VIEWPOINT
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Estimating U.S. Corporate Income Tax Lost to Tax Planning

by Eric Cook

Eric Cook began his career as a revenue estimator with Congress's Joint Committee on Taxation in 1983. He joined PwC in 1987, where he assisted state government clients with revenue estimating issues. Cook continued his work for state government clients beginning in 1991 at KPMG LLP and at Chainbridge Software LLC, which he formed in 2000.

In this viewpoint, Cook discusses the history of IRC section 482 and related regulations. He discusses the methods by which arm's-length analysis is conducted and compares application of and results from a transfer pricing estimation method at the federal and state levels.

Introduction

There appears to be general agreement in the tax community that a great deal of corporate income that may be rightly attributed to the United States is attributed either elsewhere or nowhere at all. The question is, how much U.S. corporate income tax is lost?

More than 60 percent of global trade actually takes place within multinational corporations, as one affiliate supplies goods or services to another.[1] Transfer pricing is the accounting practice by which a monetary value is attached to those goods and services for tax purposes. Internal Revenue Code section 482 outlines the arm's-length principle, which asks what an unrelated company would charge or pay for those goods or services in a competitive market.[2] The associated U.S. Treasury regulations explain the methods for testing the arm's-length nature of transfers of tangible goods, services, and intercompany payments for the use of intangibles, such as trademarks, research, and patents, and other intercompany transactions.

Naturally, every multinational company wants to book the maximum profits it can in the lowest-tax jurisdictions. Even under the guidance of the regulations, setting transfer prices, especially for the use of intangibles, can be something of an art, leading to disputes between tax authorities and corporations. Those tax conflicts are frequently among the largest disputes between the IRS and corporate taxpayers,[3] and the IRS has indicated it intends to focus on transfer pricing during audits.[4]

Yet, for all the attention transfer pricing has received, its extent has been underestimated. One estimate put the amount of uncollected tax revenue because of aggressive transfer pricing at $5.5 billion for 2004.[5] Another estimate was that the annual loss is $28 billion, with the qualification that this was likely on the low side.[6] Using quantitative IRC section 482 analysis based on publicly available information for approximately 1,700 companies, I estimate the amount of uncollected revenue was $264.4 billion over the three-year period from 2011 through 2013.

What Is Transfer Pricing?

The definition of a transfer price in a business economics context is the amount charged by one segment of an organization for a product or service that it supplies to another segment of the same organization. IRC section 482 indicates that those prices should be set according to the arm's-length principle. That is, intercompany prices should be set as if the related parties were operating on an unrelated basis.

Treasury reg. section 1.482-1(b) (1) states:

> In determining the true taxable income of a controlled taxpayer, the standard to be applied in every case is that of a taxpayer dealing at arm's length with an uncontrolled taxpayer. A controlled transaction meets the arm's length standard if the results of the transaction are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances (arm's length result). However, because identical transactions can rarely be located, whether a transaction produces an arm's length result generally will be determined by reference to the results of comparable transactions under comparable circumstances.

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[1] Alfredo J. Urquidi, "An Introduction to Transfer Pricing," *New School Economic Review*, vol. 3(1) (2008) at 27-45.

[2] *Id.*

[3] Robert Guy Matthews and Jeanne Whalen, "Glaxo to Settle Tax Dispute With IRS Over U.S. Unit for $3.4 Billion," *The Wall Street Journal*, Sept. 12, 2006.

[4] *Id.*

[5] Andrew B. Bernard et al., "Transfer Pricing by U.S.-based Multinational Firms" (Aug. 2006).

[6] Martin A. Sullivan, "Transfer Pricing Abuse Is Job-Killing Corporate Welfare," *Tax Notes*, Aug. 2, 2010. p. 461.

Taxpayers are able to shift income to reduce their overall tax burden through various intercompany pricing mechanisms. Corporate CFOs and tax directors are tasked with minimizing taxes paid, and transfer pricing is a tool used by tax accountants to minimize corporate tax burdens, both within the United States and abroad. Tax minimization is achieved through the minimization of reported income to tax authorities and operates in sharp contrast with the goal for publicly traded corporations, which is to maximize income reported to its stockholders.

A 2011 *New York Times* article[7] provides an example of a publicly traded corporation reporting high profits to shareholders and low profits to taxing jurisdictions:

> General Electric, the nation's largest corporation, had a very good year in 2010. The company reported worldwide profits of $14.2 billion, and said $5.1 billion of the total came from its operations in the United States. Its American tax bill? None. In fact, G.E. claimed a tax benefit of $3.2 billion.
>
> That may be hard to fathom for the millions of American business owners and households now preparing their own returns, but low taxes are nothing new for G.E. The company has been cutting the percentage of its American profits paid to the Internal Revenue Service for years, resulting in a far lower rate than at most multinational companies.

The History of Transfer Pricing in Consulting Firms

Transfer pricing has grown rapidly in importance over the past three decades. In the early 1980s, there were a handful of consultants who performed transfer pricing analyses for corporate taxpayers. In 1984 a former IRS economist at Coopers & Lybrand and another at PwC were providing section 482 transfer pricing studies to corporate clients facing audits. At that time, an economist at Arthur D. Little was performing section 482 analyses for corporations. The consulting revenue flowing to those transfer pricing practices was probably less than $1 million per year.

Effective for income years beginning after December 31, 1986, the Tax Reform Act of 1986 added what is known as the "super-royalty" provision and introduced the "commensurate with income" standard. The conference committee report recommended that the IRS conduct a comprehensive study and consider whether the regulations under IRC section 482, which had been issued in 1968, should be "modified in any respect."

In response, the IRS and Treasury issued Notice 88-123, "A Study of Intercompany Pricing," and later known as the white paper.[8] The notice focused on intangible asset transfers but also covered other aspects of section 482. The notice contained concepts that would later appear in proposed regulations, which contained a guide of how to apply the commensurate with income standard and record maintenance requirements.

The IRS issued proposed section 482 regulations on January 30, 1992.[9] In response to comments from transfer pricing practitioners, the IRS issued revised temporary and proposed regulations a year later.[10] The IRS received comments on the 1993 regulations from many taxpayers and industry and professional groups. Also, comments were received from several tax treaty partners, both individually and through the international forum of the Organization for Economic Cooperation and Development. On July 1, 1994, the proposed regulations were finalized and were effective for income years beginning after October 6, 1994.

From the mid-1980s to 1990, the U.S. transfer pricing practices grew quickly, becoming important profit centers in the Big Eight accounting firms. A few small consulting firms also emerged that performed transfer pricing studies for both corporate clients and the IRS.

To assist the IRS in enforcing section 482, Congress enacted reporting requirements for transactions involving foreign businesses or foreign investors. Two examples of those reporting requirements are IRC sections 6038A and 6038C. In June 1991 the IRS issued final regulations under these sections. Those rules describe reporting and recordkeeping requirements for foreign-owned U.S. corporations and foreign corporations operating in the United States. The records must be "sufficient to establish the correctness of the federal income tax return." Also, the regulations require that these corporations be designated as agents for tax matters for foreign affiliates that engage in related-party transactions.

Those same regulations provide a safe harbor under which the reporting corporation will be deemed in compliance with IRC sections 6038A and 6038C. The provisions require maintaining:

- original entry books and transaction records; "material profit and loss statements" of the reporting corporation and all related parties that reflect profit or loss of the related-party group attributable to U.S.-connected products or services;
- all pricing documents relevant to establishing the appropriate price or rate for transactions between the reporting corporation and its foreign related parties;
- foreign country and third-party filings of financial and other information relating to transactions between the reporting corporation and any foreign related party;
- ownership and capital structure records; and
- records of loans, services, and other non-sales transactions.

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[7]David Kocieniewski, "G.E.'s Strategies Let It Avoid Taxes Altogether," *The New York Times*, Mar. 22, 2011.

[8]Notice 88-123, 1988-2 C.B. 458 (Oct. 18, 1988).

[9]INTL-0372-88; INTL-0401-88, 57 FR 3571.

[10]TD 8470; INTL 401-88, 58 FR 5263.

The pricing documents described above created a transfer pricing consulting boom. The consulting firms marketed transfer pricing studies to corporate clients with the added fear of stiff underreporting penalties. By 1990, I estimate that more than 100 consultants were performing transfer pricing studies, bringing in annual consulting revenue of around $50 million. By the fall of 1990, global tax minimization became a standard goal within the accounting firms. By 2000, an estimated 2,500 professionals in the accounting and consulting firms were engaged in transfer pricing practices around the globe, with billings totaling more than $500 million per year. Transfer pricing had become a big business.

Where do things stand today? Over the past 20 years, many U.S. companies have located subsidiaries in tax haven countries. A 2007 study by Treasury found a significant increase in the number of taxpayers located in no-tax countries between 1996 and 2002.[11] A 2008 General Accountability Office report found that 83 of the 100 largest U.S. companies had subsidiaries in tax haven countries.[12] One corporation had 427 such subsidiaries. One tax haven hosted 569 subsidiaries of those U.S. corporations, 372 of them owned by just four companies. In 2009 President Obama called for the elimination of benefits for companies and wealthy individuals that stash cash in offshore accounts.[13] Reporter Lesley Stahl documented the trend for many of the major U.S. corporations locating subsidiaries offshore not only in the tax haven countries of Bermuda and the Cayman Islands but also in countries like Switzerland.[14] Transfer pricing continues to be a big business for both corporate taxpayers and the consulting firms.

Applying Treasury Regulations

The following is a simplified and generalized description of how a transfer pricing study may be performed. As stated above, transfer pricing issues arise when related parties engage in sales of tangible property, sales and use of intangible property, provision of services or know-how, or joint development of intangibles with a related party.

Initial steps when performing transfer pricing analysis may include:

- taxpayer background and functional analysis;
- identification of tested party;
- identification of related-party transactions; and
- method selection.

[11]U.S. Department of Treasury, "Report to Congress on Earnings Stripping, Transfer Pricing and U.S. Income Tax Treaties" (Nov. 2007).

[12]GAO, "International Taxation: Large U.S. Corporations and Federal Contractors with Subsidiaries in Jurisdictions Listed as Tax Havens or Financial Privacy Jurisdictions" (Dec. 2008).

[13]White House press release, "Leveling the Playing Field: Curbing Tax Havens and Removing Tax Incentives for Shifting Jobs Overseas," May 4, 2009.

[14]Stahl, "The New Tax Havens," *60 Minutes*, Mar. 27, 2011.

According to Treasury reg. section 1.482-3, the arm's-length amount charged in a controlled transfer of tangible property must be determined under one of six methods. A similar set of methods applies to the provision of intercompany services. The methods applicable to transfers of tangible property are:

- comparable uncontrolled price method (reg. section 1.482-3(b));
- resale price method (reg. section 1.482-3(c));
- cost-plus method (reg. section 1.482-3(d));
- comparable profits method (CPM) (reg. section 1.482-5);
- profit-split method (reg. section 1.482-6); and
- unspecified methods.

Each of the methods must be applied in accordance with the provisions of reg. section 1.482-1, including:

- best method rule (reg. section 1.482-1(c));
- comparability analysis (reg. section 1.482-1(d)); and
- arm's-length range (reg. section 1.482-1(e)).

If the CPM is selected as the best method to perform an arm's-length analysis of intercompany transactions, the following steps must be undertaken:

- selection of appropriate CPM profit level indicator (PLI);
- comparable firm selection (qualitative analysis);
- quantitative analysis of both tested party and comparable firms (including required asset intensity adjustments); and
- determination of the arm's-length nature of tested party's intercompany transactions.

Treas. reg. section 1.482-5(b)(4) indicates that PLIs are ratios that measure relationships between profits and costs incurred or resources employed. In many cases, the most appropriate PLI for analyzing a tested party's intercompany transactions is the net profit to sales ratio. That ratio is defined as operating profit divided by sales. Operating profit is equal to sales minus cost of goods sold minus operating expenses. For manufacturing entities, another PLI can be used, which is measured by the rate of return on capital.

Using the CPM requires identifying firms comparable to the taxpayer and computing the PLI for both. Standard and Poor's Compustat (North America) database has long been acknowledged as a premier database for fundamental financial information. The database contains thorough coverage of annual and quarterly income statement, balance sheet, statement of cash flows, and supplemental data items on publicly held companies. In IRC section 482 analyses, the initial comparables search from the Compustat database should focus on the tested party's North American Industrial Classification System code. Once the initial comparable analysis is performed, one should review the business descriptions for each of the comparable firms from SEC filings and company websites for the applicable tax period.

For purposes of applying the CPM, the comparables' PLIs (net profit to sales ratios) are sorted from highest to lowest. The arm's-length range is ordinarily determined by

Table 1. (dollar amounts in millions)					
Comparable Name	**Sales**	**Cost of Goods Sold**	**SG&A Expense**	**Net Profile**	**Net Profit to Sales Ratio**
Weis Markets Inc.	$1,284.7	$932.7	$267.2	$84.8	6.6%
Albertsons Inc.	$8,110.8	$6,088.1	$1,654.4	$368.3	4.5%
Penn Traffic Co.	$2,766.2	$2,166.6	$494.2	$105.4	3.8%
Safeway Inc.	$15,051.2	$10,653.6	$3,871.3	$526.4	3.5%
Homeland Holding Co.	$794.8	$570.7	$199.0	$25.1	3.2%
Kroger Co.	$21,250.3	$16,420.8	$4,160.1	$669.4	3.2%
Ingles Markets Inc. - CLA	$1,046.9	$794.4	$222.9	$29.6	2.8%
Eagle Food Centers Inc.	$1,122.8	$842.0	$249.6	$31.2	2.8%
Publix Supermarkets Inc.	$6,190.7	$4,702.3	$1,321.3	$167.1	2.7%
The Great Atlantic & Pacific Tea Co.	$11,372.5	$8,067.8	$3,019.0	$285.7	2.5%
Marsh Supermarkets - CLB	$1,024.5	$764.5	$240.0	$20.1	2.0%

Source: Compustat data and Chainbridge calculations.
Note: Observations 3 and 9 represent the upper and lower boundaries of the interquartile range.
The median observation is observation 6 (3.2 percent).

applying a single pricing method selected (in that case, the net profit to sales ratio) under the best method rule (in that case, the CPM) to uncontrolled companies that engage in similar business activities under similar circumstances. The acceptable range of uncontrolled results is the range from the 25th to the 75th percentile (the interquartile range) of the results derived from uncontrolled comparables.

Table 1 displays the interquartile range of the net profit to sales ratio for retail grocers.

Treas. reg. section 1.482-1(e)(3) states:

> If the results of a controlled transaction fall outside the arm's length range, the district director may make allocations that adjust the controlled taxpayer's result to any point within the arm's length range. If the interquartile range is used to determine the arm's length range, such adjustment will ordinarily be to the median of all the results.

Thus, if a tested party's PLI is below the bottom observation of the interquartile range, an income allocation to any point in the range is warranted.

State Analysis

My firm has analyzed hundreds of thousands of corporate tax returns using the CPM to identify taxpayers that may not be in compliance with the arm's-length standard. This preliminary analysis both identifies candidates for an IRC section 482 audit and quantifies the overall tax gap that may be attributable to taxpayers' noncompliance with the arm's-length standard. Since 2002 our firm has performed preliminary analyses for the governments of five states and one city. Our findings range from revenue potential exceeding 100 percent to about 50 percent of a state or city's current corporate collections. Those estimates have generally amounted to hundreds of millions of dollars at the state level. Our conclusion is that the magnitude of the tax gap attributable to transfer pricing planning at the state level is quite substantial.

Application at Federal Level

Similar to analysis at the state level, federal analysis would require identification of possible section 482 federal audit candidates as well as a nationwide assessment of the tax gap attributable to noncompliance with the arm's-length standard. Unfortunately, a lack of access to federal corporate tax returns prevents that analysis.

As a second-best approach, I have identified publicly available federal tax information reported on companies' Forms 10-K filed with the SEC. Specifically, I was able to identify federal tax information for approximately 1,700 of the nearly 10,000 companies in the Compustat database for 2011-2013. That information was used to impute federal taxable income for those 1,700 companies. The Compustat database contains information for sales, cost of goods, and detailed operating expenses. Using federal taxable income estimates, the net profit to sales ratio for each of the 1,700 companies was computed and a preliminary analysis like that developed for state governments was performed. There are technical problems with this approach, including the treatment of tax credits, net operating losses, fiscal-year differences, and accounting differences. Nonetheless, this exercise can provide some guidance toward getting a general assessment of the magnitude of tax planning at the federal level.

The results showed that 645 of the limited set of companies would receive section 482 tax assessments totaling $264.4 billion for 2011 through 2013. This estimate, like the state analysis, is based on federal income adjustments to the median of the interquartile range. Table 2 above provides a breakdown of these results by major industry.

Table 2.					
	Number of Companies	**Income Adjustment (dollars)**	**Tax Adjustment (dollars)**	**Average Income Adjustment (dollars)**	**Average Tax Adjustment (dollars)**
Agriculture	1	637,258,760	223,040,566	637,258,760	223,040,566
Mining	23	89,635,242,099	31,372,334,735	3,897,184,439	1,364,014,554
Construction	10	1,801,963,643	630,687,275	180,196,364	63,068,728
Manufacturing	346	306,773,262,062	107,370,641,722	886,627,925	310,319,774
Transportation, Communication, & Utilities	18	33,160,407,749	11,606,142,712	1,842,244,875	644,785,706
Wholesale Trade	19	22,627,035,489	7,919,462,421	1,190,896,605	416,813,812
Retail Trade	19	64,236,567,628	22,482,798,670	3,380,871,980	1,183,305,193
Finance, Insurance, and Real Estate	133	200,817,816,096	70,286,235,634	1,509,908,392	528,467,937
Services	76	35,648,281,186	12,476,898,415	469,056,331	164,169,716
Total	**645**	**755,337,834,713**	**264,368,242,150**	**1,171,066,410**	**409,873,244**

A few details from our results: Manufacturing was the industry with the largest number of companies receiving section 482 tax adjustments — 346 companies would receive an average tax adjustment of almost $310 million. The most striking examples in terms of average tax adjustment were found in retail trade: 19 companies with an average tax adjustment of nearly $1.2 billion each.

That analysis did not include foreign-owned companies and most major U.S. companies for which we lacked the necessary data. The conclusion is that from 2011 to 2013, the section 482 tax gap at the federal level is likely much higher than the $264.4 billion calculated in the limited sample of 1,700 U.S. companies.

Conclusion

Over the last three decades, the issue of transfer pricing has become quite important to multinational corporations, the transfer pricing practices within the accounting and consulting firms, and the federal and state governments. The accounting and consulting firms have thousands of consultants actively engaged in creating and marketing corporate tax-saving structures to major domestic and foreign corporations, resulting in significant corporate tax revenue loss to both the federal and state governments. These practices create fundamental corporate income tax imbalance as small businesses cannot afford to create elaborate tax-saving infrastructures spanning the globe and complex related-party transactions. That is not to say that corporations should not be engaged in minimizing their tax burdens.

Finally, from a tax policy perspective, the elimination of the corporate income tax for all companies would probably be the appropriate solution. Governments and business, however, do not operate in a theoretical world, and the corporate income tax is unlikely to be eliminated at either the federal or state level in the foreseeable future. As such, we believe there should be a level playing field for businesses of all sizes. ✰