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Minimum Asset-based Tax: A Critique

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In the article *A minimum alternative asset-based corporate tax for India* in this issue of EPW, Indira Rajaraman and T. Koshy evaluate an asset-based minimum corporate tax. They suggest that this tax would generate improvements in equity and efficiency, apart from revenue gains.

The union budget for 1996-97 announced a minimum alternative tax (MAT) based on book profits. This is not the tax that Rajaraman and Koshy analyse. To avoid confusion, we will use the term MAAT for “minimum alternative asset-based tax” to differentiate it from the term MAT which generically refers to any minimum alternative tax, even if it is not asset-based.

My treatment here is organised around four issues:

1. An evaluation of the issues surrounding tax evasion and zero-tax companies,
2. When the tax code is modified, the behaviour of firms will not stay constant. In Section 2 I explore the microeconomic optimisation that underlies the present tax regime, and qualitatively outline the incentive implications of the MAAT.
3. I briefly touch upon the impact of a MAAT for macroeconomic stabilisation,
4. The last section ties the above discussion with the MAT proposal that is in the union budget of 1996-97.

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1 Zero-tax companies

The exploration of innovative methods in taxing corporations in India has gathered momentum in the last few years, mainly owing to the emergence of a sizable population of zero-tax companies, i.e. companies which earn substantial before-tax profits but pay no tax.

Implicit in the criticism of zero-tax companies is the suggestion that these companies are obtaining low tax rates by violating laws. The existence of zero-tax companies which earn substantial profits is often viewed as a symptom of the widespread evasion of taxes in India.

Some tax evasion by companies in India is undoubtedly related to evasion, but there are legitimate factors at work as well. There are special tax exemptions which have been granted to investments in backward areas and to exporters which generate reduced taxes. Finally, an important factor underlying low tax payments is the role of depreciation write-offs which accrue to firms in the years following physical investments. Rajaraman and Koshy mention this as the major factor at work in explaining the zero-tax puzzle.

If tax evasion is the major factor underlying low tax payments by firms, then this is clearly a breakdown of the mechanism of tax collection, and perhaps innovative alternatives need to be explored if it is felt that improvement of the mechanisms of direct tax collection is extremely hard. If, on the other hand, it is depreciation earned through high rates of investment by firms that has led to low tax rates, then it is not a cause for concern.

This reasoning suggests the following testable proposition:

If low-tax companies have a history of high rates of investment, and of a larger allocation of incremental funds into forming fixed assets, then the zero-tax phenomenon is closely related to high depreciation write-offs that accrue to high investment companies.

If, on the other hand, low-tax companies and high-tax companies are similar in their attitude towards investment, then it is evasion that generates the zero-tax phenomenon.

1.1 Empirical Examination

To explore this question, a subset of firms was isolated from CMIE's CIMM database. These firms met the following three criteria: (a) had net profits in 1994-95 of more than 1% of sales, (b) are in manufacturing, and not in finance, (c) are observed in the database in 1992-93, 1993-94, and 1994-95. There were 1725 firms which met these criteria. These were broken up into

two groups: high-tax firms where the average tax rate in 1994-95 was above 10% and the remaining low-tax firms.¹

The properties of these two groups are compared in Table 1.

	1993-94		1994-95	
	Low-Tax	High-Tax	Low-Tax	High-Tax
Growth in GFA (%)	18.75	16.66	28.90	20.77
Uses of funds (%)				
GFA	65.08	39.03	66.49	44.08
Inventories	3.84	13.68	8.62	14.54
Receivables	17.42	21.54	14.54	22.59
Investments	8.78	13.08	7.20	16.29
Cash	4.88	12.66	3.16	2.49
Dividend payout (%)	18.61	25.65	18.77	22.17
Number of Companies	1043	682	1043	682

GFA = Gross Fixed Assets

Table 1: Properties of low-tax vs. high-tax companies

These summary statistics reveal sharp differences between low-tax and high-tax companies:

- Low-tax companies have had faster growth of GFA.
- They allocated a much larger fraction of their incremental resources into asset formation: around 65% of incremental resources in low-tax companies were directed to GFA addition, as compared with around 40% for high-tax companies.
- Low-tax companies payout a smaller fraction of earnings as dividends, as compared with high-tax companies.
- Finally, low-tax companies invested a much smaller fraction of their incremental resources into financial markets.

This evidence is consistent with the view that the low-tax phenomenon is primarily driven by the depreciation which is allowed to be written off in the

¹The objectives of these criteria for sample selection are the following. The minimum net profit rate is used to screen out loss-making companies who wouldn't need to pay tax anyway. The marginal tax rate faced by companies was 46%, so companies with an average tax payout below 10% can unambiguously be called "low-tax companies".

years following the addition of physical assets.² Further, these assets appear to have been primarily of the productive kind. The value of output of the high-tax set rose by 36.9% between 1992-93 and 1994-95, while the value of output of the low-tax set rose by 51%.³

1.2 Implications

Thus the primary explanation underlying the 1043 low-tax companies may be found in the high investment rates seen in the last few years. Rajaraman and Koshy observe that the average tax rate of India's corporate sector dropped in the last two years: in the light of the above argument, this should be associated with an increase in corporate investment starting from 1992-93 onwards.

The final open question may concern the very depreciation regulations themselves. The economic rationale underlying depreciation provisions is above dispute, so the only possible weak link can be the specific depreciation rates used. Some evidence about the true economic rates of depreciation is presented in Hulten & Wykoff (1996) and Jorgenson (1996). The consensus between the two articles, which use different econometric techniques, is quite remarkable. If it turns out that India's depreciation rates are out of touch with reality and constitute a fiscal policy incentive for high investment rates, then there may be a case for modifying them. This can partly be done using similar econometrics applied to Indian data, but in many cases the estimation results obtained in other countries are probably very relevant for Indian conditions.

In all, it does not appear that the low-tax or zero-tax phenomenon constitutes a breakdown of normal and healthy procedures of tax collection. Instead, it is the natural outcome of an economic environment characterised by high rates of investment. If there was a regime-shift, and firms become pessimistic about the future, and invested less in physical assets, then we would see a resurgence of tax payments in the following years under the same tax regime.

²To the extent that tax incentives for exports and for investment in backward areas have generated low effective tax rates, the results of Table 1 are an incomplete depiction of the extent to which tax evasion is a poor explanation of the low-tax phenomenon.

³Rajaraman and Koshy emphasise the role of MAAT in improving the efficiency of investment, as opposed to the risk of inefficient asset formation motivated by tax arbitrage. In our empirical analysis (not shown here), there is no serious difference between incremental capital/output ratios between these two groups.

2 Incentive Implications

In this section, we qualitatively explore the ways in which the present tax system (before the MAT announcement of the union budget of 1996-97) has shaped the behaviour of firms, and the way a new tax regime would alter this behaviour.

2.1 The present tax system

One causal chain underlying the empirical results of Table 1 could be as follows: companies inherently sort themselves into low-investment and high-investment categories, and then the tax code generates low tax rates for high investment companies. This chain of causality ignores the fact that *firms are optimising*.

In a world with optimising firms, the introduction of high income tax rates would give firms an impetus towards low dividend payout rates, and high rates of investment, which would be a method through which the effective tax rate could be lowered. In this sense, the high investment rates seen amongst the low-tax companies are partly *caused* by the tax regime of high income tax rates coupled with depreciation writeoffs.

Explorations of alternative tax regimes using historical data suffer from this Lucas Critique (Lucas 1976) problem. Rajaraman and Koshy have an empirical evaluation of three questions: (a) the level at which the MAAT should be set, (b) the possible revenues obtained from MAAT, and (c) transition probabilities of zero-tax states. The answers to all these questions are obtained using firms observed under the present tax regime. When the tax regime is changed, firms will change their behaviour towards dividend payouts, fixed investment, corporate financing patterns, etc., thus generating outcomes that are different from those predicted by the simulations.

2.2 Incentive implications of MAAT

The MAAT would generate a powerful disincentive to owning assets.⁴ Firms would try hard to obtain the *use* of assets without *owning* them.

⁴One complexity concerns the measurement of asset value. Many firms in India own assets where the book value is well below the market value. Ideally, the MAAT should be applied on market value. In India, the MAAT would generate two effects: (a) higher tax rates upon young companies as compared with old companies, and (b) a disincentive against doing revaluation of assets, the procedure through which accounting data at the firm level is brought uptodate with contemporary market prices.

We can visualise this in more detail using an example of one capital asset: automobiles. Once a MAAT is in force, firms would try to avoid owning cars since owning assets would be taxed. Hence, renting cars would become much more common as compared with what it is today. This altered behaviour would have two implications:

- Reduced revenues from the MAAT as compared with the simulations of Rajaraman and Koshy, and
- Reduced economic efficiency in the usage of cars that is generated by the problem of moral hazard in the car rental market. Agents will drive at higher speed on bad roads in a rented car than in an owned car. Agents will pay less attention to unusual sounds from a rented car than from an owned car.

Much more ambitious corporate restructuring aimed at reducing the assets on the books of firms can be visualised, but the consequences are the same as the two points shown here.

A manufacturing company that holds substantial assets would do a demerger into two parts: a finance company that owns all the assets, and a manufacturing company that rents the assets. Finance companies would be exempt from the MAAT and pay no tax. The manufacturing company would go back into the present strategy of high investment in order to obtain low tax payments. A few years later, when the assets of the manufacturing company rise to levels that generate high MAAT, another demerger would be done.

More generally, manufacturing companies that do not do such demergers would avoid accumulating assets and pay high dividends. Households would use those dividends to buy shares of finance companies, which would rent assets to manufacturing companies.

These are offered as obvious examples of the tax arbitrage that can take place; the true outcome will reflect the combined ingenuity of agents in the economy that far outweighs the foresight of this economist. The basic argument, however, is clear: (a) the simulations of Rajaraman and Koshy overestimate the revenue obtained from MAAT and (b) the economy will suffer costs associated with tax arbitrage in response to the new regime.

Finally, to come back to incentives for dividend payouts and investment: to the extent that tax arbitrage is able to render the MAAT irrelevant, it would not hurt the basic incentives towards low dividend payouts and high investment rates that are embedded in the present tax regime. But to the extent that tax arbitrage is not able to prevent the MAAT from being binding, it would additionally generate higher dividend payouts and reduced investment rates.

3 Asset-based tax and Macroeconomic Stabilisation

The simplest form of MAAT uses a fixed percentage rate of return on assets, one year at a time. This MAAT has a weakness of not being sensitive to macroeconomic fluctuations. It would bind when the macroeconomy is faring badly (i.e. profit rates are low).

A more complex form of the MAAT, with deferment provisions, may be required in order to produce a more optimal outcome. The level of the MAAT would need to be set using a long-run average rate of return on assets.

4 The MAT announced in union budget 1996-97

The MAT announced in union budget 1996-97 is not the MAAT that Rajaraman and Koshy analyse.

The analysis of zero-tax companies presented in Section 1 bears equally upon this MAT as upon the MAAT – it suggests that there is no serious tax evasion problem with low-tax companies that requires remedy.

The incentive implications of this MAT are not as profound as the incentive implications of the MAAT: it reduces incentives for firms to pay low dividend rates and invest at a high rate. Before this MAT was introduced, firms would try to invest at high enough rates to drive down their tax liability to 0. Now, tax optimisation will only drive firms to invest at the rate required to make the MAT binding.

5 Conclusion

The presentation above has highlighted some economic arguments which bear against the MAT or MAAT proposals.

More generally, the corporate tax is itself a fundamentally flawed idea in public finance. The best mode of tax collection is one where individuals are taxed, and coalitions built by individuals in order to obtain economic efficiency, such as partnerships, clubs, cooperatives, limited or unlimited liability firms, etc. are not penalised by double taxation. In this sense, the corporate tax itself should not exist; only a personal income tax should be levied.

Taxing firms (and the minimum alternative tax proposal) is an attractive option in the sense that it *will* obtain substantial revenues for government.

This is a soft option in terms of obtaining a political consensus as compared with difficult challenges such as altering the expenditure patterns of government or taxing individuals. The work of Rajaraman and Koshy, and the arguments presented here, should help in bringing economic rationality to the fore in this debate.

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