5 Alternative Minimum Tax Rules and Multinational Corporations

Andrew B. Lyon and Gerald Silverstein

5.1 Introduction

The Tax Reform Act of 1986 established an alternative minimum tax (AMT) for corporations, designed with the intention of preventing corporations from paying low rates of tax on their economic income. Under the rules of the AMT, corporations now calculate their tax payments twice: once using the regular rules of the tax system and a second time using the alternative computation provided under the AMT. Firms pay tax based on the calculation resulting in the greatest liability.

The AMT affects a significant number of firms. In 1990, the corporate AMT accounted for 8.5 percent of corporate tax receipts, or $8.1 billion. Including regular taxes paid by these AMT firms, AMT firms paid 21.4 percent of all corporate income tax. Approximately 25 percent of corporations with assets in excess of $50 million paid AMT. Among the largest firms, those with assets in excess of $500 million, the proportion of firms paying AMT was 30.6 percent.

Among multinational firms, AMT incidence is slightly more prevalent. This is partly due to the correlation between firm size and AMT liability and the fact that the largest firms are also more likely to receive foreign-source income. Among firms in 1990 filing form 1118—the form on which foreign tax credits are calculated—28 percent of those with assets in excess of $50 million paid AMT. Among these multinationals with assets in excess of $500 million, 33.3 percent paid AMT. Of all form 1118 filers, 53 percent of all assets and 56

Andrew B. Lyon is associate professor of economics at the University of Maryland and a faculty research fellow of the National Bureau of Economic Research. Gerald Silverstein is an economist in the Office of Tax Analysis of the U.S. Department of the Treasury.

The authors are grateful to Alan Auerbach, Jim Hines, Glenn Hubbard, and seminar participants at NBER and the Office of Tax Analysis for helpful discussions and comments.
percent of all foreign-source income were accounted for by corporations paying AMT.

Not much is known about how firms are affected by the AMT. Limited past analyses have focused primarily on the incentives domestic firms face for undertaking new investment. But the effects of the AMT rules on multinationals are potentially quite different. Multinationals may be affected in a number of different ways, from the design of dividend repatriation strategies to the locational choice for real investment. This paper outlines how multinational corporations' incentives can be affected by the AMT and presents data suggestive of how important these effects may be.

5.2 AMT Provisions Affecting Multinationals

The AMT rules potentially affect multinational corporations (MNCs) in a manner quite different from their effect on domestic corporations. First, the taxable income of domestic corporations (and that of the domestic operations of MNCs) is generally increased due to restrictions on deductions under the AMT and the inclusion of certain income that would be excluded from taxation under the regular tax. For foreign operations, however, deductions are quite similar for AMT and regular tax purposes.

Second, although the domestic tax base is generally larger under the AMT than under the regular tax, the tax rate on all AMT income is 20 percent rather than the 35 percent rate that generally applies to corporations under the regular tax system. As a result, whether a firm pays tax under the AMT depends on the particular sources of income and types of deductions received by the firm. For U.S.-based MNCs, the lower marginal rate of taxation under the AMT may provide the firm a timing opportunity to repatriate income from low-tax foreign countries. Repatriated income is less likely to be subject to U.S. tax, or is subject to a smaller amount of tax, because foreign tax credits can shelter a greater percentage of taxable income.

Third, a separate AMT provision limits the total amount of tax that may be offset through foreign tax credits. For a firm for which this provision is a binding constraint, positive amounts of U.S. tax will be paid on repatriated dividends even if the firm would otherwise have excess foreign tax credits.

The starting point for determining whether a firm owes AMT is the firms' regular taxable income before any deduction for net operating losses. To this amount, the firm adds back a number of deductions that are restricted under the AMT and certain sources of income not taxable under the regular tax rules (adjustments and preferences). Adjustments include a cutback on depreciation allowances allowed for domestic property and a reduction in the preferential treatment of certain assets (such as pollution-control facilities) or benefits for certain industries (such as oil and gas production).

1. See, for example, Lyon 1990, 1991 and references cited therein.
If the firm has deductions for net operating losses, these may offset no more than 90 percent of this computed income (whereas these losses may offset 100 percent of regular income). The resulting income measure is defined as alternative minimum taxable income, which may be reduced by a limited exemption amount.

Tax is calculated by multiplying this net amount by the 20 percent AMT tax rate. Business credits, such as the R&D tax credit, may not be used against the AMT. Tax may be reduced, however, by a limited amount of AMT foreign tax credits, as described in more detail below. This yields the firm's tentative minimum tax. Tentative minimum tax is compared to regular income tax before all credits except the foreign tax credit and the possessions tax credit. If tentative minimum tax exceeds this amount of regular tax liability, the excess is payable as AMT, in addition to the firm's payment of its regular tax liability. Each dollar of AMT payments creates a dollar of AMT credits that may be used in future years only against regular income tax liability. AMT credits may not be used to reduce regular tax liability below tentative minimum tax.

5.3 Investment Incentives of Multinational Corporations

For domestic property, the AMT generally creates a tax penalty for new investment undertaken by an AMT firm, relative to the incentives faced by a regular-tax firm. While income earned under the AMT is taxed at 20 percent, compared to the 35 percent rate of the regular tax system, a firm claims less accelerated depreciation allowances on its domestic investment than for regular tax purposes. In practice, the slower stream of depreciation allowances reduces investment incentives by more than the lower tax rate increases them. For foreign-use property, however, a firm claims the same depreciation deductions on the AMT as it would for regular tax purposes. If the income generated by the foreign investment is taxed currently by the United States, it will be taxed at a maximum rate of 20 percent under the AMT rather than the 35 percent tax rate applying under the regular tax system. As a result, foreign investment incentives appear to be no worse off under the AMT than under the regular tax rules and may, in fact, be improved when the income is currently taxed in the United States.

Calculations for representative categories of equipment confirm this result. For example, for equity-financed investment in equipment located in the United States, AMT firms may have reduced incentives for domestic investment, the overall effect of the AMT on domestic investment is more difficult to ascertain. This is because the AMT also has an effect on firms that are currently paying regular tax but that anticipate a future period of AMT liability. These firms may have greater investment incentives currently than if they were to remain permanently on the regular tax. See Lyon (1990) for a discussion. The example discussed in the text considers incentives of firms currently subject to the AMT.
United States, the marginal effective corporate tax rate under the regular tax is 26.8 percent. If the firm is on the AMT for five years, the effective tax rate increases to 32.5 percent. For the same firm, if the investment were located abroad and the income generated by the investment were subject to current U.S. taxation, the effective tax rate would decline from 38.3 percent under the regular tax to 36.8 percent under the AMT. This analysis suggests that the AMT creates a relative incentive to locate investment abroad rather than in the United States. Domestic investment incentives on the AMT are reduced, while foreign investment incentives are unchanged or improved under the AMT.

5.4 Income Repatriation Incentives

The differences in statutory rates and foreign tax credit calculations create the potential for AMT firms to face different incentives for the receipt of foreign-source income than if they were subject to only the regular tax. Hines and Hubbard (1990), Altshuler and Newlon (1993), and Altshuler, Newlon, and Randolph (chapter 7 in this volume) have shown in other contexts that firms take advantage of deferral and timing opportunities to reduce their global tax liabilities on foreign-source income.

A number of potential tax situations might be considered in evaluating the incentive for dividend repatriation and deferral. The variety of tax situations is somewhat larger under the AMT than for regular tax purposes, because the firm's foreign tax credit position for regular tax purposes—that is, whether it is in excess credit or excess limit—may not be the same as its position under the AMT. In addition, the firm may be in an excess credit position under the AMT due to either the separate income category limitations or the 90 percent

---

3. The corporate marginal effective tax rate is calculated as \( \frac{(p - s)}{p} \), where \( p \) is the cost of capital net of depreciation and \( s \) is the after-tax real return. The cost of capital for equipment is based on a capital-stock weighted average of the cost of capital for thirty-one types of equipment. Rates of depreciation are based on estimates by Hulten and Wykoff (1981). Annual inflation is assumed to be 3.8 percent, and the after-tax real rate of return is 5 percent. These and other assumptions follow Lyon 1990.

4. Note that for both the regular tax and the AMT, foreign investment receives slower depreciation allowances than for domestic purposes, and, as a result, the effective tax rate for foreign investment is higher under either tax system than for domestic investment. Thus, it is not the case that the AMT creates an absolute incentive to invest abroad rather than domestically. Rather, the AMT creates an incentive relative to the regular tax system that favors foreign investment over domestic investment.

5. Both foreign and domestic investment incentives may be reduced on the AMT when debt is used to finance investment. Finance costs are higher because interest payments are deductible at the corporate statutory tax rate (35 percent for a regular tax firm and 20 percent for an AMT firm). The after-tax cost of a dollar of interest payments thus rises from 65 cents to 80 cents on the AMT. (The loss in the value of the interest deductions under the AMT serves to increase the AMT credit a firm may claim in the future.) While the absolute cost of investment is increased on the AMT for debt-financed investment, the relative price of foreign investment to U.S. investment is still lower for the AMT firm.
limitation, discussed below, each of which may result in a different incentive for repatriation.

AMT foreign tax credits differ from the foreign tax credits claimed by the taxpayer against regular income tax, although the process of calculating them is similar. Under both the regular tax and the AMT, the foreign tax credit that may be claimed in a given year is limited to the amount of U.S. tax that would have been paid on the foreign income. This limitation is calculated separately for each income category, or "basket."

The U.S. tax that would have been paid on the foreign income is calculated by multiplying (1) the ratio of foreign income to worldwide income by (2) the taxpayer’s U.S. tax liability (before use of foreign tax credits). Under the AMT, foreign income, worldwide income, and U.S. tax liability used in this calculation are all calculated using the AMT rules. The U.S. component of worldwide income will differ from that used in the regular tax computation, chiefly due to the various adjustments and preferences described above. Foreign income will vary to a lesser extent, because the depreciation deductions taken for foreign-use property under the regular tax rules are the same as under the AMT.

After computing the foreign tax credits for each separate limitation category using AMT rules, a second, overall limitation is applied on the amount of foreign tax credits that may be used against AMT. The combined use of deductions for net operating losses and AMT foreign tax credits may not reduce tentative minimum tax by more than 90 percent. AMT foreign tax credits denied due to the 90 percent limitation are treated like other excess foreign tax credits, and may be carried back two years and carried forward five years to offset tentative minimum tax.

The tax incentives for earnings repatriation are considered below for several foreign tax credit positions.

5.4.1 Excess Limit Positions

Consider a firm that is in an excess limit position for both the regular tax and the AMT. Under the regular tax, an additional dollar of earnings repatriations reduces regular tax liability by $T^* - .35$ (assuming the firm is subject to the 35 percent regular tax rate), where $T^*$ is the foreign tax rate. Earnings repatriated from high-tax countries ($T^* > .35$) thus lower current regular tax liability. For a firm on the AMT, tentative minimum tax is reduced by $T^* - .20$ from the additional earnings.

The incentive for earnings repatriation is greater for a firm on the AMT. The reduction in current tax payments is 15 cents larger for the AMT firm than for a regular tax firm. The additional 15-cent saving today comes at a cost of a 15-cent reduction in the AMT credit that could be claimed at a later date. The longer the delay before a firm would be able to use its AMT credits, the greater is the incentive to repatriate earnings while subject to the AMT.
5.4.2 Excess Credit Positions

Under the regular tax, a firm in an excess credit position pays no additional U.S. tax upon the repatriation of foreign income. The stock of foreign tax credit carryovers is affected by repatriation, increasing by $T^* - .35$, where $T^*$ is the foreign tax rate per dollar of income.

Similarly for AMT purposes, assuming the 90 percent limitation is not binding, the additional dollar of earnings repatriations results in no additional AMT, and the stock of AMT foreign tax credits carried to another year increases by $T^* - .20$. In general, for firms in this position, incentives for repatriation are the same for regular and AMT purposes.

If it is alternatively assumed that the 90 percent limitation on the use of foreign tax credits against tentative minimum tax is binding, the cost of repatriating foreign income while on the AMT is increased. This result can occur when the firm has little domestic taxable income (due either to a small U.S. presence, loss carryforwards, or temporarily low domestic profits) and significant amounts of foreign income located in countries with tax rates above the AMT statutory rate. An additional dollar of repatriated earnings increases AMT before credits by 20 cents. Only an additional 18 cents of AMT foreign tax credits may be used to offset this tax, so tentative minimum tax increases by 2 cents. Because current regular tax liability is unchanged by the receipt of this earnings, AMT increases by 2 cents, and a 2-cent AMT credit is generated. AMT foreign tax credits carried to another year increase by $T^* - .18$.

Relative to the case where the 90 percent limitation is not binding, there is a diminished incentive to repatriate earnings. This is true regardless of whether the marginal dividend is from a high-tax country or a low-tax country.

5.4.3 Summary of Repatriation Incentives

When one considers the possibility that the AMT foreign tax credit position of the firm may differ from the foreign tax credit position for regular tax purposes, six possible combinations of tax prices emerge. An analysis of all possible tax price combinations suggests that, in general, the AMT offers firms the opportunity for low-cost earnings repatriations. In only one of the six cases is the AMT tax price greater than the regular tax price for all possible foreign tax rates. This case is where the firm faces the 90 percent limitation on foreign tax credits under the AMT, but for regular tax purposes is in an excess credit position. Even in this case, the firm faces only a 2-cent tax per dollar of repatriated earnings. In four cases, the AMT tax price is less than the regular tax price for some foreign tax rates. In the remaining case, the tax prices are identical.

The next section presents data from tax returns on the extent of AMT liability among multinationals and seeks to examine whether foreign earnings repatriations are influenced by the AMT.
5.5 Tax Return Data of Multinational Corporations

Using Internal Revenue Service tax return information, it is possible to examine the characteristics of multinational corporations paying AMT. Data on the receipt of foreign-source income by these multinationals are examined to explore the possibility that these firms alter their pattern of income repatriation to take advantage of the timing opportunities made possible by the firms' AMT status.

The data used in this analysis are from the 1990 Internal Revenue Service, Statistics of Income microdata files. These files contain data concerning general characteristics of firms, such as assets and tax liabilities, and data relating to foreign-source income and the credit position of firms with foreign tax credits. The data consist of a stratified sample of the corporate population. All corporations with more than $250 million in assets are included in the sample, while corporations in lower asset categories are sampled at a rate varying from 50 percent to 0.25 percent.

5.5.1 AMT Status of Recipients of Foreign-Source Income

Table 5.1 shows AMT incidence for all corporations and for firms claiming a foreign tax credit in 1990 (termed 1118 filers, because such firms claim their foreign tax credits on form 1118). While only 1 to 2 percent of all corporations incur AMT liability, a significantly higher percentage of larger corporations pay AMT. Of corporations with assets in excess of $50 million, 24.6 percent of corporations paid AMT. Among 1118 filers with assets in excess of $50 million, 28.1 percent paid AMT. AMT incidence is even more prevalent among the largest asset category, those with assets in excess of $500 million. Among all corporations in this largest asset category, 30.6 percent paid AMT. Of 1118 filers in this largest asset category, 33.3 percent paid AMT.

Counts of corporations may understate the overall impact of the AMT on economic activity. Because AMT incidence increases with asset size, a larger fraction of total assets is affected by the AMT than suggested by the number of firms paying AMT. Nearly 40 percent of all assets reported by corporations are owned by firms paying AMT. Among 1118 filers, AMT incidence is significantly greater when weighted by assets. Fifty-three percent of assets owned by 1118 filers are owned by those paying AMT. By coincidence, of all assets held by AMT payers, 53 percent of these assets are also owned by 1118 filers paying AMT.

6. Pass-through entities such as S-corporations, regulated investment companies, and real estate investment trusts are excluded from this analysis since they are not subject to the AMT.

7. Note that even corporations paying only regular taxes can face the identical incentives as an AMT payer to the extent that they are prevented from using AMT credits or other business credits to reduce regular tax liability below tentative AMT. It is hoped that these firms can be separately identified in later work.
Table 5.1  Counts of Corporations in 1990 by Size, AMT Status, and 1118 Status (in units)

<table>
<thead>
<tr>
<th>Asset Size Class (thousands of $)</th>
<th>All Corporations</th>
<th>AMT Payers</th>
<th>AMT Incidence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>1118 Filers</td>
<td>Total (%)</td>
</tr>
<tr>
<td>0–100</td>
<td>1,039,755</td>
<td>324</td>
<td>0.03</td>
</tr>
<tr>
<td>100–250</td>
<td>376,082</td>
<td>233</td>
<td>0.06</td>
</tr>
<tr>
<td>250–500</td>
<td>236,695</td>
<td>488</td>
<td>0.21</td>
</tr>
<tr>
<td>500–1,000</td>
<td>163,416</td>
<td>495</td>
<td>0.30</td>
</tr>
<tr>
<td>1,000–10,000</td>
<td>183,975</td>
<td>1,144</td>
<td>0.62</td>
</tr>
<tr>
<td>10,000–50,000</td>
<td>25,055</td>
<td>690</td>
<td>2.75</td>
</tr>
<tr>
<td>50,000–100,000</td>
<td>5,958</td>
<td>255</td>
<td>4.27</td>
</tr>
<tr>
<td>100,000–250,000</td>
<td>4,687</td>
<td>366</td>
<td>7.82</td>
</tr>
<tr>
<td>250,000–500,000</td>
<td>1,805</td>
<td>208</td>
<td>11.52</td>
</tr>
<tr>
<td>500,000</td>
<td>2,682</td>
<td>646</td>
<td>24.09</td>
</tr>
<tr>
<td>Total</td>
<td>2,040,110</td>
<td>4,848</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Another way of representing the importance of the AMT to multinationals is to examine the amount of foreign-source income received by 1118 filers paying the AMT. In total, 56 percent of all foreign-source income is earned by AMT firms. As a result, incentives for the receipt of the majority of foreign-source income are governed by the rules and tax rates of the AMT rather than the regular tax.

5.5.2 The Foreign Credit Position of AMT Taxpayers

As described in section 5.4, the tax price of foreign-source income for AMT firms and the advantage of dividend repatriation while subject to the AMT relative to the regular tax system depends on the foreign tax credit position both for regular tax purposes and for the AMT. As described earlier, six potential tax price differentials exist for a firm subject to the AMT. In table 5.2, the foreign-source income of each 1118 filer is classified into these six AMT cells (and two regular tax cells for non-AMT taxpayers), based on the foreign tax credit position of the firm. Analysis of these different cells gives some indication of how repatriation incentives under the AMT may be affected relative to the regular tax.

As mentioned above, 56 percent of all foreign-source income accruing to corporations claiming a foreign tax credit accrues to AMT-paying firms. As shown in table 5.2, just under half of this amount (27 percent) is earned by firms that are in an excess credit position under both the regular tax and the AMT. Since these firms face the same tax price for the repatriation of foreign-source income on the AMT as they do on the regular tax, their dividend repatriations should not be directly affected by the AMT.

Table 5.2

<table>
<thead>
<tr>
<th>Foreign Tax Credit Position of 1118 Filers in 1990 (foreign-source income in millions of $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position for Regular Taxes</strong></td>
</tr>
<tr>
<td>Excess Limit</td>
</tr>
<tr>
<td>No AMT liability</td>
</tr>
<tr>
<td>26.01%</td>
</tr>
<tr>
<td>Excess limit</td>
</tr>
<tr>
<td>4.78%</td>
</tr>
<tr>
<td>At 90% limit</td>
</tr>
<tr>
<td>3.01%</td>
</tr>
<tr>
<td>Excess credit</td>
</tr>
<tr>
<td>3.15%</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

A complicating factor to this conclusion is that, as shown in section 5.3, AMT firms have slightly greater incentives to invest in real capital abroad than domestically, relative to the incentives under the regular tax. This could result in a reduced incentive to repatriate foreign-source income if funds are retained in the foreign location for reinvestment. Alternatively, there could be an increased incentive (relative to the regular tax) to repatriate funds from one foreign location for use in a different foreign location. In this latter case, while measured repatriations would be increased, net repatriations, defined as repatriations net of new transfers abroad, would be lower under the AMT. In future research, we wish to examine information on the foreign subsidiaries of U.S. parents to explore these latter hypotheses.

The next largest cell for AMT taxpayers consists of firms facing the 90 percent limitation on the use of foreign tax credits for AMT purposes, but in an excess credit position for the regular tax. These firms pay an extra tax of 2 cents at the margin for each additional dollar of foreign-source income repatriated relative to their regular tax liability. Approximately 17 percent of foreign-source income is earned by firms facing this 2 percent marginal tax. While the 2 percent tax applies at the margin, inframarginal amounts of foreign-source income may be fully sheltered by foreign tax credits, so total AMT payments are increased by less than the maximum of $307 million (0.02 times $15.35 billion).

Other cells in table 5.2 generate tax savings from repatriations relative to the tax that would be owed under the regular tax. For firms in excess limit under both the regular tax system and the AMT, each dollar of repatriations is subject to 15 cents less current tax than if the regular tax rules applied (.35 - .20). Firms in this cell save approximately $630 million in current taxes, which reduce the AMT credit claimed at a future date by the same amount. Savings can also occur for AMT firms subject to the 90 percent limitation but in an excess limit position under the regular tax. Current U.S. tax payments are reduced to the extent that the average foreign tax rate is less than 33 percent (.35 - .02). Finally, savings also accrue to firms in an excess credit position under the AMT but in excess limit for regular tax purposes. These firms reduce tax liabilities on their foreign source income under the AMT relative to their regular taxes by an amount proportional to the difference between the 35 percent regular tax rate and their average foreign tax credit rate (a number in excess of 20 percent) on each dollar of foreign-source income received.

In sum, it appears that total payments of tax on foreign-source income are lower for the AMT firms than if they were subject to the regular tax rules. The analysis, however, has been unable to determine whether the increased incentive to receive foreign-source income actually significantly affects repatriation behavior. Future research designed to link the parent firm tax returns to information returns filed by the foreign subsidiaries will allow us to better examine how actual payout ratios are affected by the AMT.
5.6 Conclusions

This paper has shown the dimensions along which incentives of U.S.-based multinational corporations may be affected by the AMT. More than half of all corporate foreign-source income in 1990 was received by corporations subject to the AMT. As a result, the tax prices on foreign-source income created by the AMT may be at least as important as those created by the regular tax. While data shown in Gerardi, Milner, and Silverstein (1994) indicate that AMT incidence for the largest corporations in 1990 was approximately 25 percent greater than in 1989 or 1991, the large stock of unclaimed AMT credits accumulated by corporations suggests that the incentives created by the AMT will continue to be an important factor in the future. As shown in section 5.3, the AMT may create a relative incentive for AMT firms to invest abroad rather than domestically. For firms interested in repatriating income from abroad, the AMT may create a temporary timing opportunity that allows repatriation of this income at a lower cost than if the firms were subject to the rules of the regular tax system. These two different incentives may have an ambiguous overall effect on U.S. domestic investment if repatriated income is retained by the parent in the United States. Alternatively, the two incentives together may suggest that the AMT provides an opportunity for firms to repatriate income from foreign locations with poor reinvestment opportunities and reinvest the funds abroad in different foreign locations with better opportunities to take advantage of the temporary, relatively lower cost of capital.

Future research will examine more closely the differences in repatriation behavior between AMT firms and non-AMT firms to determine whether the pattern of repatriation from these subsidiaries is consistent with predictions based on differences in tax prices faced by these firms.

References


