THE ALTERNATIVE MINIMUM TAX: AN ANALYSIS OF ITS EFFECT ON CORPORATIONS IN 1987

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The Tax Reform Act of 1986 was signed into law by President Reagan on October 22, 1986. It was generally thought of as a revolutionary piece of tax legislation, the conclusion of many years of work by both the Administration and Congress [1].

The Tax Reform Act of 1986 intended, among other things, to halt the declining share of federal income tax that was paid by corporations [2]. One of the most significant changes to corporate tax law introduced in The Tax Reform Act of 1986 was the Alternative Minimum Tax.

This paper will analyze the effects of the alternative minimum tax on specific industries, based on the first year of data available for the new tax [3]. The first section outlines the objectives of the alternative minimum tax, as anticipated by legislators. The next section explains how the tax was implemented, based on a comparison between the 1986 Minimum Tax and the 1987 Alternative Minimum Tax . The Alternative Minimum Taxable Income (AMTI) is then used as a basis for determining the effects of the alternative minimum tax on different industries. The final section of this paper analyzes the results and discusses possible consequences of the new tax.

I. EXPECTATIONS OF LEGISLATORS FOR THE ALTERNATIVE MINIMUM TAX

The changes of The Tax Reform Act of 1986 (TRA) are expected to increase tax revenue from corporations by $120.3 billion over the five-year period between 1987 and 1991. At the same time, taxes paid by individuals are expected to decrease $121.5 billion. This legislation was designed to be revenue neutral [4]. Of the $120.3 billion increase in corporate tax revenue, $22.2 billion is expected to be generated from the alternative minimum tax (AMT) [5].

AMT was created to ensure that all corporations with some type of income pay a minimum amount of tax, regardless of their allowable use of deductions, credits, and exclusions. Before TRA, the computation of minimum tax for corporations was basically an add-on-tax equal to 15 percent of net tax preferences minus regular tax. The add-on-tax did not sufficiently solve the problem of tax avoidance for two reasons: first, the add-on-tax did not define a comprehensive income base, and second, it did not approach the measurement of economic income [6]. The Senate Finance Committee felt that a tax on preference items alone would not stop the regime of corporations reporting significant earnings to their shareholders while having little or no tax liability [7].

II. THE IMPLEMENTATION OF ALTERNATIVE MINIMUM TAX, AND HOW IT COMPARES WITH THE 1986 MINIMUM TAX

In order to more accurately measure economic income, the 1986 Minimum Tax (MINTAX) was replaced by AMT. The Corporate AMT was modeled after the individual AMT, which has been in effect since 1979. The basic premise of AMT is to "[base] the tax on 'book income,'" [8] which implies that economic income was measured using book income in the first year of the AMT.

To achieve this end, the AMT is calculated beginning with taxable income before net operating loss deduction. Preference items allowed in figuring regular tax are added. "Adjustment items" are also added. They are generally composed of differences generated by comparing the use of allowable, yet favorable, tax accounting methods against more stringent "AMT" accounting methods. If these preference and adjustment items do not appropriately measure the disparity between book and taxable incomes, a book income adjustment is added to capture the residual differences. The book income adjustment includes items that are not reached directly through the adjustment and preference items [9].

Figure 1 (next page) emphasizes the extensive differences between MINTAX and AMT. As expected, AMT raised significantly more revenue than MINTAX. Minimum tax collected in 1986 was approximately $1.0 billion; in 1987 AMT collected $2.1 billion. This increase of $1.1 billion was concentrated in corporations with assets greater than $250 million (giant corporations), which accounted for 77 percent ($1.7 billion) of the increase. Since asset size is an indirect measure of economic income, this result may indicate that corporations with large economic incomes, which may have previously escaped taxation, may now be paying taxes based on the AMT [10].

Because of the nature of AMT, certain industries are expected to be affected by the tax more than others. Industries with significant depreciation and new private activity bonds would be expected to pay AMT. Finance companies which invest in tax exempt securities may pay AMT based on the book income adjustment. All oil and gas companies (as opposed to only personal holding companies) should report AMT based on the intangible drilling costs preference. We hope to determine from the 1987 data if such results were realized during the first year of AMT.

The next section of the paper will analyze the industries that contributed most to AMT revenue. Since revenue collected is a function of the income from which it is derived, AMTI before net operating loss deduction (NOLD) and its components (Figure 1) are used to determine the major sources of revenue for the AMT.

FIGURE 1:--COMPUTATION OF 1987 AMT, AND A COMPARISON WITH 1986 MINTAX [11]

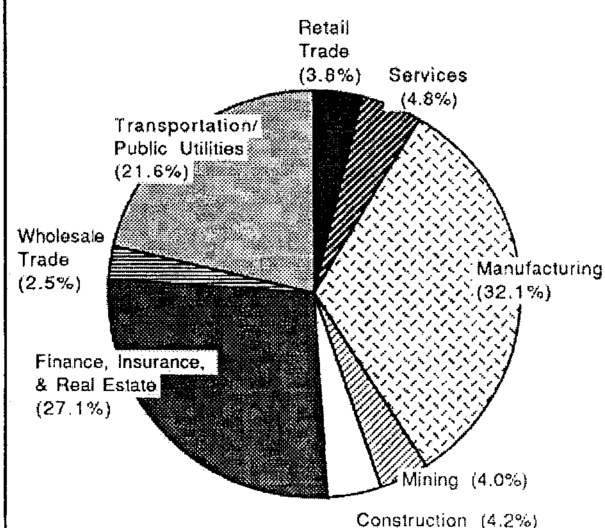
COMPONENTS OF TAX	MINTAX 1986	AMT 1987
Taxable Income Before Net Operating Loss Deduction		X
+ Adjustments:[1]		
Accelerated depreciation on new property		X
Mining exploration and development costs	X[2]	X
Long-term contracts		X
Pollution control facilities	X	X
Installment sales		X
Circulation expenses	X[2]	X
Merchant marine fund		X
+ Tax Preferences:[3]		
Accelerated depreciation on pre-ACRS and pre-MACRS property:		
o Real property	X	X
o Leased property	X[2]	X
Depletion	X	X
Intangible drilling costs	X[2]	X
Tax-exempt interest		X
Appreciated property charitable deduction		X
Reserves for losses on bad debts of financial institutions	X	X
+ Book income adjustment: Computed by taking the sum of above amounts and comparing the sum to an adjusted net book income. If the adjusted net book income is larger, the difference between it and the sum is multiplied by .50.		X
= ALTERNATIVE MINIMUM TAXABLE INCOME BEFORE NET OPERATING LOSS DEDUCTION (AMTI before NOLD)		X
- Alternative Minimum Tax Net Operating Loss Deduction (AMT NOLD - cannot be more than 90% of AMTI before NOLD)		X
= ALTERNATIVE MINIMUM TAXABLE INCOME (AMTI)		X
- (Exemptions, which differ between the two years	X	X
+ AMT Foreign Tax Credit)		X
x 0.20		
= TENTATIVE MINIMUM TAX AFTER FOREIGN TAX CREDIT		X
- Investment Tax Credit		X
= TENTATIVE MINIMUM TAX		X
- Income tax before credits minus foreign tax credit		X
= ALTERNATIVE MINIMUM TAX		

1 There were no "adjustment items" in 1986 -- the lines "X"ed were "preference items."
2 Personal holding companies alone were subject to these items.
3 Repealed preference items: dividend exclusion and capital gains deduction -- they were not applicable for 1987 due to changes to the regular income tax [12].

III. DIFFERENT WAYS IN WHICH AMTI WAS COMPUTED FOR DIFFERENT INDUSTRIES

Upon examination of the breakdown of AMT payment, it was found that three major divisions paid nearly 80.8 percent of AMT (Figure 2). In 1987, the Manufacturing division paid a total of $686.8 million (32.1 percent) of AMT. A quarter of this AMT came from the Nonelectric Machinery industry. The remaining 75 percent of AMT in the Manufacturing division was divided among the other twenty industries; none had a significant amount of AMT. The Finance, Insurance, and Real Estate division paid 27.1 percent of AMT; the Insurance and Banking industries, combined, made up 61 percent of the $580.3 million this division paid. The Transportation and Public Utilities division was the third major contributor to AMT, paying a total of $463.0 million (21.6 percent). Two industries within this division made up 96.7 percent of AMT: Transportation paid 25.8 percent of the division's AMT, and Electric, Gas, and Sanitary Services paid 71.7 percent. Because these five minor industries as a whole made up almost 50 percent of AMT in 1987, they are the ones analyzed in the rest of this section [13].

FIGURE 2.--INDUSTRIES' PERCENTAGE OF AMT IN 1987



Note: The divisions Agriculture-Forestry-Fishing, Wholesale/Retail Trade Not Allocable, and Nature of Business Not Allocable were not included in this chart because the amount of AMT they contributed was less than 0.3% of the total.

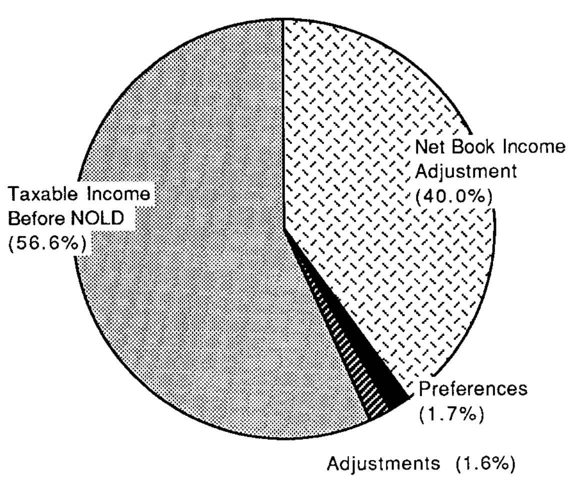
One of the most significant additions to broadening the base of alternative minimum taxable income was the inclusion of taxable income before net operating loss deduction (NOLD). This inclusion is important because of the nature of the net operating loss deduction. Regular tax liability is often low because taxable income can be reduced by NOLD. NOLD arises when current deductions exceed current gross taxable income. Corporations that incur such losses may first carry back the loss to reduce the tax liability of the prior three tax years. If they did not incur tax liability in those years, they may carry forward the NOLD against the next 15 years of taxable income. Since taxable income before NOLD is used as the base for AMT, NOLD does not enter the computation of AMT until after AMTI has been computed (see Figure 1). Unlike NOLD for regular income, AMT NOLD is 1) adjusted to take into account the impact of prior-year tax preferences and 2) cannot reduce AMTI by more than 90%. Industries whose taxable income before NOLD is the largest contributor to AMTI and AMT are paying tax because AMT NOLD is not fully reducing AMTI. This insures that corporations who have a long running tally of NOLDs (which can be interpreted as being able to take advantage of taxable deductions for long periods of time) pay some tax on income earned during the current tax year. The Insurance industry exhibits this kind of AMT.

Insurance

The Insurance Industry is composed of three different types of insurance companies: Life, Mutual, and all others. In 1987, the industry paid a total of $200.2 million in AMT, approximately 9 percent of total AMT paid. Giant corporations paid the bulk of the AMT; they paid $178.0 million, about 89 percent of Insurance's total AMT bill.

The chief component of AMTI before NOLD, as seen in Figure 3, is taxable income before NOLD (56.6 percent). The net book income adjustment is 40 percent of pre-NOLD AMTI; the other approximate 3 percent is made up of the sum of other tax adjustment and tax preference items. The fact that taxable income before NOLD is so significant implies that the NOLD taken against regular taxable income was large enough to offset most regular tax liability.

FIGURE 3.--INSURANCE: COMPONENTS OF AMTI BEFORE NOLD

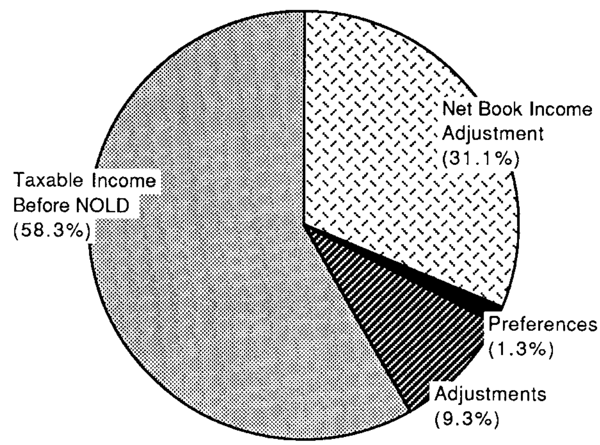


AMTI Before NOLD = $7.2 Billion

Transportation

Another industry adversely affected by the inclusion of taxable income before NOLD is the Transportation industry, which consists of railroads, passenger transit, trucking, water/air transportation, and various others. This industry paid $116 million in AMT in 1987. As with the earlier industries, taxable income before NOLD was a very substantial portion of AMTI before NOLD (Figure 4). The net book income adjustment was the second largest, with 31 percent of AMTI before NOLD ($929.2 million).

FIGURE 4.--TRANSPORTATION: COMPONENTS OF AMTI BEFORE NOLD

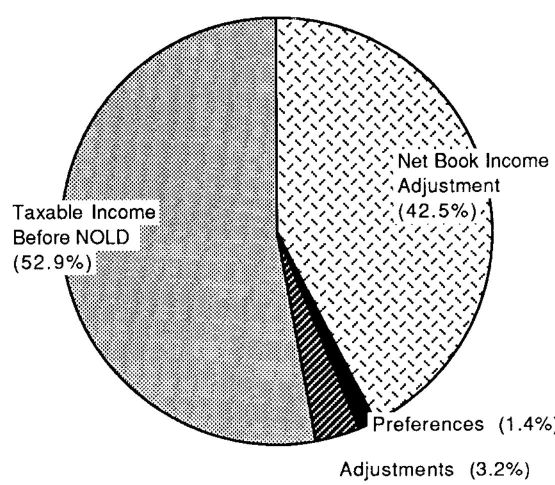


AMTI Before NOLD = $3.0 Billion

Banking

Figure 5 looks at the Banking industry, which is composed of four different types of banks:

FIGURE 5.--BANKING: COMPONENTS OF AMTI BEFORE NOLD



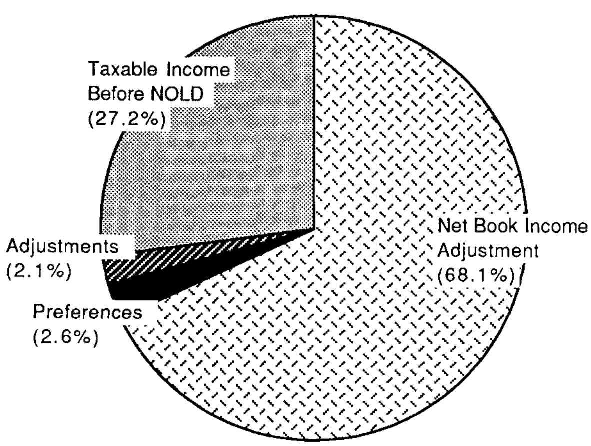
AMTI Before NOLD = $5.6 Billion

mutual savings banks, life insurance departments of mutual savings banks, bank holding companies, and banks (except mutual savings banks and bank holding companies). In 1987, the Banking industry paid $221.2 million in AMT. Of this $221.2 million, giant companies paid approximately 73 percent ($161.2 million). Their aggregate AMTI was chiefly composed of taxable income before NOLD; the amount of $2.9 billion made up 53 percent of the alternative income tax base. However, the net book income adjustment also made up a substantial portion (42.5 percent) of AMTI before NOLD.

Electric, Gas, and Sanitary Services

One industry which paid a significant amount of AMT in 1987 due to a large net book income adjustment was the industry Electric, Gas, and Sanitary Services. This industry paid a total of $331.9 million in AMT. The greatest portion of AMTI before NOLD came from the net book income adjustment (68.1 percent). In comparison, the inclusion of taxable income before NOLD did not have as large of an impact (27.2 percent) and the adjustment and preference items had a very small effect (Figure 6).

FIGURE 6.--ELECTRIC, GAS & SANITARY SERVICES: COMPONENTS OF AMTI BEFORE NOLD



AMTI Before NOLD = $4.7 Billion

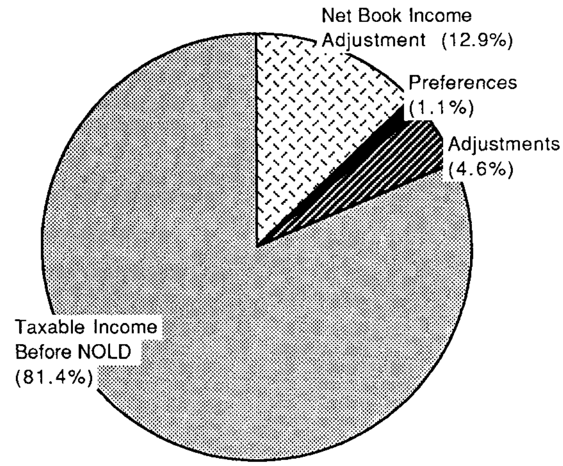
Nonelectric Machinery

Another large contributor to the total AMT bill was the Nonelectric Machinery industry. In 1987, this industry paid a total of $172.8 million in AMT. Nearly all of their AMTI before NOLD consisted of the inclusion of taxable income before NOLD (Figure 7). Giants paid 93.5 percent of AMT. However, upon closer inspection of some of the giant companies in this industry, it was noted that a few giant companies paid nearly all of the AMT.

Summary

Among the industries that paid the largest amount of AMT, taxable income before NOLD and the net book income adjustment were the largest contributors to AMTI. As expected, finance companies were included among the largest payers, probably due to tax exempt income reported in their book incomes. Oil and gas industries were not as severely affected by the tax, despite the addition of the intangible drilling costs preference item to the computation of their AMTI. In fact, the individual preference and adjustment items appeared to have very little impact in terms of raising revenue through the AMT. Among the five industries analyzed, the largest source of AMTI outside of taxable income before NOLD was overwhelmingly the net book income adjustment: it accounted for 70% or more of the AMTI before NOLD when taxable income before NOLD was not included as part of the AMTI computation. Even though the composition of book income probably varies between industries, industries that paid the largest amount of AMT all had large differences between book income and taxable income based on the proportion of the net book income adjustment.

FIGURE 7.--NONELECTRIC MACHINERY: COMPONENTS OF AMTI BEFORE NOLD



AMTI Before NOLD = $8.4 Billion

IV. CONCLUSIONS ON THE ALTERNATIVE MINIMUM TAX

Based on the analysis of 1987 Corporate AMT payers, companies who paid the greatest share of AMT did so for two reasons: the inclusion of taxable income before NOLD and the net book income adjustment. This indicates that AMT, in some part, solved the problems of tax avoidance it sought to address.

However, AMT has created a host of accounting and bookkeeping problems for corporations, which has provoked a great deal of negative publicity. Due to the separate depreciation and basis calculations required for AMT purposes, corporate taxpayers must maintain AMT accounting records regardless of whether or not they are subject to the AMT for that year. Although the purpose of the AMT was to force "delinquent" corporations to pay some amount of tax, an unfortunate side effect has been to force taxpayers who do not have alternative tax liability to engage in this elaborate dual-system bookkeeping.

Legislators have recognized the complexity involved in calculating AMT and the problems it may cause in regard to taxpayer compliance. To simplify the AMT, Congress passed the Revenue Reconciliation Act of 1989 on November 22, 1989. The major changes to AMT were as follows: 1) a repeal of the rule stating that deductions used in certain minimum tax calculations may not exceed the deductions used in computing "book income" reported to shareholders; 2) a change in the computation of the AMT credit which allows for an increase in the portion of minimum tax payments which may balance future taxes; and 3) an expansion of the dividend received deduction that may be taken under the AMT.

Although these changes will help simplify the reporting of AMT tax, legislation has not gone far enough to simplify AMT, and, in fact, has added to the complexity of computing AMT liability. Starting in 1988 a credit for prior year minimum tax will be made available to be used against regular tax liability. For tax years 1987 through 1989, this credit is limited to AMT paid on preferences/adjustments deemed deferral items -- that is, items that do not cause a permanent difference in taxable income over a number of years. AMT paid on items causing a permanent difference in taxable income -- exclusion items -- is not permitted to be used as a credit in the subsequent tax year. AMT credits may also only be used when regular tax liability exceeds AMT liability in the present year. Therefore, this credit may lower a corporation's tax liability the year after AMT is paid. In this sense, AMT is "at most a prepayment of regular tax and, at least, a considerable nuisance to corporate accounting and investment procedure" [14]. A 1989 amendment drops the restrictions on exclusion items and in 1990 all AMT paid can be used as a potential credit against regular tax liability. Despite the good intentions of this credit, it may only add to the complexity of reporting for AMT purposes [15].

Although the AMT credit was created in an effort to minimize the burden of corporations who pay tax regularly, the credit may open up a loophole for targeted corporations. These corporations which believe they will be taxed by AMT can also plan to avoid it. One clear method would be to use AMT depreciation and write-off methods for regular tax purposes; however, since the new two-track system was designed to remove many of the costs of switching from one system to the other, the benefits of this type of planning method have been reduced. Other types of planning opportunities are as follows:

1) leasing, rather than owning assets and depreciating them -- a company would not have to pay the AMT associated with owning assets and depreciating them;
2) merging and acquiring other corporations -- for example, a company with a high AMT may find it tax-advantageous to merge with a company with high regular tax (this method could show some strange unions, such as the merger of a capital-intensive company with a service company);
3) electing subchapter S status, and avoiding the book income adjustment -- but for companies with high circulation, research, and experimental expenditures or significant built-in gains, the switch may not be justifiable; and
4) selling just enough tax-exempt bonds to lower the preference for interest on the bonds, and thus lowering AMT liability below tax liability [16].

Although changes to simplify the AMT and the addition of the credit will help reduce the frustration of corporate taxpayers, these changes, along with tax avoidance issues mentioned above, may reduce the revenue raised by the AMT. Although the AMT was not designed primarily to increase revenue -- but instead to ensure that profitable corporations pay some minimum amount of tax -- Treasury's Office of Tax Analysis has estimated the Corporate AMT will result in a $20 billion net five-year revenue gain. The breakdown of this is as follows [17]:

Tax Year	Dollars (in millions)
1987	$2,717
1988	$4,648
1989	$4,760
1990	$4,225
1991	$3,532.

There has been some speculation that the expected revenue may not be collected. For example, the Revenue Reconciliation Act of 1989 may reduce revenue by $416 million in 1990 and reaching $693 million by 1992 [18]. Tax avoidance issues and the AMT credit were considered in Treasury's estimates, but the difficulty of measuring their effects on revenue [19] and their unpredictable natures may cause revenues to fall short of these original estimates.

In conclusion, in the case of large companies with regular deferrals of tax liability, AMT may cause them to experience a new phenomena: paying taxes. However, AMT's complexity, tax avoidance issues and questionable revenue-raising ability have clouded this positive effect. These issues lead to the conclusion that the present AMT needs to be simplified. One method that would raise the intended revenue from targeted corporations would be to use economic income as the basis for calculating regular income tax liability and to repeal the AMT [20]. The present AMT has value, but it seems to require a lot of repetitive and unnecessary effort by both legislators and taxpayers to keep it working effectively.

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NOTES AND REFERENCES

[1] "Congress Enacts Sweeping Overhaul of Tax Law," 1986 Congressional Quarterly Almanac, p. 491.

[2] 1986 Congressional Quarterly Almanac, p. 491.

[3] Data presented in this paper are from an unpublished weighted sample of Internal Revenue Services' Statistics of Income 1987 Corporation Data File. The corporations used for analysis had accounting periods ending between December 1987 through June 1988 and paid Alternative Minimum Tax. All data are from this source, except where noted.

[4] 1986 Congressional Quarterly Almanac, p. 494.

[5] Dildine, Larry L., "Some Impacts of the Tax Reform Act of 1986 on American Industry," prepared for the Brookings National Issues Forum, "The Tax Reform Act of 1986: An Evaluation," December 2, 1986.

[6] U.S. House of Representatives, Tax Reform Act of 1986, Conference Report to Accompany H.R. 3838, U.S. Government Printing Office, 1986, p.519.

[7] Gould, Arthur, "The Corporate Alternative Minimum Tax: A Search for Equity Through a Maze of Complexity," The Tax Magazine, December 1986, p. 788.

[8] 1986 Congressional Quarterly Almanac, p.493.

[9] Gould, p. 788.

[10] Further research would be required to validate this point. Corporations that previously escaped taxation were not studied in this paper.

[11] This exhibit was derived from the 1986 Form 4626, "Computation of Minimum Tax - Corporations," the 1987 Form 4626, "Alternative Minimum Tax - Corporations," and Internal Revenue Service, Explanation of the Tax Reform Act of 1986 for Business, Publication 921 (August 1987) (Washington, D.C.: GPO 1987) p. 22.

[12] Fiore, Nicholas J., "The AMT After the TRA: Strategies for Minimizing the Minimum Tax," Journal of Accountancy, 163 (1987), 8.

[13] The weighted sample for this study was a total of 15,694 companies who paid a total of $2.1 billion in AMT in 1987. Of the five minor industries who paid 48.5 percent of AMT, the number of records in each industry is as follows: Insurance -- 701; Transportation -- 55; Banking -- 2053; Electric, Gas, and Sanitary Services -- 141; and Nonelectric Machinery -- 310.

[14] Dildine, Larry L., p. 11.

[15] Monroe, Kendyl K., "The Alternative Minimum Tax from a Practical Perspective: Its Role in the Income Tax Structure Under Current Law, and Its Possible Role in Future Deficit Reduction Legislation," Columbia Business Law Review, 2 (1988), 348.

[16] Gould, Arthur, pp. 798-800.

[17] Dworin, Lowell, "Impact of the Corporate Alternative Minimum Tax," National Tax Journal, XL (1987), 505, 513.

[18] Estimated Revenue Effects of Conference Agreement on Revenue Provisions of H.R. 3299, the Omnibus Budget Reconciliation Act of 1989, Joint Committee on Taxation, November 21, 1989, Washington, D.C.

[19] Dworin, Lowell, p. 506.

[20] Monroe, Kendyl K., p. 358.