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# Is the Flat Tax Right for Mozambique?

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# Contents

<b>Is the Flat Tax Right for Mozambique?</b>	<b>1</b>
Introduction	1
What is the Flat Tax?	1
Why Adopt the Flat Tax?	5
Why Doesn't Everyone Do It?	8
Is the Flat Tax Right for Mozambique?	13
<b>References</b>	<b>18</b>

## Illustrations

### Figures

Figure 1. Progressivity under a Flat Tax	6
Figure 2. Laffer Curve Relationship between Tax Rates and Tax Revenues	8

### Tables

Table 1. Tax Rates and Revenues Before and After the Implementation of a Flat Tax	3
Table 2. Average Three-Year Economic Growth Rates Before and After Introduction of Flat Tax	12



# Is the Flat Tax Right for Mozambique?

## INTRODUCTION

There is widespread concern in the business community in Mozambique that the tax system is a serious impediment to private investment and business expansion, particularly for companies that do not benefit from special fiscal incentives. Under the standard fiscal regime, Mozambique imposes a 32 percent tax on corporate profits plus a 32 percent tax on dividend income, creating an onerous combined tax of 53.8 percent on profits that are distributed to shareholders.<sup>1</sup> At the same time, investors who qualify for fiscal incentives face much lower effective tax rates, varying by sector and region (Kuegler 2008). By narrowing the tax base, these preferences necessitate higher tax rates on other activities. In addition, many local businesses find the income tax code too complex (Nathan Associates 2004a).

To remedy these problems, some stakeholders have expressed a keen interest in following the lead of a growing number of countries that have adopted a flat tax in place of a traditional income tax. The basic proposition is that a simple, uniform income tax with low tax rates could generate more revenue and also stimulate more investment and faster growth.

Is the flat tax right for Mozambique?

As a step toward answering this question, this note has been prepared at the request of USAID to provide the government, the business community, donor agencies, and the public with an explanation of the flat tax concept and observations on its suitability for Mozambique. The note explains the basic characteristics of a flat tax, emphasizing that in practice there are many variations on the theme; outlines the advantages of the flat tax in general terms; and summarizes the main counterarguments. The final section discusses implications for consideration in Mozambique.

## WHAT IS THE FLAT TAX?

In public discussions, the flat tax is generally described in terms such as the following: “Tax everything, tax it at the same rate, and tax it only once. That means, first, getting rid of the many

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<sup>1</sup> The combined tax per \$100 of pretax profit is:  $32\% \times \$100 + 32\% \times \$68 = \$53.80$ , where \$68 is the after-tax profit available for distribution to shareholders.

credits and exemptions and preferential rates that clutter up the tax code at present. And second, cutting taxes to a single, low rate.”<sup>2</sup> The resulting tax system would treat all taxpayers equally, and the tax code would be so simple that many taxpayers could file their returns on a post-card.

In practice, there are many versions of the flat tax involving various degrees of uniformity and simplicity. The concept was developed in 1981 by two American academics, Robert Hall and Alvin Rabushka (Hall and Rabushka 1981, 1985). Their proposal would apply a single tax rate to both company and individual income, with a zero-rate bracket to relieve the tax burden on low-income individuals. Other central characteristics of the Hall-Rabushka proposal include the elimination of special tax preferences as well as exemption of income in the form of returns to saving. To achieve the latter, Hall and Rabushka proposed to end the double taxation of dividends (distributed profits), exempt capital gains and interest income, and allow full and immediate deductibility of investment expenditures, in place of depreciation allowances. Since income equals consumption plus saving (by the definition of saving), the exemption of returns to saving means that the Hall-Rabushka flat tax is equivalent in economic terms to a tax on consumption. Indeed, Hall and Rabushka offered their flat tax as an alternative not only to the traditional income tax in the United States, but also to proposals for a national VAT or sales tax (Bradford and Slemrod 1996).

A closely related proposal would apply a flat tax to company cash flow rather than to income as measured by standard accounting rules. Like the Hall and Rabushka approach, the cash flow tax would eliminate the need to value depreciation allowances and capital gains or losses, but it would also simplify the definition of taxable income by avoiding problems with determining accruals and valuing inventory changes, among other features (Shome and Schutte 1995).<sup>3</sup>

In the real world, Jamaica was an early adopter of a flat tax. In 1986, Jamaica discarded a complex income tax system with marginal rates of up to 57.5 percent and introduced a flat tax of 33-1/3 percent on company and personal income (cut to 25 percent in 1992), while eliminating numerous exclusions and exemptions in order to broaden the tax base. In 1994, Estonia introduced a uniform 26 percent tax on company and personal income, and in 2001 Russia implemented a bold version of the flat tax featuring a 13 percent tax on personal income.

At least 15 countries have established some version of the flat tax (Table 1). A widely cited IMF study of eight flat-tax regimes in eastern Europe<sup>4</sup> found that “their sole common feature is a single strictly positive marginal tax rate on labor income” under the personal income tax (PIT) (Keen, Kim and Varsano 2006, p. 4). For purposes of equity, all but one of these eight systems (with Georgia as the exception) also included a zero tax rate on incomes below a certain threshold.

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<sup>2</sup> For example, see: <http://andrewcoyne.com/columns/2008/01/pay-your-taxes-on-postcard.php>.

<sup>3</sup> The cash flow tax would still need to have possibly complex provisions for treating non-cash transactions or payment deferrals designed to game the system.

<sup>4</sup> The eight countries are Estonia (1994); Lithuania (1994); Latvia (1997); Russia (2001); Slovak Republic (2004); Ukraine (2004); Georgia (2005) and Romania (2005).

**Table 1***Tax Rates and Revenues Before and After the Implementation of a Flat Tax <sup>a</sup>*

Country	Year Flat Tax Adopted	PIT (%)			CIT (%)			Change in Total Revenue (% GDP)	Social Insurance Tax (%)		
		Rate After	Rate Before	Change in PIT Revenue (% GDP)	Rate After	Rate Before	Change in CIT Revenue (% GDP)		Rate After	Rate Before	Change in Revenue (%GDP)
Jamaica	1987 (PIT)/ 1988 (CIT)	33.3	30–57.5	1.3	33.3	45	-1	N/A	No change	14–8	N/A
Estonia	1994	26	16–33	-0.4	26	36	-1	-1.4	33	N/A	1.1
Lithuania	1994	33	18–33	0.4	No change	29	0.9	1.3	34	N/A	N/A
Latvia	1997	25	25 and 10	0.2	No change	25	0.4	0.6	36 (falling to 33 in 2002)	N/A	0.0
Russia	2001	13	12–30	0.5	37	30	0.3	0.3	35.8-44.1	N/A	-0.3
Zambia	2002	30	10-30	3.1	No change	15–45	-5.6	-2.5	N/A	N/A	N/A
Slovak Republic	2004	19	10–38	-0.7	19	25	-0.4	-1.1	48.6	51	-0.7
Ukraine	2004	13	10–40	-1.3	25	30	-0.3	-1.6	37.9-40.15	37.5–38.5	0.7
Georgia	2005	12	12–20	-0.2	No change	20	0.3	0.1	20	33	-0.3
Romania	2005	16	18–40	-0.5	16	25	-0.3	-0.8	Same in 2005, falling to 47.5 in 2006	49.5	0.4
Guyana	2006	33.33	2–33.33	-0.3	N/R	N/R	N/R	N/R	No change	12.1	0.2
Kyrgyz Republic	2007	10	1–20	0.1	10	20	0.2	0.3	29	31	0.1
Kazakhstan	2007	10	5–20	0.1	Falling to 15 by 2011	30	0.5	0.7	In 2008 falling to 5–20	30	0.0
Macedonia	2007	12 in 2007, 10 in 2008	15–24	-0.1	12 in 2007, 10 in 2008	15	0.3	0.2	65% of average wage	N/A	0.0
Mauritius	2007	15	15–22.5	N/A	15	15–25	N/A	N/A	6–10	6–10	N/A

SOURCES: IMF, individual country sources, and U.S. Social Security Administration

<sup>a</sup>Rates and revenues relate to year before and after adoption of a flat tax.

Beyond this “sole common feature” of a uniform tax rate on labor income, the various systems differ remarkably from one country to another:

- Not all flat tax systems feature a low tax rate. The uniform tax rates are as low as 10 percent in Mauritius and as high as 33-1/3 percent in the original version in Jamaica, and 33.3 percent in Guyana since 2006. Most flat-tax countries impose a payroll tax on labor income to fund social insurance programs, on top of the PIT. Even if the PIT rate is low and uniform, the combined tax burden on labor income may still be extremely high, and it may vary widely depending on income. For example, when Russia introduced its famous 13 percent flat tax in 1991, the social insurance tax was 35.6 percent on low incomes, declining to 5 percent on high incomes (Ivanova, Keen and Klemm 2005).<sup>5</sup> The combined tax on payments to labor therefore ranged from 48.6 percent to 18 percent.
- Some flat-tax countries paid for a sharp reduction in the tax rate by eliminating preferential tax benefits, tax holidays, and inessential deductions and exemptions. In Mauritius, the minister of Finance even announced that he was “relinquishing my discretionary power ... to remit duties and taxes and grant exemptions” (Mauritius Ministry of Finance 2006). Other countries, such as Guyana, retained a provision for tax holidays (as well as extensive remissions of import duties and indirect taxes) other after adopting a uniform marginal tax rate.
- Some countries, such as Jamaica, Georgia and the Kyrgyz Republic, follow the Hall-Rabushka approach in applying a uniform tax to both personal and corporate income. But many do not. Again using Russia as an example, the PIT rate is a flat 13 percent, but companies face a tax rate of 35 percent. Similarly in Zambia, the PIT rate is a flat 30 percent, while company tax rates vary from 15 to 45 percent depending on the sector of activity.
- Some countries, such as Estonia, eliminated the double taxation of dividend income. Others, such as Georgia, continued to tax dividend payouts in addition to company income. Latvia exempts dividend income from the PIT for Latvian companies only, leaving a higher effective tax rate on distributed profits from foreign investment.
- Many flat-tax countries apply the uniform tax rate to interest income and capital gains income, as well as labor income. Other countries apply different tax rates to these forms of income from capital. Recall that the Hall-Rabushka proposal would exempt income from capital altogether.
- Flat tax systems differ in many technical features. For example, rules on depreciating or expensing capital costs and the provisions for loss carry-forward often determine whether a company has any chargeable income on which to pay tax. This is especially likely for businesses with large capital outlays. Such investors may be more concerned with these technical provisions of the tax code than with the tax rate itself.

From this synopsis, it is clear that “the flat tax” idea has been implemented in many different ways. Perhaps the only generalization is the familiar observation: the devil is in the details.

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<sup>5</sup> The same reference applies to other data on the Russian flat tax.

## WHY ADOPT THE FLAT TAX?

This section summarizes the main advantages of the flat tax, as advocated by proponents. As discussed in the previous section, real world applications of the flat tax vary greatly in terms of structural attributes. For our purposes, we focus on a prototype version of the flat tax, characterized by a low and uniform tax on both companies and individuals; a zero-rate bracket for PIT to protect the poor; and the elimination of tax preferences.

In essence, the argument for a flat tax is that such a system is simpler and fairer than the traditional income tax and that it enhances tax compliance, stimulates growth, and may even raise more revenue.

### Simplicity

The application of a single tax rate aims to simplify taxation because a uniform rate is easier to understand and easier to use in determining tax liability (at least for those who may be uncomfortable with tax tables or simple formulas).

Yet most of the complexity in any tax code arises not from the structure of tax rates, but from myriad provisions of the tax code that determine the computation of income subject to tax. For individuals with income solely from wages in a single job, the calculation of income can indeed be simple enough to fit onto a postcard. For individuals with multiple income sources—and for companies—the calculation of “income” can be dauntingly complicated, regardless of whether there is a single tax rate or multiple tax bands. In particular, the computation of income depends on features of the tax code such as provisions defining which receipts or accruals are included in taxable income; which expenses, deductions, and allowances are permitted; which exemptions or exclusions are allowed; and how all of these concepts are measured. Hence, the greatest scope for simplification under the flat tax comes from sweeping away special deductions, exclusions, exemptions, allowances, credits, holidays, and other preferences.

### Fairness

The flat tax is widely regarded as being inherently fair because it treats every taxpayer identically, charging the same marginal tax rate on any additions to income. If the uniform tax rate applies from the first dollar, the tax due is strictly proportional to income: if Ms. A has 10 times the income of Mr. B, she pays 10 times as much tax, in absolute terms. Moreover, as noted above, nearly every flat tax country has retained a zero-rate bracket to avoid imposing income tax on the poor. This provision transforms the flat tax into a progressive source of revenue, meaning that taxpayers with higher income pay a higher *proportion* of their income in tax. To see how this works, consider a flat tax of 20 percent with a personal exemption of \$5,000. In this case:

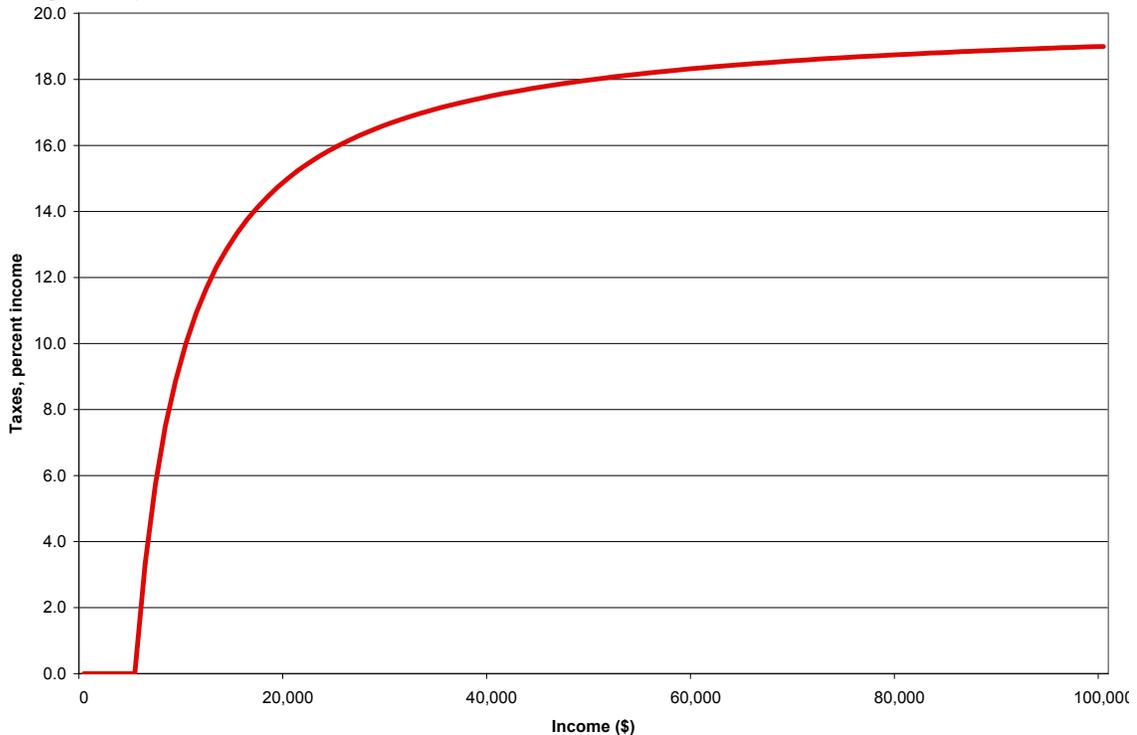
- No tax is due on incomes up to the threshold; in this range the effective tax rate is 0 percent.
- At an income of \$10,000 the tax is  $20\% \times (10,000 - 5,000) = \$1,000$ , giving an effective tax rate of 10 percent.
- At an income of \$20,000 the tax is  $20\% \times (20,000 - 5,000) = \$3,000$ , giving an effective tax rate of 15 percent.

- At an income of \$50,000 the tax is  $20\% \times (50000 - 5000) = \$9,000$ , giving an effective tax rate of 18 percent.

As Figure 1 shows, the ratio of tax to income approaches 20 percent at very high incomes, using the parameters indicated in this example. The degree of progressivity can be increased by adopting a higher tax rate or by increasing the threshold for the zero-rate bracket.

**Figure 1**

*Progressivity under a Flat Tax*



## Avoidance and Evasion<sup>6</sup>

Applying a single uniform tax rate to all forms of individual and corporate income eliminates important avenues for tax avoidance by closing off loopholes in the form of opportunities to restructure transactions as tax-preferred payments. This advantage is enhanced if the flat tax also features the elimination of special tax preferences, as discussed above (see Simplicity). In addition, when the flat tax involves sharply lower tax rates, it reduces the incentive for pursuing tax avoidance maneuvers—also called tax planning.

In addition to reducing legal tax avoidance, a flat tax may also reduce the prevalence of illegal tax evasion—also called tax cheating. This outcome is most likely in systems where the tax rate is very low, so that the benefits of cheating are also very low. In addition, if public views the flat tax

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<sup>6</sup> Tax “avoidance” is the *legal* practice of structuring transactions to minimize tax liability, by taking advantage of “loopholes” in the tax code. Tax evasion is the *illegal* practice of failing to pay tax due through nonregistration, nonfiling of returns, or filing of returns that understate income.

to be fairer than the traditional income tax, the perception itself may reduce incentives for tax evasion. As the finance minister in Mauritius, Mr. Rama Krishna Sithanen, stated when he introduced the low-rate flat tax: “There is now no justification for anyone not to pay his share of taxes to finance needed public services” (Mauritius Ministry of Finance 2006, p. 27).

There is another important link between the problems of avoidance and evasion, on one hand, and tax fairness, on the other. When high tax rates and a complicated tax code spawn avoidance and evasion responses, the effective tax rate on companies and high-income individuals often proves to be far less than the statutory tax rate. Consequently, the standard tax system is usually much less progressive in practice than it appears to be on paper. By improving compliance, a well-designed flat tax can potentially be more progressive than a traditional income tax with higher tax rates.

## **Economic Growth**

A more subtle argument in favor of the flat tax is that the reform can stimulate economic growth by strengthening incentives to undertake productive activities. The notion is that a lower marginal tax rate reduces the “tax wedge” between the gross value of a productive activity and the net reward received by those involved. With a marginal tax rate of 32 percent on gross earnings from labor, the worker takes home 68 percent. If the marginal tax rate is 20 percent, the worker takes home 80 percent. In the second situation, more is gained from productive effort. The same arithmetic and incentive effects apply to the rewards for saving, investment, and innovation.

The flat tax can also spur growth by attracting internationally mobile capital either directly by reducing taxes to a more attractive level or indirectly by signaling to investors that the government is committed to establishing a favorable business climate. Further growth benefits can be achieved from efficiency gains arising from the elimination of special preferences that draw capital, labor, land, and financial resources into tax-favored investments that may yield a lower economic rate of return than other, fully-taxed pursuits. This may sound like an esoteric point, but tax-driven investment decisions can have a substantial impact on economywide productivity, efficiency, and growth (Nathan Associates 2004b).

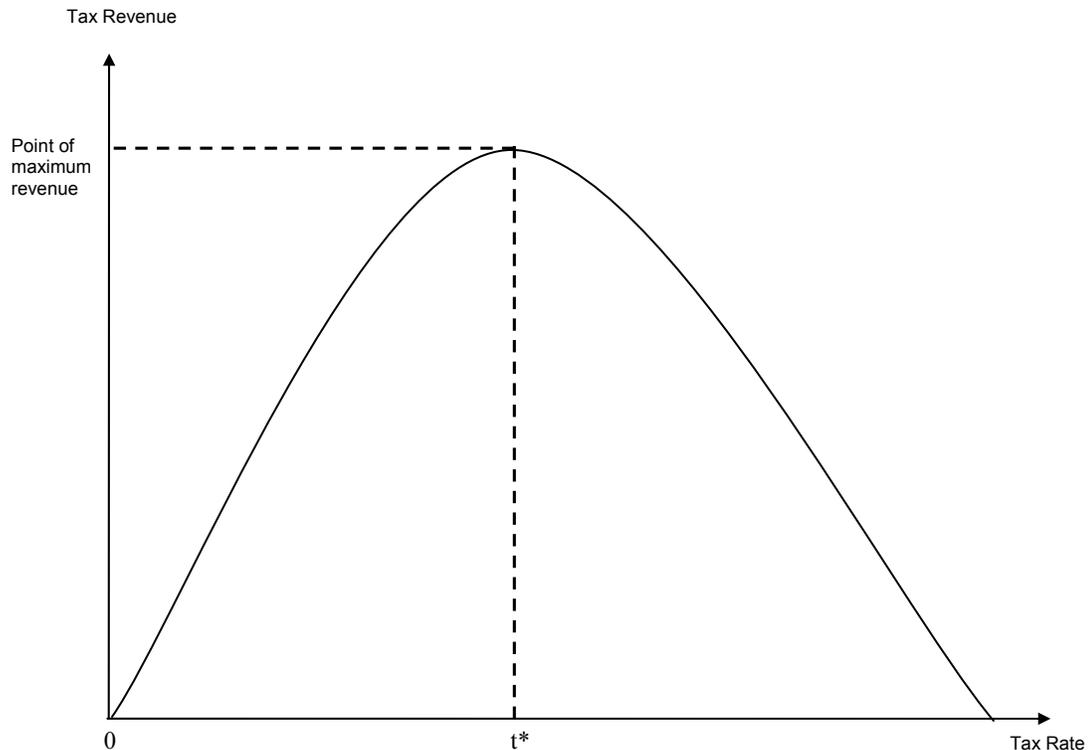
## **Revenue Yield**

Finally, flat-tax proponents often contend that this system can yield more revenue than a traditional income tax with higher tax rates because of the relationship between rates and revenues, as illustrated in by the Laffer curve (see Figure 2). The Laffer curve shows that higher tax rates will increase government revenue up to a point, shown as  $t^*$  in Figure 2. Beyond this “maximum revenue” point, a further increase in the tax rate will lead to a loss of revenue due to the effect of high taxes on compliance and growth (the Laffer effect). If tax rates in a given country exceed the maximum-revenue point, especially in relation to attracting or retaining internationally mobile capital, then lowering the tax rate by introducing a flat tax can increase revenue. As a result, the tax rate reduction may be self-financing. In addition, the elimination of special tax preferences under a prototype flat tax will close off many of the loopholes used for tax avoidance, providing a further boost to revenue. Even where these revenue enhancement effects are not strong enough to fully finance a reduction in the tax rate, they will still mitigate the

revenue loss and make it easier for the government to compensate through other measures such as improvements in tax administration.

## Figure 2

*Laffer Curve Relationship between Tax Rates and Tax Revenues*



## WHY DOESN'T EVERYONE DO IT?

The idea of lowering tax rates, simplifying the tax code, and treating all taxpayers uniformly is inherently very attractive. Yet many of the “flat tax” systems differ in important ways from the prototype version that would feature these attributes. And many countries are not moving towards a flat tax at all. What, then, are the arguments against adopting a simple, low-rate flat tax? One major concern is the revenue risk associated with tax cuts. Other issues include the degree of progressivity in the tax system, the use of tax benefits as a tool for pursuing other policy objectives, and the extent of the benefits for growth. At a more basic level, most of the benefits claimed for the flat tax can be achieved through best-practice reforms under the traditional income tax, via measures to broaden the tax base and lower tax rates.

## Revenue Risk

The fundamental purpose of taxation is to raise revenues to finance public goods and services and other government expenditures. Hence, a careful analysis of the revenue effects is central to the consideration of introducing a low-rate flat tax, or any other tax reform. In the case of the flat tax, one basic issue is whether the top marginal tax rate under the existing system is above or below

the maximum-revenue point on the Laffer curve—point  $t^*$  in Figure 2. If it is above  $t^*$ , then cutting the tax rate will boost revenue.<sup>7</sup> Otherwise, a tax cut will cause a revenue loss. Unfortunately, it is difficult to determine which portion of the Laffer curve is applicable, or the positive impact of tax cuts on compliance and growth (the Laffer effect). Without an empirical basis for estimating the strength of the Laffer effect, policymakers tend to budget on the basis of a static projection that assumes that the tax cut would not significantly expand the tax base, and that other specific measures are needed to offset the prospective revenue loss. Simply presuming that a tax cut will improve compliance or growth, without supporting evidence, would entail a risk of a revenue shortfall that could lead to destabilizing budget deficits or unplanned expenditure cuts.

This revenue risk can be avoided by incorporating into the flat-tax reform program measures to broaden the tax base by eliminating tax preferences and closing loopholes to balance the potential revenue loss from lowering the tax rate. In any given country context, this balancing act requires a careful quantitative analysis that takes into account specific base-broadening options and data on actual taxpayer attributes based on tax returns.

How big is the revenue risk, empirically? In some countries, the introduction of a flat tax has been accompanied by a revenue gain (see Table 1). Jamaica's early flat tax regime produced the largest revenue gain, of 1.3 percent of GDP, when the flat tax was introduced for the PIT in 1987, largely because of extensive base-broadening measures (Bahl 1997).<sup>8</sup> The most famous example is Russia, where PIT revenue jumped from 2.4 percent of GDP to 2.9 percent of GDP when the flat tax took effect in 2001, despite the low 13 percent tax rate. In this case, only a small part of the revenue gain can be explained by base-broadening measures, though the booming oil-driven economy was obviously an important factor. Interestingly, many taxpayers were previously in the 12 percent bracket and thus faced a tax increase rather than a tax cut (Ivanova, Keen and Klemm 2006).

Lithuania, Latvia, and Zambia also saw PIT revenue rise after introducing versions of the flat tax in 1994, 1997, and 2002, respectively. In these cases, however, the flat tax involved little or no cut in the tax rates. Lithuania avoided a revenue loss by cautiously setting the flat tax at 33 percent, compared to a range of 18 to 33 percent before the reform. Similarly, Latvia set the flat tax at 25 percent, matching the highest marginal rate under the previous system. In Zambia, the flat tax was set at 30 percent, compared to the 15 to 35 percent in the previous system

In other cases, the introduction of a low-rate flat tax has been accompanied by a sizeable revenue gap, at least in the short term. For example, income tax revenue in Estonia fell by 1.4 percent of GDP in 1994. The result was similar in Ukraine, with a decline of 1.6 percent of GDP, and in Slovakia, where income tax collections fell by 1.1 percent of GDP (Moore 2005).

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<sup>7</sup> This may well be the case in Mozambique for some excise tax items. See Nathan (2008a).

<sup>8</sup> The small revenue gains in Kazakhstan in 2007 were also largely due to sweeping measures to eliminate tax preferences, exemptions, and special tax regimes (World Bank, 2008).

In general, the revenue risk from cutting tax rates under the flat tax is less of a problem when

- Tax cuts are packaged with measures to broaden the tax base by eliminating tax preferences, close loopholes, and strengthen tax administration, or by measures that will enhance revenue from other sources to offset the cost of lowering tax rates.
- The tax cuts are phased in over time to reduce uncertainty about the fiscal impact and to facilitate complementary fiscal adjustments.
- The income tax generates little revenue in the first place because of poor compliance, poor collection efficiency, or an underdeveloped formal sector. In this case the revenue risk is inherently small (there is not much to lose), and there may be more potential for tax cuts to encourage compliance.
- Other elements of the business environment are very favorable and the tax system is a primary constraint on investment and business expansion; in this case the investment response from lowering tax rates is likely to be strong.
- There are high-tax neighbors with strong economies; here, again, the investment response is likely to be strong, as the low-rate flat tax may be a magnet for investment from across the border.
- Policymakers have access to good data and careful quantitative studies on the likely fiscal impact of proposed tax cuts, to reduce the risk of encountering an unanticipated revenue gap.

The application of these guidelines to Mozambique is addressed on p. 13.

## Progressivity

As shown above, most flat-tax systems are progressive because they include a zero-rate bracket under the PIT to shield the poor from tax liability. The pattern of progressivity under a flat tax, however, does not necessarily accord with political preferences about tax equity. The pattern illustrated in Figure 1 is typical of any flat tax with a zero-rate bracket: the effective tax rate (defined as the ratio of tax to income) rises abruptly for incomes just above the zero-tax threshold. The fundamental reason for having multiple brackets with rising marginal tax rates is to modify this pattern so that the effective tax rate does not rise so steeply for households with relatively low incomes.

Another consideration is that the adoption of a low-rate flat tax may entail a regressive change in the incidence of the tax burden, even if the flat tax itself is progressive. This is because higher income groups will enjoy the largest rate reduction when the uniform rate comes into effect. Indeed, in most flat-tax systems, the uniform flat-tax rate is higher than the rate previously applying to low tax brackets. In such cases, the flat tax may impose a higher tax bill on low-income taxpayers, while high-income taxpayers get a large tax break. For example, Estonia's flat tax in 1994 was set at 26 percent, whereas the marginal tax rate on low-income taxpayers was previously 16 percent (rising to 33 percent at higher incomes).

The distributional impact of the flat-tax also depends on many other attributes of the reform package, including changes in the zero-rate threshold, changes in the payroll tax for social insurance programs, changes in the availability of special deductions and preferences, changes in the company income tax and the treatment of income from capital under the PIT, and changes in

tax administration—to name just a few. Gauging the distributional effect of a flat-tax reform therefore requires a careful quantitative analysis taking into account pertinent technical details for any particular country context.

These progressivity considerations can loom large in political decisions about the flat tax, especially for those concerned about vertical equity as a principal of tax policy, or the impact of policy changes on lower-income households.

## **Tax Breaks as a Policy Tool**

A major premise of the flat tax is that it should eliminate special tax incentives and preferences, as well as inessential exemptions, exclusions, deductions, and allowances, to simplify the tax code, establish uniform treatment for all taxpayers, and broaden the tax base to pay for tax cuts. The elimination of special tax breaks is also a basic tenet of any comprehensive tax reform program, whether it involves the flat tax or not.

In practice, however, eliminating tax breaks can be hard to sell politically, because it requires government to forego the use of tax breaks as a tool for industrial or social policy—and to resist political pressure from those who benefit from selective provisions of the tax code. Many tax benefits are adopted as convenient instruments for pursuing well-defined economic or social objectives. Common examples include promoting “pioneer industries” or strategic sectors; attracting investment into disadvantaged regions; encouraging the use of alternative energy; providing incentives for research and development or labor force training; fostering home ownership; or encouraging contributions to charity or the arts—the list goes on and on. Other tax benefits, such as deductions for narrowly defined business activities, may be motivated by pressure from special interest groups or political deals. Whatever the source, there are constituencies for virtually every tax break.

Most economists argue against using the tax code for these nonrevenue purposes, not only because they complicate the tax code and diminish the tax base but also because they open the door for political favors that can be costly, and opaque to the public at large. Nonetheless, most governments prefer to retain tax incentives and preferences, for better or for worse. When this is the case, they are reluctant to embrace anything like the prototype version of the flat tax.

## **Growth Effects Revisited**

Flat tax proponents contend that a low-rate flat tax will foster growth by enhancing incentives to work, save, invest, and innovate, and also by reducing tax-motivated distortions to the allocation of resources. But the magnitude of the growth benefit is difficult to establish. One crude way to examine the impact is to look at changes in growth performance associated with the adoption of a flat tax. Of the 15 country cases examined for this note (see Table 2), nine had GDP data available for three years before and after the initial flat-tax reform. GDP growth accelerated in seven of these cases and slowed in two.<sup>9</sup> On balance, this is a favorable finding, though the two

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<sup>9</sup> Growth accelerated in Jamaica, Georgia, Latvia, Guyana, Russia, Slovakia and Zambia. The growth rate declined in Ukraine and Romania.

exceptions show that an increase in growth is not inevitable. The more serious problem is that the statistical association does not imply causation. Other contemporaneous factors are usually more important than the tax reform program in determining growth outcomes. These include higher export prices (in Russia and Zambia), major political changes (in Guyana), and other deep reforms to the business environment (in Georgia).

**Table 2**

*Average Three-Year Economic Growth Rates Before and After Introduction of Flat Tax*

	<b>Year Adopted</b>	<b>Before</b>	<b>After</b>	<b>Outcome</b>
Jamaica	1987	2.4	2.8	<b>Increase</b>
Estonia	1994	N/A	2.8	<b>N/A</b>
Lithuania	1994	N/A	-1.2	<b>N/A</b>
Latvia	1997	1.3	5.5	<b>Increase</b>
Russia	2001	3.7	5.7	<b>Increase</b>
Zambia	2002	3.6	4.6	<b>Increase</b>
Slovak Republic	2004	4.3	6.8	<b>Increase</b>
Ukraine	2004	8.0	7.4	<b>Decrease</b>
Georgia	2005	7.5	10.5	<b>Increase</b>
Romania	2005	6.3	6.0	<b>Decrease</b>
Guyana	2006	-0.3	5.1	<b>Increase</b>
Kazakhstan	2007	10.0	N/A	<b>N/A</b>
Kyrgyz Republic	2007	3.3	N/A	<b>N/A</b>
Macedonia	2007	4.0	N/A	<b>N/A</b>
Mauritius	2007	3.8	N/A	<b>N/A</b>

*Source: World Economic Outlook Database*

According to The Economist (2005), the flat tax was an important stimulus to growth in the case of Slovakia, which adopted a broad-based 19 percent tax on personal and corporate income in 2004, while eliminating double taxation of dividends. Slovakia's growth rate averaged 4.3 percent for the three years before the reform, and 6.8 percent in the following three years. The Economist explains, however, that Slovakia adopted the flat tax as it gained full entry to the European Union, which created unusually favorable conditions for attracting foreign investment from other EU countries to achieve a strong supply response.

A more rigorous analysis of the empirical link between tax cuts and growth has been conducted in the United States (albeit in the context of the traditional income tax rather than the flat tax). A recent study by the U.S. Treasury used sophisticated econometric models to examine the effects of making the Bush tax cuts permanent instead of letting tax rates rise as scheduled under current law. The study found that changes in the tax rate would have a miniscule impact on growth over

the next 10 years.<sup>10</sup> Although many commentators, including leaders of the Bush administration, contend that lower tax rates are essential for growth, the best evidence does not support this proposition, even in a country with flexible markets and sophisticated investors.

Another aspect of the growth analysis is that the introduction of a flat tax does not always result in lower tax rates on investment or saving. This is because many countries start from a situation in which they extend generous tax incentives to investors. If these are eliminated under the flat tax, then the marginal effective tax rate for investors in formerly favored industries will go up rather than down. In addition, some flat tax systems apply only to the personal income tax and therefore have little effect on business decisions.

The bottom line is that one cannot take for granted that the introduction of a flat tax with low tax rates will have a strong positive effect on growth. The actual relationship between tax rates and growth rates requires country-specific analysis, taking into account details of the tax reform package and other conditions that may affect the supply response.

### **Traditional Tax Reform as an Alternative**

A remarkable feature of the arguments in favor of a flat tax is that the main benefits—and much of the public appeal—derive from the prospect of reducing tax rates and simplifying the tax code. Yet any government that is serious about pursuing these objectives can do so without a flat tax. Indeed, proposals to reduce income tax rates, integrate the company and individual tax codes, eliminate tax preferences and loopholes, and simplify the tax code are basic themes of the conventional wisdom for reforming the traditional income tax. Some versions of the flat tax, such as the original Hall-Rabushka proposal or the proposed cash-flow tax (see p. 2), go much further in simplifying the computation of income, but these approaches have not been put into practice.

Conversely, adopting a flat tax does not mean that the prospective benefits will be realized. Many flat-tax systems do not conform to the prototype envisioned in popular discussions. Some retain high overall tax rates on labor income (taking into account the payroll tax as well as the PIT), differential tax rates for individuals and companies, double taxation of distributed profits, and numerous tax preferences that complicate the tax code and create opportunities for tax avoidance.

Hence, “the flat tax” is neither necessary nor sufficient for achieving the benefits claimed for the system. The results depend on the design. Even so, the popular image of the flat tax as being fair and simple may provide political leverage for governments to overcome opposition to measures that sweep away special tax preferences to pay for lowering tax rates. These political considerations may be an important advantage of moving to a flat tax.

### **IS THE FLAT TAX RIGHT FOR MOZAMBIQUE?**

Two broad conclusions emerge from the discussion above. First, the flat tax concept is an attractive approach to tax reform, featuring a simple tax code with low tax rates and a broad tax

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<sup>10</sup> Specifically, the baseline dynamic model shows that real GDP will have increased by less than 1 percent 10 years later, implying a negligible increase in the growth rate. See Furman (2006); Gravelle (2006).

base that treats all taxpayers equally. These features are the motivation for interest in the flat tax in Mozambique, especially in the business community.

Second, in application of the flat tax, the devil is in the details. One cannot judge the suitability of this approach for Mozambique without mapping out a specific program. There would be little advantage, for example, in adopting a “flat tax” like that in Guyana, with a single tax rate of 33.3 percent on personal income, alongside a company tax ranging from 35 to 45 percent (Nathan Associates 2008b). Closer to home, Zambia has a flat tax with a single rate of 30 percent on personal income, alongside company tax rates that vary from 15 to 45 percent. At the other end of the spectrum, Mauritius recently adopted a bold version of the flat tax covering both personal and company income with an initial tax rate of 12 percent in 2007, declining to 10 percent in 2008. The reform package in Mauritius also greatly simplified the tax system and eliminated special incentives and preferences.

The example of Mauritius is particularly appealing for Mozambique. The operational question is how much Mozambique can afford to cut tax rates. The answer depends on the consideration of several factors specific to Mozambique.

## **Vulnerability to a Revenue Gap**

If the government has a comfortable budget cushion, as in Botswana, for example, the risk of adverse consequences from a drop in revenue due to tax cuts would be minimal. Mozambique does not have this luxury. According to IMF estimates, total revenues are projected at 16.7 percent of GDP in 2008, of which 4.4 percent of GDP will come from the tax on income and profit. The overall budget deficit (including grants) is projected at 6.2 percent of GDP. Foreign financing will cover the deficit, so the IMF anticipates no need for domestic borrowing by the government to finance the budget gap (IMF 2008, 15). But Mozambique is still vulnerable to any sizeable loss of revenue that might occur from reducing tax rates.

To illustrate the importance of this point, recall that income tax revenue in Ukraine fell by 1.6 percent of GDP following the adoption of a flat tax. A comparable revenue loss in Mozambique would represent nearly 1/10 of all domestic revenue, putting the government in a position of having to increase borrowing or cut expenditures. Government borrowing is likely to crowd out credit to the private sector, drive up interest rates, create inflationary pressure, and undermine efforts to establish credibility in maintaining macroeconomic stability—as occurred in 2004 and 2005 (Nathan Associates 2007, 63). The alternative of cutting expenditures is no better. Hence, it is important to model carefully the revenue impact of any major tax reforms, to avoid exposing the budget to potentially destabilizing revenue risks.

## **Scope for Base Broadening**

The conventional way to pay for tax cuts is by widening the tax net through measures to eliminate special tax preferences. Mozambique currently offers a wide range of fiscal benefits to investors, including preferences relating to the income tax and customs duties (Investment Promotion Center 2008, 35–59). Keugler (2008) estimates that the income tax incentives alone (excluding those for megaprojects) had a cost in foregone revenue equal to 32 percent of total corporate income tax collections in 2005. Closing these loopholes would therefore suffice to reduce

company tax rates by one-third. As noted above, however, there is often political resistance to eliminating fiscal incentives and closing tax loopholes. Leaving tax breaks in place reduces the scope for cutting tax rates.

Another way to widen the tax net is through measures to improve tax administration, which might include new information technology systems, better taxpayer services, or tougher enforcement practices. Administrative changes generally have only a limited effect on revenue unless they are accompanied by measures to close loopholes or strengthen penalties. Furthermore, quantifying the revenue impact of administrative measures in advance is very difficult.

A flat tax can also broaden the tax base through improved incentives for compliance. By all accounts, compliance is a serious problem in Mozambique. Although effects on compliance might be significant, the authorities cannot prudently bank on higher revenue from this source without some quantitative basis for estimating the likely gains. In any case, the compliance effects of a flat tax may be most pronounced for smaller enterprises, which do not contribute much to total revenue.

## **Growth Stimulus**

The revenue impact from cutting tax rates and reforming the tax code is usually estimated by computing how the proposed measures would affect revenue using a database drawn from recent tax returns. This so-called static revenue projection omits revenue gains that may occur if tax cuts stimulate faster growth. A dynamic analysis of the revenue effects would take this into account.

There is no clear basis, however, for estimating potential growth effects from introducing a low-rate flat tax in Mozambique. Mozambique is certainly less well placed than Mauritius to achieve a strong investment response, because Mauritius offers an excellent investment climate, a reputation for good governance, a well-trained workforce, and dependable infrastructure. In addition, Mauritius has a double tax treaty with India that makes the island a preferred legal venue for companies doing business on the subcontinent.<sup>11</sup> In contrast, studies of the investment climate in Mozambique typically show that the tax system is only one of many serious constraints on investment. Hence, tax cuts are important, but one cannot presume that they would have a large effect on investment and growth. The most favorable factor in this respect is Mozambique's proximity and economic ties to South Africa. This could be a great advantage if tax rates in Mozambique were cut to levels well below those across the border. A study of the likely investment response would be needed to determine the prospects for revenue gains resulting from growth effects of a prospective low-rate flat tax.

## **Other Fiscal Adjustments**

The government can also offset a revenue loss from tax cuts through other fiscal adjustments. As noted above, expenditure cuts are probably off the table, given the country's acute need for

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<sup>11</sup> Harper (2007) flatly states that "Mauritius holds the World Championship in this particular pastime." Mauritius already had a favorable tax environment for foreign investors before the flat tax, but it was more complicated and discretionary. Some investors may actually have to pay more under the new flat tax than they would have under the previous regime.

improvements in social services, infrastructure, and governance institutions. Hence, any fiscal adjustment would have to come from other revenue measures. The VAT is not a likely vehicle for this purpose because its rate is already fairly high by regional standards and because the government, by delaying paying legitimate claims for VAT refunds, is actually overcollecting on the VAT.

Aside from measures to eliminate special tax preferences as part of a flat tax reform, the most promising avenues to finance lower tax rates (if needed) would probably be higher levies on extractive industries (following the example of Botswana and Namibia) and the application of a minimum duty on all imports.

The latter point has interesting parallels to the flat tax, in that some countries have adopted a flat-rate import duty. This idea is worth considering for Mozambique's most-favored-nation (MFN) tariff schedule (as distinct from tariffs covered by the SADC trade protocol). The flat-rate duty structure has the great advantage of simplifying customs administration and eliminating all scope for manipulation of import classifications. The flat-rate duty might also raise more revenue than the existing tariff schedule, though this point would have to be confirmed empirically. Still, this approach has two important disadvantages. First, a flat-rate duty would increase the duty on most capital goods (class "K"); this up-front cost could discourage investment, especially in capital-intensive industries. This is a good example of the political economy's influence on removing tax breaks. The second disadvantage is that the flat-rate duty would reduce protection for domestic consumers of import-competing goods. In economic terms, this is desirable in the interests of efficiency and competition and better prices for consumers but implies significant adjustment costs for enterprises in the protected sectors and their workers, complicating the political calculus.

## Tax Policy Analysis

A final factor relating to revenue risk is the quality of tax policy analysis underlying any decision to reform the tax system. Decision makers require a careful evidence-based analysis of the likely revenue effects of tax cuts, base-broadening measures, and other technical features of the tax code. A careful quantitative analysis based on microeconomic data on taxpayer characteristics will minimize the risk of confronting a large and unexpected revenue gap in the budget. Additional policy research could focus on sampling potential investors to obtain information on investors' likely supply response to a flat tax.

## Conclusion

Finally, we return to an underlying theme of the paper—that the attractive advantages that motivate interest in the flat tax do not actually require having a single positive rate of income tax. The government can pursue the same basic objectives of reducing tax rates, eliminating inefficient tax differentials, simplifying the tax code, and integrating the company and individual tax regimes even if it retains multiple brackets for the personal income tax so as to improve the progressivity profile. Perhaps the main advantage of the flat tax, compared to the alternative of reforming the traditional tax system, is that the flat tax concept can resonate with the public to mobilize political support for deep reforms.

What does this analysis imply about next steps for Mozambique? First and foremost, the idea of the flat tax as an innovative approach to tax reform merits open and candid public discussion. It is particularly important for the discussion to go beyond popular slogans about the flat tax and address seriously the conceptual issues discussed above, as well as lessons from international experience. At a minimum, these discussions can strengthen the constituency for deeper tax reforms. If sufficient political will to pursue these reforms coalesces, the next step will be to develop a specific package of measures and undertake the policy analysis necessary to assess the attendant impact, with special attention to the revenue risks and methods for offsetting those risks.

# References

Bradford, David and Joel Slemrod. 1996. *Making Tax Choices: A Guide to the Issues and the Alternatives*, Nathan Associates.

Bahl, Roy. 1997. "The Jamaican Tax Reform: Its Design and Performance," Chapter 5 in Wayne Thirsk (ed.), *Tax Reform in Developing Countries*. World Bank: Washington.

Furman, Jason. 2006. *Treasury Dynamic Scoring Analysis Refutes Claims by Supporters of the Tax Cuts*. Center on Budget and Policy Priorities: Washington.

Gravelle, Jane. 2006. *Comments on the Treasury Dynamic Analysis of Extending the Tax Cuts*, Congressional Research Service. Washington.

Hall, Robert and Alvin Rabushka. 1995. *The Flat Tax*, second edition. The Hoover Institution Press: Stanford, California.

Harper, John. 2008. *Mauritius: The Mauritius/India Double Tax Treaty (without Tears)*, Mauritius International Trust Company. <http://www.mondaq.com/article.asp?articleid=55688>.

International Monetary Fund. 2008. *Republic of Mozambique: First Review Under the Policy Support Instrument*, IMF Country Report No. 08/15.

Investment Promotion Center. 2008. *Legislation on Investment in Mozambique*. Maputo.

Ivanova, Anna, Michael Keen and Alexander Klemm. 2005. *The Russian Flat Tax Reform*, IMF Working Paper WP/05/16.

Keen, Michael, Yitae Kim and Ricardo Varsano. 2006. *The "Flat Tax(es)": Principles and Evidence*, IMF Working Paper WP06/218.

Keugler, Alice. 2008. *Uneven Playing Fields: The Application of Tax Incentives in Mozambique*," *Papers on Fiscal Policy and Tax Incidence*, National Directorate of Studies and Policy Analysis (DNEAP), Ministry of Planning and Development, Mozambique. <http://www.mpd.gov.mz/gest/Chapterbook.htm>

Mauritius Ministry of Finance. 2006. *Budget Speech: Securing the Transition: From Trade Preferences to Global Competition*.

Moore, David. 2005. *Slovakia's 2004 Tax and Welfare Reforms*, IMF Working Paper WP/05/133.

Nathan Associates. 2004a. Tax Reform and the Business Environment in Mozambique: A Review of Private-Sector Concerns, USAID Trade and Investment Project Technical Report.

Nathan Associates. 2004b. SADC Tax Incentives, technical report for the USAID-funded SADC-TIFI Project.

Nathan Associates. 2007. Financial Sector Constraints on Private Sector Development in Mozambique, USAID Trade and Investment Project Technical Report.

Nathan Associates. 2008a. Excise tax in Mozambique, technical report for the USAID-funded Trade and Investment Project.

Nathan Associates. 2008b. Guyana: Review of the Tax System, draft technical report for the MCC-funded (and USAID administered) Guyana Threshold Country Program Implementation Project (in process).

Shome, Parthasarathi, and Christian Schutte. 1995. "Cash-Flow Tax," in Shome (ed.), *Tax Policy Handbook*, Fiscal Affairs Department, International Monetary Fund.

The Economist. 2005. "Flat Is Beautiful," p. 54. March 5.

World Bank. 2008. Republic of Kazakhstan Tax Strategy Paper, Volume 1: A Strategic Plan for Increasing the Neutrality of the Tax System in Non-Extractive Sectors, Report No. 36494, Washington.