened by inventory stored throughout the system. However, increased prices have made inventory carrying costs excessive.¹⁴⁵ Consequently, stocks have been reduced. This further exacerbates the impact of demand and supply swings. Therefore, supply is fixed over the short term. Any disturbance in equilibrium caused by increased or decreased demand, or changes in available supply, substantially affects prices and produces a degree of volatility.

The marginal cost¹⁴⁶ of producing a barrel of crude oil in the Middle East is roughly 30 to 50 cents. Since the 1973 and 1979 oil shocks, the price of oil has been without sound economic footing. Prices were driven by the politics of the OPEC nations.¹⁴⁷ Internal quarrels between OPEC members have caused prices to increase when the majors¹⁴⁸ thought they might fall and vice-versa, making prediction impossible.¹⁴⁹

The relationship of crude oil and product prices is complex. Crude oil is refined by a range of processes to produce three basic products: naphtha (gasoline), distillate and fuel oil,¹⁵⁰ and a large number of other products. The relative yields of the three products and the quality of each varies with the type of crude oil. There is a correlation between the marginal crude¹⁵¹ which is generally accepted to be Arabian Light,¹⁵² and product prices in

144. See VERLEGER, *supra* note 42, at 55.

145. See RIVERA-BATIZ AND RIVERA-BATIZ, *supra* note 121, at 353.

146. Marginal cost is the addition to total cost resulting from the addition of the last unit of output.

147. WALL STREET JOURNAL, May 27, 1981, at 3. "It is my crude and I will do with it as I please." *Id.* (quote attributed to Sheik Yamani at the May 25, 1981, meeting of OPEC in Geneva).

148. For the period 1971 until 1987 The "majors" were the seven major oil companies: British Petroleum, Chevron, Exxon, Gulf (now part of Chevron), Mobil, Shell and Texaco.

149. VERLEGER, *supra* note 42, at 55. In 1981, when the world expected the price of crude to rise, internal confusion amongst the OPEC members allowed Saudi Arabia to keep the price of crude down through the use of its surplus production capacity. *Id.*

150. In an average barrel of Arabian Light there is:

- 38% Fuel oil
- 36% Gas Oil (distillate)
- 7% Naphtha
- 7% Premium Gasoline
- 6% Regular Gasoline

VERLEGER, *supra* note 42, at 267.

151. General economic theory defines the marginal crude as that barrel which will be purchased last (i.e. the highest priced barrel produced). This has traditionally been the Arabian crudes because of their distance from the industrialized nations and the politics of crude produced in the industrialized nations. See EDWIN MANSFIELD, *MICRO-ECONOMICS THEORY & APPLICATIONS* 472 (1985).

152. See generally THE MABRO STUDY, *supra* note 18.

key markets¹⁵³ when weighted in proportion to their yield from Arabian Light crude. The difference between the weighted product price and the landed cost of Arabian Light crude oil in the respective markets represents the refiner's margin.¹⁵⁴ This is a measure of the correlation when compared to the actual cost of refining.¹⁵⁵ The sum of the percentages of each of the major products that can be produced from a barrel of crude, multiplied by its market price, is termed its gross product worth.¹⁵⁶ (Also termed a netback price). To obtain a free on board (F.O.B.) netback price,¹⁵⁷ the costs of transportation and refining are deducted from the gross product worth.

An understanding of netback pricing and the marginal nature of Arabian crude is essential to its consideration as an uncontrolled comparable price.

C. Comparable Uncontrolled Prices In The Petroleum Industry

The analysis of spot market prices, as comparable uncontrolled prices for determination of a tax reference price, is divided into two time periods because of the way the oil industry has developed. The two significant periods are from 1973 to 1981 and from 1982 to the present. In 1981, a weakening of the OPEC cartel and the advent of tax spinning¹⁵⁸ substantially changed the pricing structure of the industry,¹⁵⁹ requiring separate analysis.

In the first period, the majority of crude was distributed through term contracts¹⁶⁰ and the spot market served primarily as a market clearing device representing between 5% to 15% of total supply.¹⁶¹ Price fluctuations on spot product markets occurred on a day-to-day, and often minute-to-minute basis, making it difficult to perceive rhyme or reason for the fluctuations.¹⁶² A price could spurt on a given day, in one particular market, because a buyer couldn't locate a seller or vice-versa. Market shifts on any given day had little to do with the fundamentals of global supply and demand.¹⁶³

153. The markets are: New York, Rotterdam and Tokyo.

154. VERLEGER, *supra* note 42, at 268.

155. *Id.*

156. *Id.*

157. An F.O.B. netback price, is calculated by taking the price of each of the products sold and multiplying it by its percentage of a barrel of crude.

158. *See infra* period (ii).

159. WALL STREET JOURNAL, May 27, 1981, at 3.

160. A term contract is a contract negotiated for a fixed period of time with a pre-arranged price or pricing schedule.

161. VERLEGER, *supra* note 42 at 263.

162. *Id.* at 265.

163. *Id.* at 265.

In contrast, during the second period, a significant increase in spot market activity occurred,¹⁶⁴ and term contracts were renegotiated to incorporate spot market pricing mechanisms.¹⁶⁵

Understanding the role of the spot market requires recognition that, unlike any other industry, the oil industry, must achieve supply-demand balance. Once product is removed from the ground it must be stored in tanks. Tank storage capacity is finite and costly. Surpluses anywhere in the system are dispersed through the spot market.¹⁶⁶ The surplus may be a crude cargo in excess of that required to meet demand, cargos that end up in geographical areas with insufficient demand, or cargos that when refined into products will produce grades or qualities for which there is no demand. Furthermore, this is a highly capital intensive, low marginal cost industry. Because of enormous expenses involved in finding oil fields, once a field is discovered companies maximize extraction regardless of demand. A barrel that is not produced today will not be produced until the end of the life of the well, greatly reducing the return on investment.¹⁶⁷ Saudi Arabian crude is exceptional in this regard due to uncharacteristically low marginal cost of recovery. Total recovery may also be affected because shutting down a well will result in a loss of pressure.¹⁶⁸ These factors, in addition to the low marginal cost of additional production and refining capacity, lead to over-production, except in crisis periods.¹⁶⁹

D. Are Spot Prices Representative of Transactions Within The Industry?

(The Search for Comparable Uncontrolled Prices)

A price charged for transfer of crude oil between unrelated parties is by definition an arm's length price.¹⁷⁰ An issue in the transfer pricing cases is whether any of the arm's length prices available in the petroleum industry, to the Service, satisfy the requirements of a comparable uncontrolled price, as defined

164. PETROLEUM INTELLIGENCE WEEKLY, February 2, 1981, at 2.

165. *Id.*

166. VERLEGER, *supra* note 42, at 265.

167. Because the development costs of a well are fixed in dollar values from the date of discovery, to sell a barrel 20 years from now that could have been produced today for the same price, would result in a lower return on investment when reduced to present value.

168. Oil caverns are under high pressures prior to discovery. This pressure allows for easy extraction. By pumping water into the well, as it is extracted, the pressure is maintained forcing the oil out. Shutting down the well will result in a loss of pressure, decreasing the total recovery and/or increasing the cost of extraction.

169. *See generally* VERLEGER, *supra* note 42.

170. *See* Treas. Reg. § 1.482-1 (1991).

under § 1.482-2(e)(2)(ii) of the regulations.¹⁷¹ Uncontrolled sales are considered comparable to the controlled counterparts if the physical property and circumstances are identical or, so nearly identical, that any difference can be reflected by a reasonable number of adjustments.¹⁷²

Period (i) (1973-1981) Term Contracts

Until producing countries nationalized oil company operations, and net consuming countries created state owned integrated oil company operations, the producing countries' oil was controlled from the wellhead to the pump by the major oil companies.¹⁷³ During this period, most contracts for oil were negotiated on a long-term basis, with the spot market playing a minor role.¹⁷⁴

During period (i), spot market trades were normally transacted at lower prices than the vast majority of transactions (the normal scenario).¹⁷⁵ On the other hand, when the system was constrained or subjected to excess demand,¹⁷⁶ the spot market reacted upward and reflected higher prices that were equally unreflective of the vast majority of transactions (the crisis scenario).¹⁷⁷ This was a result of the spot market's use as a market clearing device during this period.¹⁷⁸ The table below illustrates the effect of a systematic constraint (the 1979 oil crisis) on the spot market price.

171. See Brief of Petitioner.

172. Treas. Reg. § 1.482-2(e)(2)(ii) (1991).

173. See Brief of Respondent, at 8.

174. See PETROLEUM INTELLIGENCE WEEKLY, Feb. 2, 1981, at 2. Spot transactions accounted for only 5% to 15% of all crude sales during this period. *Id.*

175. See VERLEGER, *supra* note 42, at 143-8.

176. For example, political interruption of crude supplies from one country; closures of ports or slowdown of ships; interruption of supply routes such as the Suez Canal closure; reduction of refining capacity via explosion or fire; or unpredicted increases in demand due to abnormally cold weather conditions.

177. VERLEGER, *supra* note 42, at 268.

178. *Id.*

Crude Prices During The 1979 Iranian Crisis
(In Dollars Per Barrel)¹⁷⁹

MONTH	OFFICIAL PRICE ARAB LIGHT	SPOT VALUES
Oct. 1978	12.70	15.36
Nov. 1978	12.70	12.40
Dec. 1978	12.30	16.68
Jan. 1979	13.34	19.44
Feb. 1979	13.48	26.89
Mar. 1979	13.98	25.74
Apr. 1979	17.25	25.96
May 1979	18.14	30.06
Jun. 1979	19.68	35.37

Under either normal or crisis scenarios which describe the conditions that existed during this period, the evidence strongly suggests spot market prices did not reflect average prices used by companies for their internal or external transactions. Therefore, spot market prices failed to meet the comparable uncontrolled price criteria for period (i).¹⁸⁰

Period (ii) (1982-1990)
Emergence of the Spot Market

The spot market price for crude did not reflect contract prices until the advent of tax spinning,¹⁸¹ a tax avoidance device developed by the major oil companies to contain the effects of new tax policies introduced by the United Kingdom.¹⁸² Spinning takes place when an integrated company producing United Kingdom Continental Shelf ("UKCS") oil sells all or part of its crude in arm's length deals, rather than appropriating this oil for refining in its own plants or transferring it to subsidiaries or affiliates.¹⁸³ The oil company then enters the spot market to satisfy its own requirements.¹⁸⁴ Tax spinning substantially reduces the fiscal liability of an integrated company when the price of an arm's length oil transaction is lower than the price that would be assessed by tax authorities when oil companies directly appropriate oil for use in their own refineries (a non-

179. VERLEGER, *supra* note 42 at 149.

180. See Treas. Reg. § 1.482-2(e)(2).

181. See generally THE MABRO STUDY, *supra* note 18.

182. *Id.* at 161.

183. *Id.* at 123.

184. *Id.*

arm's length transaction).¹⁸⁵ The savings accrue because production profits are taxed at about 95 percent, whereas refining profits are taxed at 52 percent but, due to losses, may be shielded from tax (i.e. 0 percent).¹⁸⁶ Since direct appropriation is subject to a post-facto negotiation with the tax authorities, spinning also provides a known and certain tax reference price.¹⁸⁷ This creates greater planning options and reliable calculation of margins.

Spinning developed in the early eighties and reached its peak in 1984 and 1985.¹⁸⁸ A major study was performed at Oxford University analyzing the effect of spinning on the benchmark and spot market prices of crude oil.¹⁸⁹ From the table below, one can see a disparity between contract and spot market prices during selected intervals. This disparity illustrates why the oil companies elected to spin.

Influence of Spinning on Contract Prices¹⁹⁰
(Values in United States Dollars)

DATE	BENCHMARK PRICE ¹⁹¹ BRENT CRUDE	SPOT PRICE BRENT CRUDE	SPOT PRICE ARABIAN LIGHT
1980 Aug.	36.25	31.95	32.10
1981 Jun.	35.00	32.19	31.84
1982 Aug.	35.10	32.33	31.26
1983 May	30.00	29.47	28.56
1984 Jul.	30.10	27.78	27.43
1985 May	27.90	26.74	26.80

185. *Id.*

186. See THE MABRO STUDY, *supra* note 18, at 271. For example, where there is a \$2 differential between spot and benchmark prices, \$1.90 of liability is avoided by spinning. *Id.*

187. *Id.*

188. *Id.* at 191.

189. ROBERT MABRO ET. AL., THE MARKET FOR NORTH SEA CRUDE OIL (1986).

190. *Id.* at 329-335. The benchmark prices are the term BNOC/Statoil prices of North Sea crudes (contract and spot market prices are taken from the Mabro Study). *Id.*

191. The benchmark price is the value assigned by the British government to crude oil which is used internally by the recovering company.

Prior to 1980, the spot market for Brent crude¹⁹² did not exist. Today Brent spot price has become a market indicator.¹⁹³ Reasons for its emergence include: the decline of term contracting starting in 1979, the pressure for short-selling in a falling market, the rapid growth of North Sea production, structure of UKCS fiscal regimes, and the role of the British National Oil Company (BNOC) in setting prices and disposing of substantial volumes of UKCS production available through taking its royalties in kind instead of cash.¹⁹⁴

North Sea oil represents less than 2 percent of total reserves with OPEC retaining 67 percent of known reserves.¹⁹⁵ The advent of spinning and percentage of Brent crude traded on the spot market in proportion to total production has resulted in its dominance as an indicator of crude oil prices.¹⁹⁶ Because of its proximity to major consuming nations, marginal producers have been forced to resort to Brent spot prices as a basis for their own pricing.¹⁹⁷ Roughly two-thirds of world supply of crude oil is now spot in some sense.¹⁹⁸ It is estimated that perhaps one third of volume moves in bonafide short-term third-party transactions and another one third under specifically spot-related pricing.¹⁹⁹ The remaining one third consists of more official orientated equity oil,²⁰⁰ and a few non-spot related term contracts.²⁰¹ The advent of dry barrel²⁰² trading added another element of risk to the market. Eight million of the twenty million barrels per day traded on the futures market in 1984 were dry barrels.²⁰³

192. Brent is the name given to one of the largest oil fields in the North Sea. As a result the price of Brent crude has become a market indicator for North Sea crude prices.

193. THE MABRO STUDY, *supra* note 18 at 161. Trading in Brent spot and forward markets has become an accepted measure of an arm's length crude oil price. Brent plays a barometric role in the pricing of other North Sea crudes and may have an influence on economic behavior in the world petroleum scene outside the North Sea. *Id.*

194. *Id.* at 161-63.

195. *Id.* at 6.

196. *See Id.* at 240.

197. *See Id.* at 161.

198. PETROLEUM INTELLIGENCE WEEKLY, Special Supplement April 22, 1985, at 3. [hereinafter PIW].

199. *Id.*

200. This includes long-term contracts, strategic petroleum reserves and oil produced and consumed by national governments.

201. PIW, *supra* note 198.

202. A dry barrel is a future transaction for a barrel of crude that has not been lifted.

203. PIW *supra* note 198 at 3. For example, a Brent cargo to be loaded in March of 1984 was first traded in the previous December and was bought and sold by 24 trading entities in 36 deals over a period of a few months. *Id.*

Spinning is an unnecessarily volatile pricing exposure for the industry which United Kingdom government fiscal policy could have avoided.²⁰⁴ Agreements with the oil companies establishing transfer prices for Petroleum Revenue Tax (PRT) purposes at market levels would eliminate the problem. Spinning creates a strong downward bias in spot market prices because of the incentive to trade out of the an artificial barrier²⁰⁵ created around upstream profits by the United Kingdom government, at the lowest possible price.²⁰⁶

Excess spot market activity has subjected the industry to high levels of volatility.²⁰⁷ Furthermore, excessive participation in the spot market, heretofore not a factor in the industry, invited speculators and formal establishment of a futures market purely for the purpose of speculation.²⁰⁸ This too has markedly increased volatility. In every other commodities industry, the purpose of futures markets is to stabilize costs so that end product prices will not vary. In the oil industry, futures trading thrives on long-term price volatility and dies when prices are stable. The futures market, therefore, serves only to reduce product price stability, not increase it. As already discussed above, because of long lines of supply (90 days from the well to the pump); minimum inventory buffers due to their high cost; and high risk and unpredictability of demand, the industry is prone to excessive reaction to volatile prices. Spot prices may be more representative of industry patterns in this period due to the higher volumes of crude traded on the market (33%) and the advent of spot based term contract pricing, but this in fact causes untold economic impacts on world economies.²⁰⁹ These factors must be

204. See *Id.*

205. The barrier is known as the "ring-fence." It is an artificial tax barrier the United Kingdom government created around upstream profits in the petroleum industry. The purpose was to prevent oil companies using "paper" downstream losses to reduce there upstream tax liability. Upstream activities include exploration and exploitation of wells. Downstream activities are refining and distribution.

206. See generally THE MABRO STUDY, *supra* note 18. For example, an oil company enters into separate transactions to buy and sell cargoes in August for November delivery at \$40/barrel (assuming the bench mark price was above the spot price). If market price drops to \$28/barrel as November approaches the company will prefer to close out the \$40/barrel trade rather than elect to use it as a spin. It can then enter into a subsequent trade at a lower price and use that trade as its spin. The price of the cargo the oil company sells in its spin is the price at which the company is taxed when it leaves the ring-fence. Since oil companies are the major participants in the market an incentive and mechanism exists to use the lowest achievable price. This creates the downward bias.

207. THE MABRO STUDY, *supra* note 18, at 244.

208. *Id.*

209. A recent example is found in Iraq's 1990 invasion of Kuwait.

considered prior to establishing spot prices as tax reference prices.²¹⁰

There are many unique aspects of crude as a commodity and factors that influence the price of crude oil. The relationship between spot market price for crude and term prices commands great influence over the application of § 482 to transfer pricing in the oil industry.

IV. APPLICATION OF I.R.C. § 482 TO THE PETROLEUM INDUSTRY

Internal Revenue Code § 482 establishes a broad standard for determining when transfer prices are unreasonable.²¹¹ The text of § 482 limits its application to cases of tax evasion or where reallocation is necessary to assure that the income of a related taxpayer is reflected on its tax return.²¹² The scope of § 482 has been expanded beyond the plain meaning of the text by both the Service and the courts.

The Service has promulgated regulations allowing for reallocation where a taxpayers' income does not reflect the income it would have earned in a comparable arm's length transactions.²¹³ The Service fails to account for error in the comparison that may result from the economic benefits of integration. Thus, § 482 reallocations may not truly reflect income.²¹⁴

The courts have expanded the scope of § 482 by interpreting the evasion standard to include tax avoidance.²¹⁵ This is justified on the basis that § 482 is a non-punitive provision and thus the terms evasion and avoidance may be interchanged.²¹⁶ The courts' reasoning continues that transactions between one controlled taxpayer and another should be subject to special scrutiny to ascertain whether the common control is being used to reduce, avoid or escape taxes.²¹⁷ A more accurate summation would be that the purpose of § 482 is to prevent reduction or avoidance of United States taxation.

The Commissioner's power to reallocate income extends both to cases of intended and inadvertent shifting of income.²¹⁸ An

210. See Treas. Reg. § 1.482-2.

211. See I.R.C. § 482 (1986).

212. *Id.*

213. Treas. Reg. § 1.482-1(a)(6).

214. See D. Kevin Dolan, *Intercompany Transfer Pricing For The Layman*, Tax Notes, October 8, 1990, at 211, 214; see also Langbein *supra* note 29.

215. *Stewart v. Commissioner*, 714 F.2d 977, 987 (9th Cir. 1983).

216. *Foster v. Commissioner*, 80 T.C. 34,158 (1983).

217. *Foster v. Commissioner*, 756 F.2d 1430,1432 n.1 (9th Cir. 1985).

218. See *Eli Lilly & Co. v. C.I.R.*, 856 F.2d 855,860 (7th Cir. 1988).

understanding of the extent of the Commissioner's authority to reallocate income, beyond the intended scope of § 482, would appear imperative to the major oil companies. The discussion of the ARAMCO cases will question whether in fact transfer prices were used to reduce a controlled taxpayers' taxable income. The data will show that in some instances controlled taxpayers taxes were in fact increased through mandatory deceleration of income in higher tax jurisdictions, even though their United States taxes were reduced.

*A. An Analysis of Uncontrolled Comparable Prices
In The Petroleum Industry*

As discussed above, the standard by which transfer prices are scrutinized is the arm's length standard.²¹⁹ Can the Commissioner use spot market prices as a standard to evaluate transfer prices in the petroleum industry under current law?

Use of pure spot prices as comparable uncontrolled prices would subject the taxpayer to prices that are uncharacteristically low during normal periods and high during crisis periods.²²⁰ The treasury regulations require that sales used in determining arm's length prices be realistic.²²¹ Uncontrolled sales do not include sales at unrealistic prices.²²² "With respect to the arm's length standard, a requirement the IRS must satisfy is it may not be arbitrary, capricious or unreasonable."²²³ There is substantial evidence that during both period (i) and, to some extent, during period (ii) the spot market prices did not represent realistic comparable uncontrolled prices.²²⁴ The evaluation of reasonableness relies on the standard for comparability.²²⁵ Term contracts are for the sale of large volumes of crude over long periods of time. The spot market is used as either a market clearing device for small volumes of crude or as a tax avoidance device for small amounts of crude. The "same circumstances requirement" is not met.²²⁶ This argument is further strengthened

219. Treas. Reg. § 1.482-1 (1991).

220. See *supra*, part IV(c)(i) & (ii).

221. Treas. Reg. § 1.482-2(e)(2)(ii) (1991).

222. *Id.*

223. Statement of Frances Zuniga, of the California Franchise Tax Board before The Subcommittee On Oversight of the House Committee On Ways and Means, July 10, 1990 (discussing his experiences with section 482 cases).

224. See *supra* test accompanying period (i) and period (ii).

225. Levey and Ruchelman, *supra* note 7, at 616. "Comparability exists if substantially the same products are sold under the same circumstances, or if differences in the property or circumstances either have no effect on prices or can be measured and eliminated with a reasonable number of adjustments." *Id.*

226. See Treas. Reg. § 1.482-2(e)(2) (1991).

by the existence of term arm's length contracts in the petroleum industry.²²⁷

The courts have overruled § 482 reallocations by the Commissioner only if found to be arbitrary, capricious or unreasonable.²²⁸ When a taxpayer rebuts the presumption of reasonableness afforded the Commissioner's determinations, the Tax Court must determine whether the taxpayer's own allocations conform to the arm's length requirement.²²⁹ Use of term arm's length contract²³⁰ prices more closely parallels the comparable uncontrolled price standard than do spot prices.²³¹

Term arm's length prices did, and still do, exist. A possible solution to the problem of acquiring this information would be to require all companies importing oil into the United States to report relevant transaction data for each cargo to the Service. Other consuming nations have adopted similar solutions.²³² The Service would have each company's results as a basis for comparison. Thus, the Service could better determine whether controlled prices reflect market conditions. Further, allocation biases could be determined, such as: selective importation of (i) low profit crudes; (ii) high cost crudes (spot or term); or (iii) high freight charges (smaller cargo sizes) into higher tax jurisdictions.²³³

The industry includes both spot and term contracts negotiated at arm's length. Spot market trades are by definition arm's length transactions. In addition, other arm's length term contracts exist between the majors and between governments and the majors. The prices at which these transactions occur remain beyond the public domain for competitive reasons. However, the British government requires oil companies to report all transfer, term and spot contract prices quarterly.²³⁴ Throughout Europe, governments have established national oil companies, providing the pricing data needed for taxation. The British National Oil Company (BNOC) converted from receiving royalties in cash to taking them in kind

227. See *infra* section IV (b); see also Treas. Reg. § 1.482-2(e)(1)(iii) (1991).

228. *Eli Lilly and Co. v. C.I.R.*, 856 F.2d 855 (7th Cir. 1988).

229. *Id.* at 860.

230. Term arm's length contracts are long-term contracts negotiated between unrelated parties.

231. See Treas. Reg. § 1.482-2(e)(2) (1991).

232. See *THE MABRO STUDY*, *supra* note 18, at 93.

233. For example, if one company imports 100% spot cargoes at elevated prices where other companies had a mix of spot and term, reallocation seems appropriate. See Treas. Reg. § 1.482-2(e)(2) (1991).

234. *Id.*

This enables the government to participate in spot and term markets and maintain independent pricing data.²³⁵

Assuming that term prices satisfactorily meet § 482 requirements for a comparable uncontrolled price, the problem most often cited by the Service is difficulty in collecting data for determination of arm's length price.²³⁶ European importing countries have obtained this data for years. They require complete reporting of all costs to support product price regulation and income tax regulation on all imports. In addition, much statistical data is available in detailed industry publications prepared primarily for the oil companies.²³⁷ There is no suggestion here of a need for a U.S. national oil company. Feasible government controls²³⁸ would provide enough leverage to ensure accurate reporting. This solution is, however, subject to the assumption that such reporting could be implemented without infringement of the rights held by United States companies under current law.

B. The Pass-Through System

(i) The ARAMCO Cases (1979-81)

The foregoing discussion does not account for tax treatment of transfers of crude oil between foreign affiliates of United States corporations. The primary issue in these intra-corporate transfers is the United States' right to tax income generated in the purchase and sale of crude oil wholly outside its borders when transfer prices are established by local law. This issue is the subject of the pending ARAMCO cases.²³⁹

The Service's challenge to the transfers arose from the selling price, of crude oil sold by the Saudi Arabian Government to the ARAMCO shareholders between 1979 and 1981.²⁴⁰ According to a source at one of the major oil companies, the four Aramco partners were able to buy crude oil at \$28 a barrel during a three year

235. In France the national oil company is ELF Acquitane; in Italy, the company is INI; in Norway, the company is STATOIL; and in Spain, it is CEPESA.

236. Statement of Edward Romoff, a CPA with the IRS in California, before the Oversight Subcommittee of the House Ways and Means Committee July 10, 1990, (discussing his experiences with section 482 cases); statement of Louis Milano, an international examiner with the IRS in New Jersey, before The Oversight Subcommittee of the House Ways and Means Committee July 1990. (Discussing his experiences with section 482 cases).

237. E.g. PETROLEUM INTELLIGENCE WEEKLY; PLATT'S OILGRAM SERVICE.

238. For example, establishing criteria for bidding on offshore licenses, product price regulations, etc.

239. See *supra* note 1.

240. Brief of Respondent.

period instead of at the \$34 official price set by the OPEC countries.²⁴¹

The above referenced, official market price, was related to the spot market prices. The Saudi Arabian dominance of petroleum markets reduced other OPEC crudes to the margin. During this period a transition to F.O.B. netback pricing occurred. The official OPEC price was the price of marginal crude, which was essentially an F.O.B netback price influenced by spot market pricing. As discussed above, spot influenced prices fail to meet the § 482 criteria. Aside from the inappropriate nature of the Services suggested arm's length price current law may still prevent reallocation.

The tacit agreement between the ARAMCO shareholders and the Saudis required that the crude be distributed according to pre-crisis proportional consumption of Saudi crude by consuming nations.²⁴² The cost savings were to be passed through to consuming nations.²⁴³ The discount contracts prohibited companies from reselling to overseas subsidiaries at higher prices.²⁴⁴ Recent developments in § 482 case law may prevent reallocation under these circumstances.²⁴⁵ *Procter and Gamble* held that a taxpayer who could not pay royalties to a related party because of a restriction imposed by a foreign government should not be subject to a § 482 reallocation be the Commissioner. The court acknowledged that § 482 requires the controlled group to have distorted its income. Where the distortion results from a restriction imposed by law, and not the controlled taxpayer, no reallocation should be permitted.

The Service argues that, while restricted by the Saudi government, the recipient nations were not subject to the Saudi contracts, thus the ARAMCO shareholders were able to sell their products at higher prices, substantially increasing their United States profits.²⁴⁶ Through these cases, the Service intends to capture the lost revenues.²⁴⁷ The Service contends that, if the oil companies had sold crude to their affiliates at official market prices, profits would have been shifted to their United States affiliates.²⁴⁸

241. CHICAGO TRIBUNE, Jan. 14, 1988, at C1.

242. Brief of Petitioner.

243. See *supra* INTRODUCTION (A) The Complexity.

244. CHICAGO TRIBUNE, Jan. 14, 1988, at C1.

245. *Procter and Gamble Co. v. C.I.R.*, 95 T.C. 323 (U.S.T.C. 1990):

246. Brief of Respondent.

247. *Id.*

248. *Id.*

Although not bound by a contractual relationship, the oil companies' business relationship with the Saudis required that the tax benefits be passed through to consuming nations. "Without more disclosure, tax experts are unable to determine whether the lower price might have been viewed by the I.R.S. as helping Texaco report higher profits in low-tax countries or whether the I.R.S. considered the value of the discounted transactions between foreign affiliates a constructive dividend that should have been paid to the U.S. parent."²⁴⁹ The issue is whether the oil companies could or should have, sold the crude oil to their affiliates at official OPEC price. The Tax Court has held that § 482 does not apply where restrictions imposed by law, and not the actions of the controlling interest, results in a non-arm's length allocation of income within a controlled group.²⁵⁰ A showing by the ARAMCO shareholders that they were bound by the restrictions imposed by the Saudi Arabian government should result in the reallocations being overruled. Noting that the aforementioned arrangement forced the oil companies to allow the full tax benefits of the discount contracts to pass through to the consuming nations,²⁵¹ and that oil companies operate in both consuming and producing nations by invitation, one can conclude that transfer prices were not established by the controlled taxpayers.²⁵² This lack of control should warrant an extension of the principles of *Procter and Gamble*²⁵³ to these cases.

Irrespective of the control issue there is evidence to rebut the Services claim that the taxpayers were reducing or avoiding taxes. The tax rates charged by the countries which benefited from the lower prices were not all lower than United States corporate tax rates.²⁵⁴ Reallocation requires that the Commissioner demonstrate that the company in question used its control to reduce, avoid or escape taxation.²⁵⁵ In order for the tax avoidance argument to prevail, the recipient tax jurisdiction must have a lower corporate tax rate than the United States. Since this was not always the case, the Service's theory that transfer prices were contrived to shift profits in order to lower tax jurisdictions fails.²⁵⁶ From this data, it can be argued that the oil companies

249. NEW YORK TIMES, Jan. 15, 1988, at 4D, col. 1.

250. *Procter and Gamble Co. v. C.I.R.*, 95 T.C. 323 (U.S.T.C. 1990) motion for reconsideration and full court review den'd T.C.M. 1990-638 (U.S.T.C. filed Dec. 19, 1990).

251. Brief of Petitioner, *Texaco, Inc. v. C.I.R.*, No. 24855-89 (U.S.T.C. filed Dec. 21, 1990).

252. See *Id.*

253. 95 T.C. 323 (U.S.T.C. 1990).

254. The U.S. corporate tax rate was 50%. The U.K. tax rate was 52%. THE MABRO STUDY, *supra* note 18.

255. I.R.C. § 482 (1986).

256. *Id.*

intended to maintain essential lines of supply by transferring into both higher and lower tax jurisdictions, according to guidelines set by the purchase agreements.

The Service's post-facto reallocation of profits, whose declaration in the United States would cause substantial future hardship for the oil companies, would subject the companies to double taxation.

(ii) The General Debate

The purchase of crude oil by United States based trading affiliates of a United States company, from a foreign government for sale to a foreign affiliate, should produce minimal taxable income in the United States. The oil companies operate in producing and consuming nations by government invitation and are subject to strict controls. Although purchasing nations enjoy convenient use of oil companies' distribution systems, the governments would soon initiate direct trading with producing nations if the United States oil companies began to sell crude at above cost to their downstream affiliates. The consuming countries would consider this to be a declaration of offshore profits. Requiring United States companies to set transfer prices for crude oil which is not distributed to United States affiliates at above cost would result in affiliates losing competitive position in world markets. In practice, it would not seem logical for Saudi oil sold in Germany to be subject to taxation by a third jurisdiction. The tax court has overruled reallocations by the Commissioner where pricing restrictions were imposed by importing countries.²⁵⁷ A legal restriction on control of profit distribution should prevent a reallocation under § 482.²⁵⁸

The Service makes valid arguments to justify its claims to a portion of these profits. First, the oil rights resulted from the ARAMCO agreement, originally a contractual relationship. The contracts were between ARAMCO and the Saudi government. It was the United States affiliates that owned the ARAMCO shares. Since the ARAMCO shareholders controlled the destination of the crude oil, they should be subject to taxation on the profits.²⁵⁹ The Service thus contends that since the trading activity or control was

257. *L.E. Shunk Latex Products, Inc. v. C.I.R.*, 18 T.C. 940 (1952); *Lehman v. C.I.R.*, 25 T.C. 629 (1955); *C.I.R. v. First Security Bank of Utah*, 405 U.S. 394 (1972).

258. *L.E. Shunk Latex Products, Inc. v. C.I.R.*, 18 T.C. 940 (1952); *C.I.R. v. First Security Bank of Utah*, 405 U.S. 394 (1972); *Cf. Treas. Reg. § 1.482-1(a)(6)*. If the receipt of the income by the U.S. affiliate is prohibited by commercial agreement and not by law, than an allocation under section 482 is not barred. *Id.*

259. *Lucas v. Earl*, 281 U.S. 111 (1930); *Vercio v. C.I.R.*, 73 TC 1246, 1253 (1980).

exercised in the United States, some income must be imputed for these services.²⁶⁰

The Service's contentions are subject to challenge by virtue of amount of control exercised. The Saudi government started to nationalize the ARAMCO oil company in the late sixties, retaining the ARAMCO partners as a first source of distribution. While this privilege, or agency relationship, was a product of the earlier contractual relationship, the contracts had little or no value as a result of the nationalization. The ARAMCO partners were being tested by the Saudis for retention, and their performance on the demand to pass through profits to the Europeans was a necessary prerequisite for retention of distribution privileges. The Saudis could have sold their oil directly to the European governments, placing in question the value of the agency relationship. The oil companies' employment was conditioned on maintaining the pass-through nature of the pricing mechanism. This defeats the contention that income should be attributed to the relationship. The service provided by the United States trading partners was merely to assure that the oil was distributed between the affiliates according to pre-crisis apportionments. Little value can realistically be attributed to this activity.

*C. Transaction Cost Analysis of the Pass-Through Cases*²⁶¹

Advocates of the continuum price problem propose an alternative solution to the inadequacies of the current law § 482.²⁶² The approach has characterized the traditional arm's length methods, discussed above, as a production cost methodology.²⁶³ Under that approach, income or profits are localized by their attribution to localized factors.²⁶⁴ The transaction cost orientation, by contrast, acknowledges that what is produced by factors and functions in one place may be jeopardized by non-integrated operations in another.²⁶⁵ Integration that obviates the risk deserves some credit.²⁶⁶ This theory calls for a close examination of the reasoning behind

260. Brief of Respondent, at 17-18.

261. Stanley I. Langbein, *Transaction Cost, Product Cost, and Tax Transfer Pricing*, Tax Notes, September 18, 1989, at 1391 (the Transaction Cost solution to the transfer pricing problem was developed by Professor Langbein and first explained in the above mentioned article).

262. *Id.*

263. *Id.* at 1392.

264. *Id.* (Traditionally these factors have been formulated through analysis of market forces in transactions where the parties act independently of each other).

265. *Id.* at 1392.

266. *Id.*

forward integration.²⁶⁷ The purpose of integration is to reduce risk by increasing control of lines of production.²⁶⁸ In the petroleum industry, it is most desirable to control production from the well head to the pump.

The transaction cost approach to transfer pricing problems recognizes the value of production economies resulting from forward integration.²⁶⁹ Under the forward integration approach it is assumed that each undertaking of a multinational corporation has an economic purpose which derives some benefit to an aspect of the operation. The benefit derived by an activity should be allocated a return on investment which is subject to taxation. While the earlier analysis of the continuum price problem suggested there was a residual of income attributable to the organization form, the transaction cost analysis helps to visualize this residue and suggests it be attributed to its source.²⁷⁰

The solution to the problem of allocating this residual may be found by analyzing the reasons for forward integration. In the petroleum industry, the downstream operations are a necessary precursor to bidding for exploration licenses. No country will sell rights to a company that could not move the oil. While no concrete values can be attributed to these operations, educated estimates may be used. This would not be uncharacteristic of § 482 analysis, where it is common to estimate values. There are other externalities to consider, such as undertaking unprofitable investments to protect other corporate interests. A system is sought where allocation of profit between tax jurisdictions reflects each entity's contribution to generating the overall income. This fractional apportionment theory, however, is subject to one major drawback. It requires a system developed on a multinational scale. It also requires agreement between all participating tax jurisdictions in the industry.

Proponents of the transaction cost approach believe that the solution to the ambiguities of the existing arm's length methodologies will be found in a flexible, workable apportionment regime. The arm's length principle gives guidance only in the rare circumstance where the behavior of unrelated parties approximates that of related parties, a scenario clearly never present in the petroleum industry.

267. *Id.* Forward integration can best be defined, in this context, as control by the owners of primary resources of all factors of production through final consumer purchases of end products. *Id.*

268. *Id.*

269. *Id.*

270. *Id.* at 1407. "[I]f an organization functions to protect or produce income, such income as is so produced, or preserved, is, perforce, attributed to the corporate form." *Id.*

D. Continuum Price Analysis of the Petroleum Industry

Finally, the remaining question is whether the continuum price problem exists in the petroleum industry and whether the transaction cost approach is workable in such a highly politically motivated industry. Absent governmental constraint, a continuum of prices would exist in the petroleum industry, all of which would reflect \$ 482 arm's length criteria.²⁷¹ However, the unique elements of petroleum industry pricing substantially diminish the size of the continuum. Through political control, consuming and producing nations remove the arbitrary nature of petroleum industry transfer prices. While the result is a politically induced transfer price, rather than an arbitrary post-facto allocation, it still fails to reflect income. It is, however, practical and workable.

How much income is really at stake in petroleum industry transfer pricing? "Profits that more than cover the opportunity cost of capital are known as economic rents."²⁷² "Royalties [payable to the U.K government for North Sea Crude] are treated by some economists as a tax and by others as a rent levied on the owner."²⁷³ Post 1976 royalties were 12.5 percent of the landed value of production.²⁷⁴ Royalties amounted to 12.5 percent of the gross revenues.²⁷⁵ After the deduction of royalties, the government deducts a petroleum revenue tax (PRT). (Its primary purpose is to act a natural resource depletion allowance). Between 1979 and 1982 the PRT was 70 percent, but was raised to 75 percent after 1982.²⁷⁶ The cost of producing a barrel of Brent crude in 1987 was \$2.20 per barrel.²⁷⁷ The United Kingdom corporate tax rate has fluctuated between 52 percent between 1982-1985 and 35 percent between 1986-1987.²⁷⁸ The United Kingdom government has placed a "ring-fence" around upstream oil operations. This means that an oil company cannot offset losses incurred elsewhere in the United Kingdom or in the rest of the world against the profits from United Kingdom production. The ring-fence and PRT result in an average barrel of crude netting profits of approximately 9 percent of the landed value as shown in the table below. Economic rent, therefore, relieves the selling entity of a substantial portion of the unallocated income or residue.

271. See generally Langbein *supra* note 29.

272. RICHARD BREARLEY AND STEWART MYERS, *PRINCIPLES OF CORPORATE FINANCE* 227 (1984).

273. THE MABRO STUDY, *supra* note 18, at 111.

274. *Id.*

275. *Id.*

276. *Id.* at 116.

277. *Id.*

278. *Id.* at 118.

The delicate relationship between the producing nations and the oil companies limits the amount of redistribution that can occur under United States law without subjecting the United States companies to double taxation. Limitations placed on profit allocation by foreign host governments, while not eliminating the benefits of integration, do not allow for corporate redistribution for tax avoidance purposes.

The second factor that causes price rigidity in the petroleum industry is the regulation of end-product prices by consuming nations' governments. Crude is traded in dollars,²⁷⁹ therefore, consuming nations constantly risk balance of payments crises brought on by large changes in product prices. By controlling product prices the governments can stabilize the inflationary effect of price shocks on their economies. This control forces the industry to absorb a substantial portion of the negative impact of a price shock. Consuming nations control product prices competitively through participation in the downstream portion of the industry and by strict enforcement of end product price ceilings. However, control of product prices substantially limits revenues downstream. Within the confines of this highly competitive, heavily regulated industry, profit margins are small. Therefore, revenues are generated through volume.

Between high economic rents, suppressed product prices and demands for cost-based transfers on crude by consumer governments, only a narrow margin of unallocated income remains subject to transfer pricing policies. However, the petroleum industry is a high volume industry (30 million barrels consumed daily). Even minute variations in price create large swings in the income at stake.

To further understand the continued existence of price rigidity in the industry, one must note the importance of market share. Traditionally, profits have been taken on upstream production for tax reasons which date back to when the Service permitted depletion allowances, in order to encourage resource development. However, in order to bid on exploration licenses, companies must prove their distribution capacity, as represented by market share of product sales. During the 1979 oil crisis, the ARAMCO shareholders were forced to accept Saudi terms to ensure consideration for future contracts. The industry's highly competitive nature necessitates expenditures in low or negative return ventures to establish the outlets required to bid on oil licenses. While fractional apportionment of profits would be more equitable for international tax purposes, such redistribution can not equitably occur without negotiated settlements with importing and exporting nations.

279. See *supra* note 42.

The foregoing analysis shows that all or most profit related to production, refining and sale of petroleum products accrues in the producing country tax jurisdictions. Proponents of transaction cost or fractional apportionment methods of regulating transfer pricing make a valid argument by suggesting that, because each source participates in the production of income, the return on their percentage participation should be subject to taxation in its resident jurisdiction. However, in this highly political industry the likelihood of an agreement that would allow for such methodology to be implemented appears small. On the residual that is free for allocation, arguments that refining and distribution arms of the industry function to protect the asset specifications selected by the industry would validate even a unilateral redistribution of profit. The redistribution must, however, be limited to that portion which is free from regulatory control (assuming it can be separated). Any other redistribution would require prior agreement between the participating governments. To apply transaction cost methodology unilaterally or retroactively would result in double taxation.

V. CONCLUSION

After examining the statutory arm's length requirements, the continuum price problem, a model of the petroleum industry and the availability of comparable uncontrolled prices in the industry, this comment suggests that true uncontrolled comparables are not readily available in the petroleum industry. The problem arises because of industry structure and, in particular, because of the downward bias in spot prices. The issue for the tax courts is whether the United States has a right to tax sales where the United States affiliate of a multinational corporation merely acts as a trader. Evidence presented suggests that this not only produces double taxation, but constraints placed on pricing by producing and consuming governments substantially negate any return on the parent's capital investment when measured under existing law standards. Thus, pursuant to the reasoning in *Procter and Gamble*, reallocation would appear inappropriate.

A solution to future petroleum industry transfer pricing problems might be to establish a system where all transaction data is submitted to the Service. Tax reference prices could be negotiated, while avoiding most of the objections regarding continuum pricing. Under such a contingency, arm's length methodology would appear workable within this very unique and influential industry. However, the result would be somewhat artificial under a transaction cost analysis because of the heavy emphasis on upstream profit taking in the industry. Each segment of the industry serves its purpose. If a workable fractional apportionment scheme could be developed, it might be more realistic than existing methods.

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