

**International Studies Program
Working Paper 07- 12
June 2007**

**From Income Tax to Consumption
Tax? The Case of Jamaica**

Roy Bahl
Sally Wallace



**International Studies Program
Working Paper 07- 12**

**From Income Tax to Consumption
Tax? The Case of Jamaica**

**Roy Bahl
Sally Wallace**

June 2007

International Studies Program
Andrew Young School of Policy Studies
Georgia State University
Atlanta, Georgia 30303
United States of America

Phone: (404) 651-1144
Fax: (404) 651-4449
Email: ispaysps@gsu.edu
Internet: <http://isp-aysps.gsu.edu>

Copyright 2006, the Andrew Young School of Policy Studies, Georgia State University. No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means without prior written permission from the copyright owner.

International Studies Program Andrew Young School of Policy Studies

The Andrew Young School of Policy Studies was established at Georgia State University with the objective of promoting excellence in the design, implementation, and evaluation of public policy. In addition to two academic departments (economics and public administration), the Andrew Young School houses seven leading research centers and policy programs, including the International Studies Program.

The mission of the International Studies Program is to provide academic and professional training, applied research, and technical assistance in support of sound public policy and sustainable economic growth in developing and transitional economies.

The International Studies Program at the Andrew Young School of Policy Studies is recognized worldwide for its efforts in support of economic and public policy reforms through technical assistance and training around the world. This reputation has been built serving a diverse client base, including the World Bank, the U.S. Agency for International Development (USAID), the United Nations Development Programme (UNDP), finance ministries, government organizations, legislative bodies and private sector institutions.

The success of the International Studies Program reflects the breadth and depth of the in-house technical expertise that the International Studies Program can draw upon. The Andrew Young School's faculty are leading experts in economics and public policy and have authored books, published in major academic and technical journals, and have extensive experience in designing and implementing technical assistance and training programs. Andrew Young School faculty have been active in policy reform in over 40 countries around the world. Our technical assistance strategy is not to merely provide technical prescriptions for policy reform, but to engage in a collaborative effort with the host government and donor agency to identify and analyze the issues at hand, arrive at policy solutions and implement reforms.

The International Studies Program specializes in four broad policy areas:

- Fiscal policy, including tax reforms, public expenditure reviews, tax administration reform
- Fiscal decentralization, including fiscal decentralization reforms, design of intergovernmental transfer systems, urban government finance
- Budgeting and fiscal management, including local government budgeting, performance-based budgeting, capital budgeting, multi-year budgeting
- Economic analysis and revenue forecasting, including micro-simulation, time series forecasting,

For more information about our technical assistance activities and training programs, please visit our website at <http://isp-aysps.gsu.edu> or contact us by email at ispaysps@gsu.edu.

From Income Tax to Consumption Tax? The Case of Jamaica

Roy Bahl and Sally Wallace

Department of Economics, Andrew Young School of Policy Studies, Georgia State University

Abstract:

Over the past decade, a number of countries have shifted to single rate tax systems with broader bases and lower rates. In the U.S., there continues to be discussion of the merits of a consumption tax, and of base-broadening reforms to the income tax system. The objective of this paper is to demonstrate how, over time, a conventional income tax could be converted to a flat rate consumption tax in a developing country. The value of this analysis, we hope, comes with the use of a real world situation (Jamaica), which allows us to focus on the detail that determines the feasibility of transitioning to a flat rate tax on consumption. Our main contribution is to show the conditions under which the switch can be revenue neutral.

Keywords: flat tax, consumption tax, tax policy

JEL Classification: H2, H24, H3

1. Introduction

The “flat tax revolution” that has taken Eastern Europe by storm over the last decade and the proliferation of proposals in the U.S. represents a substantial change in thinking about the right way to structure an income tax.¹ Under these various reforms, income taxation has moved from a system of progressive rates with complicated deductions, exemptions, and special treatment, to a tax system with broader bases and a single rate, and in some cases, closer integration of individual and business taxation. In most countries that have moved to flat taxes, the tax base is realized income. Many economists, however, are intrigued about the possibility of narrowing the tax base to consumption. In the U.S., Hall and Rabushka (1983, 1985, 1995) have proposed a direct consumption tax, where income from savings is exempt from tax and a single tax rate is imposed on businesses and individuals. Zodrow and McLure (1988) and McLure and Zodrow (2006) have led the discussion about consumption taxes in developing countries. To date, however, no country has converted its income tax to a consumption tax.

The objective of this paper is to demonstrate how a conventional income tax could be converted to a flat rate consumption tax in a developing country, and how this can be done in a revenue-neutral way. To our knowledge, no study has estimated the revenue effects of moving from an income-based direct tax system to a consumption-based one in a developing country, although many have argued that in principle the latter should be both economically more desirable and administratively simpler. In this paper, we consider in detail the changes needed to move from an income to a consumption tax

¹ According to *The Economist* (April 14, 2005), the “new revolution” in flat taxes began with Estonia’s adoption of a flat rate income tax in 1994; see Table 1. Jamaica adopted a flat rate individual income tax in 1986 (Bahl and Wallace, forthcoming). Keen et al. (2006) have surveyed the literature and the practice of flat taxes for transition countries.

base in Jamaica, and we estimate the revenue effects of such changes. We conclude that at least in the case of Jamaica the move to a consumption tax from its present system would be revenue-neutral. However, it remains questionable whether the net benefits reaped from such a move are sufficiently large to offset the significant political, economic, and administrative difficulties entailed.

The paper proceeds as follows. In the next two sections, we describe the components of a flat rate consumption tax and discuss its merits in the developing country context. We then turn to the case of Jamaica, outlining the necessary steps for moving to a direct consumption tax in Jamaica and providing a detailed analysis of the revenue consequences of each step. In the conclusions, we consider the lessons that might be learned from the Jamaican case about the feasibility of a gradual move to a consumption-based tax system in a developing country.

2. What Is a Flat Tax?

The flat rate income taxes that have become widespread in Eastern Europe and in Russia typically feature a single tax rate and a limited number of deductions and exemptions (Martinez-Vazquez, Rider, Qibbayth, and Wallace, 2006; Hadler, Moloi, and Wallace, 2006; Keen, Kim, and Varsano, 2006). These flat rate income taxes have emphasized a base broadening that has moved them closer to being a tax on comprehensive income. The “flat tax” that is of concern in this paper, however, is an individual income tax that is levied at a single rate on consumption, and is fully integrated with the corporate income tax. The composition of the tax base, rather than the single flat rate, is the distinguishing feature of the flat tax that we discuss in this

paper. We take the Hall and Rabushka (HR) proposal (1983, 1985, 1995) as a convenient starting point for our discussion.²

The HR proposal is an integrated tax on individuals and businesses that is levied through a “postcard tax return.” This postcard tax return requires the taxpayer to report wage income plus pension and retirement benefits, and provides a deduction for family status and for dependents in the case of individuals. Businesses would report gross revenues and deduct allowable costs (wages and salaries, pension contributions, purchase of goods, services and materials, and purchases of capital equipment, but not fringe benefit payments). Interest income is exempt and deductions of interest expense are not allowed. All income is therefore subject to consistent treatment and is taxed at one rate (above the standard deduction/personal exemption level). The tax on withdrawals from savings accounts (that might eventually be used for consumption) is treated as “prepaid” in that savings and non-retirement investments are made from after-tax income.³ The tax is essentially a two-part tax that taxes compensation of individuals and separately taxes businesses through a value added approach. McLure and Zodrow (2006, p. 4) point out that combining this treatment of expenditures on real assets with the tax prepaid treatment of financial transactions yields what the Meade Commission called the real business cash flow tax base, or “R-base,” and combining it with the tax postpaid

² HR was by no means the first proposal to replace the income tax with a consumption tax. Among those to whom flat tax ideas are attributed are: John Stuart Mill, Milton Friedman (1962), David Bradford (1986), Nicholas Kaldor (1955), William Andrews (1974), and the Meade Commission (Institute of Fiscal Studies, 1973.).

³ Several other versions of the consumption tax have been discussed. See Meiskowski (1977) for a discussion of a specific cash-flow expenditure tax: <http://www.treasury.gov/offices/tax-policy/library/ota26.pdf>. The “X-tax” proposal is attributed to David Bradford (1986). A helpful summary of the flat tax and X-tax proposals is available from the President’s Advisory Panel on Tax Reform, at <http://www.taxreformpanel.gov/>.

approach yields the “real plus financial” business case flow tax base, or “R+F” base.”⁴

The treatment of savings and investment is the critical difference between the consumption versus the income base. Under the consumption base, individuals are taxed only on that part of their income and asset accumulation that is consumed. There are two ways to do this. The tax can be pre-paid by making contributions to qualified accounts from after-tax income, while not treating withdrawals from these accounts as taxable income. Or, the tax can be post-paid (by making deductible contributions and subjecting withdrawals to tax.) In either case, businesses fully deduct the purchase prices of assets including equipment, buildings, land, and the like; however, they must include revenue from the sale of assets as taxable income. Interest and dividend payments are not business deductions, so effectively, the returns to capital are taxed once at the business level—a form of integration of individual and corporate taxes.

3. The Advantages of a Flat Tax on Consumption

Why might a consumption tax, levied at a flat rate, have appeal in a developing or transition country? Simplification of the tax system and the resulting reduction in the costs of tax administration and compliance is usually cited as a major benefit of a move to a consumption-based flat tax. The pre-paid version of the consumption tax eliminates the need to audit deductions for interest payments and pension contributions, and depreciation schedules would be eliminated in favor of expensing capital asset purchases. On the individual income tax side, since only wage income would be taxed, this could lead to a reduction in the number of returns filed. More generally, if all income is taxed

⁴ Under certain circumstances (e.g., a uniform tax rate on all transactions), the present value of the R and R+F tax bases are equal.

only once, we would expect that the tax administration could do a better job than it could through monitoring and enforcing double taxation of the same income sources. If individual and company rates are equalized, the flat rate structure reduces the incentives for arbitrage and in that way simplifies the job of tax administration. Expensing and ignoring financial transactions also would be major steps in the direction of simplification. All of this could free up tax administration resources to concentrate on other areas of enforcement (e.g., taxpayer identification, collections) or could lead simply to a reduction in administration costs that could be passed back to the general public.

Certainly, simplification is an advantage that we can attribute to a consumption tax, but it may be a more important benefit in the industrialized countries than in the developing countries. This is because the individual income tax in developing countries largely falls on formal sector payroll workers. The major compliance problem is with the self-employed, small businesses, and the informal sector in general.⁵ The consumption tax does not completely resolve this problem. In fact, presumptive taxes based on estimated levels of wealth -- one common approach to overcoming this problem -- are inconsistent with the principle of consumption taxes. An annual presumptive tax based on an individual's asset holdings does not reflect income available for consumption. This is a special problem with consumption taxation that would have to be dealt with in developing countries (Zodrow and McLure, 1988).

Another important benefit of a consumption tax is the elimination of the distorting effects of inflation. Since activity is taxed on a cash-flow basis, inflation does not play a role (McLure and Zodrow, 2006). The benefit from a flat rate consumption tax that most

⁵ For a discussion of the size of the underground economy, and some estimates for individual countries, see Alm, Martinez-Vazquez, and Schneider (2004).

interests economists is that it eliminates the current penalty for future consumption and thus probably increases savings. In a developing country, the switch to a flat tax could result in increased domestic investment because the relative after-tax return to home country investment is improved under a consumption levy that imposes a lower tax on capital income. In the U.S., the economic growth effects might be quite significant. Auerbach (1997) reports potential increases in output of 2 to 4 percent over the first nine years of pure flat tax and 4 to 6 percent over the long run. In developing countries, we would not expect domestic savings to have any significant crowd-out impact.

There are many possible disadvantages inherent in shifting to a consumption tax. Whether the shift will draw additional investment to a developing country depends on several factors. Certainly there are conditions in the open economy case under which a revenue-neutral consumption tax might actually repel certain types of investment. First, if the shift is revenue neutral an increased income tax rate may dampen the after-tax return to investors. Second, if there is a shift in the tax burden to labor, production costs in labor intensive industries could be driven up, and the after tax return to investment could be reduced. Third, even if increased domestic savings did lead to a reduction in the average cost of capital, it might not lead to a reduction for all investors. For example, in the case of Jamaica, the present income tax regime -- that features tax exemptions, tax holidays, the deductibility of interest costs, and weak enforcement -- could make the cost of capital lower for some investments than would be the case under a flat rate consumption tax. Perhaps most important of all, the question of whether a consumption-based direct tax is eligible for foreign tax credits in capital-exporting countries is still an open one (McLure and Zodrow, p. 14). Finally, there are transition costs to be reckoned

with. The switch to expensing to replace deductions would result in unused write-offs and declines in asset prices, and there is the major issue of eligibility for foreign tax credits. Net operating losses (NOLs) present a special transition difficulty. To achieve neutrality, NOLs (e.g., deductions greater than income) should be carried forward with interest reflecting inflation as well (McLure and Zodrow, 2006) or should be refunded in the year realized. The literature on transition issues is discussed in McLure and Zodrow (2006).

All of these considerations help to make the case, we believe, that the impacts of a consumption tax are best evaluated in the context of a particular country.

4. Moving To a Consumption Tax

Over the past 20 years, all of Jamaica's major taxes have been the subject of reform. The individual income tax (largely a tax on payrolls) moved from a steeply progressive rate structure prior to a major 1986 reform to a flat rate of 25 percent with a (non-indexed) threshold. Since 1986 a number of deductions and exemptions have crept back into the system. The company income tax also has been simplified over the years and is currently levied at a flat rate of 33 1/3 percent. The VAT, while also burdened with exemptions and zero-rating problems, is levied at a flat rate of 16 percent. The general theme of tax reform has been to focus on simplification and on efficiency concerns, and to concentrate on broadening the tax base and removing distortions in relative prices. In the background, revenue protection and enhancement were always major considerations.

None of these reform programs explicitly took the objective of introducing a consumption tax, even though many policy makers argued the need to reduce reliance on the present income tax. Nevertheless, many of the structural changes recommended/adopted in the income tax system were consistent with what would be needed for a flat rate consumption tax such as moving to a flat rate for individual and corporate income, removing numerous individual income tax deductions, taxing certain fringe benefits, and reducing exemptions and rationalizing zero rating under the value added tax. Some of the other changes adopted (or rejected) are not consistent with moving toward a consumption tax, including the exemption of capital gains, an allowance for tax holidays in various sectors, and the difference in individual and corporate tax rates. The question we raise here is about the steps that would be necessary to convert the Jamaican system as it stands now to a flat rate consumption tax and about the feasibility of this conversion, especially its revenue impact.

By our reckoning, five major changes in the Jamaican income tax structure would be required to move the present system to a direct consumption tax. Some of these policy changes have to do with integration of the individual and corporate income tax, and others are more directly focused on limiting the tax base to consumption. In the remainder of this section, we track through these necessary changes and estimate their revenue impacts.⁶

⁶ The revenue analysis includes behavioral impacts of tax changes but does not use a dynamic model in that there are no second round effects associated with changes in investments, pensions, personal savings, and the like.

4.1 Wage and Salary Income

All income that is available for consumption expenditure should be taxed as personal income under a consumption tax. None should be taxed twice. This requires some important adjustments to the present income tax structure. It will be necessary to bring non-taxed fringe benefits into the individual income tax. Those payroll taxes that are not contribution programs should be eliminated, since they represent a double taxation of wage income. At risk here are the “education tax,” a general fund levy, and HEART, a payroll tax earmarked for labor retraining. Payroll taxes for “savings” programs including the National Insurance Scheme (NIS), Civil Service Family Benefits Scheme (CSFBS), and the National Housing Trust, (NHT, a mortgage lottery) (Alm and Wallace, 2004). These are properly treated as future consumption and so contributions should be made from after-tax dollars and no deduction should be allowed for individuals or corporations. By requiring that contributions to pension and other savings programs be made from after-tax income (employers and employees), the tax on future consumption would be pre-paid and all withdrawals from these accounts would be exempt.

Based on data gathered in connection with the 2005 comprehensive reform, we have estimated the revenue impact of this package of changes. Elimination of the education tax and HEART will result in a significant revenue cost to government. The elimination of deductions, however, will have an opposite effect. In the case of the contribution-type payroll taxes, CSFBS is an employee-only tax and allows a deduction from taxable income for “contributions.” Disallowing that deduction results in a revenue gain. For NIS, both employees and employers are presently allowed to deduct their

contributions (their mandatory NIS taxes paid), so revenue gains come from disallowing this deduction. In the case of NHT, only employers are allowed a deduction under current law, so there is an additional revenue pick up from disallowing that deduction.

We estimate the revenue impact of bringing all fringe benefits into the tax base by making use of a sample of income tax return information for employees and employers, in which fringe benefit tax preferences are reported as deductions or exemptions. For individuals there would be no change in tax payments due to the proposed fringe benefit reform, because workers currently report all emoluments (including benefits) and then deduct those non-taxed benefits (including housing allowance and gratuities). Instead, the adjustment would come on the corporate side, where none of these deductions for fringe benefits would be allowed any longer. In theory, corporate deductions and emoluments reported by individuals should be equal. If this is an avenue for evasion under the present system, and if companies are over-reporting deductible costs, then our estimate of the revenue capture will be too high.

The net revenue cost of the proposed changes in fringe benefits and payroll taxes would be equivalent to about 0.4 percent of total taxes, based on 2003 data. The payroll tax elimination would cost an amount equivalent to about 7.0 percent of total taxes, while the disallowance of deductions at the company level would enable government to recapture an amount equivalent to about 6.7 percent of total taxes (Table 1, lines (1) and (2)). While the net effect is almost revenue neutral, there is a shift in the locus of payments from individuals to corporations.

4.2 Private Pension Income

Companies and individuals can presently deduct some of the expense associated with private pension funding, and J\$45,000 of pensions received by individuals are untaxed in the present system. Pension income would be taxed at the ordinary personal income tax rate under a consumption tax, since it represents income available for consumption. As noted above, the tax could be pre-paid by allowing contributions to be made from after-tax income (i.e., by disallowing deductions for contributions). An alternative for businesses and individuals is to allow a deduction for contributions to savings and pension funds, but to include withdrawals in taxable income. McLure and Zodrow (2006) note that on the business side the pre-paid option could lead to various types of arbitrage. The difficulties of tracking contributions, together with bank secrecy laws which limit access to information about withdrawals, make the pre-paid tax system a better choice for a developing country like Jamaica.

We do not have data to make a good estimate of the revenue implications of the change in the taxation of pensions, but it is likely very small due to the relatively small amount of private pension activity in Jamaica and the small number of tax returns filed by pensioners. The change would also not be a major administrative hurdle. However, it may be an especially contentious political issue. Some pensioners are lower income, and inclusion of this source of income -- even with present thresholds -- might be seen as highly regressive.

4.3 Interest Income and Dividend Taxation

Jamaica taxes interest income paid to individuals (or corporations) while allowing deductions for interest payments. The corporate and individual income taxes are not integrated, hence there is preferential treatment for corporate debt (e.g., the corporate tax rate at which the deduction occurs is 33 1/3 percent while the individual income tax rate is 25 percent). This may lead to arbitrage in the system, and provides an incentive to adopt certain business structures. However, this is a case where full integration of the income tax system at one tax rate may increase the user cost of capital in the short run due to lack of deductibility of interest expense. Under a consumption-based tax, interest income received by individuals would not be taxed, interest expenses would not be deductible at the company level, and the corporate and individual income tax rates would be equal.

The tax treatment of dividends has long been a problem in Jamaica. Some dividends are double taxed and some are not. Dividends paid by companies listed on the Jamaica Stock Exchange are not taxed at the individual level, but are taxed at the corporate level because dividends are not a deductible expense. Stocks not listed on the Jamaica exchange face both individual and corporate taxation. Policy makers in the country have felt that encouraging the development of a stock exchange is more important than capturing the potential welfare gains from taxing all dividends at the same rate. Under the integrated income tax that we evaluate here, dividends would not be taxed at the individual level, and there would be no differentiation between “listed” versus “non-listed” companies in terms of tax treatment. The revenue impact is a loss equivalent to about 0.06 percent of GDP.

The revenue impact of a change in the taxation of interest is not easily estimated. In 2002, Jamaica reported interest income tax revenues equivalent in amount to about 2.2 percent of GDP. If we assume an average tax rate on interest income of 25 percent (e.g., a blended effective corporate and individual tax rate), then total interest income would be equivalent to about 9 percent of GDP. Disallowing the corporate deduction for interest expense at a rate of 33 1/3 percent yields an increase of CIT revenue equivalent to 11.9 percent of tax revenues (Table 1, line (4)), and 2.9 percent of GDP. Elimination of the individual income tax on interest and dividends together would cost an amount equivalent to about 9.2 percent of tax revenues (Table 1, line (5)).

By our estimates, based on 2003 data, this reform would lead to a net revenue gain equivalent to 2.7 percent of tax revenues (Table 1, lines (4) and (5)).

4.4 Elimination of Corporate Incentives

As noted by Rider (2004), the level of incentives for businesses in Jamaica is quite large. Total company tax revenues are lower by about 0.3 percent of GDP because of corporate income tax holidays. In addition, waivers and special relief (discretionary waivers) for company taxes, stamp duty, and the GCT cost the government an amount equivalent to about 3.6 percent of GDP (Bahl and Wallace, forthcoming). We include the elimination of tax holidays in this analysis, because the availability of a tax holiday would provide for a second, lower income tax rate and provide an easy loophole for tax avoidance. The revenue increase associated with the elimination of tax holidays is about 1.55 percent of tax revenue in 2002 (Row 6 of Table 1).⁷

⁷ This does not take into account the revenue cost of any investment effects associated with the elimination of tax holdings, and it also does not include ad hoc political exemptions.

4.5 Asset Purchases, Asset Sales, and Capital Gains

Under a consumption tax, asset sales would be taxed at the income tax rate, and capital gains would not be brought into tax under a separate levy. Capital investments would be expensed rather than depreciated. This reform would eliminate a longstanding problem with the Jamaican tax system -- the loophole created by exempting capital gains from taxation (Rider, 2004).

We know that the expensing of capital asset purchases (versus depreciation) would lead to a government revenue loss in the short run, but some revenue increases would come from the taxation of the sale of assets. For the revenue cost of expensing, we make an estimate based on data from the corporate tax returns for Jamaica. Rider (2004) reports total deductions (including depreciation) of \$J2.5 billion in 2002/2003 (0.5 percent of GDP). If we assume that half of those deductions are from depreciation, and if we assume that the effective rate of depreciation is 10 percent (based on a rough average of the depreciation treatment reported in Rider, 2004), then full expensing could cost about \$J3 billion (0.7 percent of GDP) in the form of lost corporate tax revenue, including the offset for a disallowance of current law depreciation.

To estimate the revenue recapture from the sale of assets, we use the estimate of capital gains tax from Wallace and Alm (2004). First, we make the arbitrary assumption that 40 percent of gains would be attributable to capital assets. In total, if this amount were taxed at an average rate of 30 percent, then the revenue recapture from the sale of assets would be equivalent to about 0.9 percent of tax revenues. Taxing the sales of assets and expensing capital investments are estimated to result in a net revenue loss

equivalent to about 2.1 percent of revenues (Rows 7 and 8 in Table 1).⁸

4.6 Rate Harmonization

At present, the individual income tax rate is 25 percent and the company rate is 33 1/3 percent. So long as these rates diverge, there will be behavioral impacts related to forms of incorporation, and this will have an impact on the effective tax rate on capital. Over the past 20 years, Jamaica has resisted harmonizing these rates, primarily because of revenue concerns.

The move to a consumption tax requires that the income tax rates be equalized. If we assume no base effects, a harmonizing of the individual income tax rate with the corporate rate at 30 percent could generate a revenue increase equivalent to about 4 percent of the current level of collections (Table 1, line 10). Dropping the corporate rate to 25 percent would cost the equivalent of 1.4 percent of collections.

The direct effect of a higher individual income tax rate (coupled with no tax on interest income) would be an increase in the attractiveness of savings and a lowering of the cost of capital. The indirect effects, however, might be quite opposite as the possible increase in labor costs may dampen the enthusiasm for investment in Jamaica.

4.7 Total Impact

The net impact of all changes except the rate harmonization is a revenue gain equivalent to 1.85 percent of tax revenue (Table 1, line (9)). The revenue losses of 15.6

⁸ Under the plan evaluated here, the existing property tax and property transfer taxes would continue as supplementary wealth taxes. In fact, the property transfer tax (and stamp duty) are taxes on sales rather than on the value of holdings, but they are mostly (75 percent) levied against real estate. Any asset that is taxed upon sale should not also be subject to the property transfer tax.

percent of total taxes -- largely from removal of taxes on individuals -- is more than offset by the revenue recapture from disallowing certain deductions under the corporate tax (17.45 percent of tax revenues). We argue that this small net gain will be just enough to permit harmonizing the individual and company tax rates at the present individual rate of 25 percent. This is an important finding, and will be good news for those who are concerned about the revenue feasibility of shifting to a consumption tax. Other revenue neutral changes are possible such as reducing the GCT rate by one percent.

Though the net impact of this structural reform is close to revenue neutral, the individual changes that are required may be substantial. Elimination of the individual income tax on dividend and interest income, and elimination of two payroll taxes will reduce the direct tax on individuals. The disallowance of deductions under the corporate tax may have approximately offsetting revenue effects, but there will be a major shift in the point of collections to the company level. This will have major implications for the political acceptability of this proposal, probably making it more difficult to implement, and major implications for administration, probably in the direction of making it easier.

5. Conclusions: A Consumption Tax?

Would a flat tax on consumption be a good choice for Jamaica? What benefits might one expect from the adoption of a consumption tax in Jamaica's next round of reforms? Does the reform package laid out above present insurmountable obstacles?

5.1 Revenue Neutrality

The issue of revenue neutrality is crucial. In the long run, a consumption tax may stimulate economic growth enough to augment revenues, but a question arises as to whether, in the short run, it will be a revenue loser. If so, this could be a death knell for the consumption tax. The results of this research for Jamaica show the shift to a consumption tax can be revenue neutral.

Can this result be generalized in the developing country case? Perhaps not. There are three reasons why the shift to a consumption tax could lead to a significant revenue cost. First, in their zeal to protect revenues by taxing easy “handles”, developing countries often double tax capital income and formal sector labor earnings. Moving to a consumption tax base and eliminating some of these easy tax targets (e.g., payrolls, bank deposits) will narrow the size of the taxed base and impose a revenue cost. Second, the transition period to a consumption tax and the “learning” of the new system may take years. Moreover, evaders and avoiders probably will learn to manipulate the new system faster than the tax administration will learn to enforce it, and faster than the regulations and laws can be adjusted to close the new loopholes. Revenue losses will occur in this transition period due to these administration and compliance adjustments. Third, there will be significant political resistance to adopting a consumption tax in place of a more traditional income tax, even if the two do have off-setting revenue effects. This will likely cause postponement of the adoption of some of the features of the flat rate consumption tax. This has indeed happened over the years in Jamaica as various reforms have been “undone.”

We estimate that the enactment of a consumption tax (as described above) in 2003 would have been revenue neutral. However, there is always uncertainty in revenue estimation. Four types of revenue risk might concern government most. One is that deductions by businesses under the present system may have been overstated to reduce tax liability. In this case, our estimate of revenue recapture is too high. Another important risk is that if the many tax incentives in the present system remain in the consumption tax system, it may allow taxable events to be shifted to sheltered status. Third, if there is inadequate administration of the new system, revenue leakage will occur. Finally, there is the question of the foreign tax credit eligibility of the new system as an “income tax”.⁹

There are a number of ways to hedge against these risks during a transition period. One possibility is to equalize the individual and corporate tax rates at 28 percent, which would increase the net revenue gain from the switch. This would provide a hedge against the risk of administrative problems in the early years of the new tax. Note that in this case the increased tax rate on individual income raises the tax penalty on current consumption.

5.2 Economic Growth

A major benefit expected from the adoption of a consumption tax is a reduction in the cost of capital and an enhanced attractiveness of investment in Jamaica. But, could it be that the short-term revenue cost of the transition would not lead to tax rate and base adjustments that reduce the after-tax return to capital? As we show in Table 1, under current assumptions, a revenue-neutral direct consumption tax would allow a decrease in

⁹ For a discussion of how the IRS might view a consumption tax, see McLure and Zodrow (2006).

the company tax rate. However, this would be accompanied by elimination of tax preferences for a number of industries and firms that have been targeted for special treatment. This may reduce the return to capital in some sectors in the economy. The elimination of the corporate deduction for interest expense could also increase the cost of capital if interest income has escaped taxation under the current system. What all of this means is that Jamaica may be a good case study of a country where a flat rate consumption tax would increase the relative cost of capital in the transition period and thereby mitigate the short run positive impacts. The inflow of foreign direct investment could be retarded, and could be reduced if the U.S. government ruled that the consumption tax was not creditable.

On the other hand, there would likely be significant efficiency gains from introducing a consumption tax. In Jamaica, Light (2004) uses a CGE model to show that a broad-based consumption tax is superior to the present system in terms of welfare effects.¹⁰ This lends some credibility to the potential economic growth effects of a tax on consumption.

5.3 Administrative Costs

On balance, the long-term effects of a consumption tax would be to lower both administrative costs and compliance costs. This is because the consumption version of Jamaica's flat rate income tax would be much simpler than the present version:

- Two payroll taxes and all related administrative and compliance costs would be eliminated.

¹⁰ Rutherford, Light, and Barrera (2005) reach a similar conclusion in their analysis of a broad-based VAT in Colombia.

- Under the pre-paid version of a consumption tax, dividends and interest would be taxed only at the company level. This would lead to a reduction in the number of year-end returns filed by individuals. If the post-paid version was adopted, the inclusion of withdrawals from savings accounts would probably lead to an increase in administrative costs.
- Interest expenses would no longer be deductible, hence audit costs would be reduced.
- The present program of tax holidays would be eliminated.
- The expensing of asset purchases in place of the present complicated depreciation system would reduce both administrative and compliance costs.

On the side of increased costs, however, individuals and businesses would be required to report sales of assets.

5.4 Fairness

Would the loopholes in a consumption tax that are left open for administrative, political or legal reasons significantly compromise the fairness and revenue productivity of the consumption tax? Jamaica has a long history of weak tax administration, and the adoption of a direct consumption tax would present some new challenges. The following may be the most serious.

- The system would require individuals and companies to report asset sales and be taxed fully on them. The evidence that this would happen is not encouraging. At present, the property transfer tax and the stamp duty are levied on real property and financial asset sales, and underreporting is rampant (Bahl and Wallace, forthcoming). This could become a major loophole.
- The transition period would be especially difficult for companies with assets that are not fully depreciated on the present system.
- Some form of presumptive tax would need to be developed that would not be inconsistent with a consumption tax, i.e., one that would not introduce

an implicit tax on capital income. Zodrow and McLure (1988) argue that such a tax is likely to be complicated and not easily administered.

- The tax treatment of foreign investment income will be a difficult hurdle if foreign tax credits are to be preserved and likely will complicate the administration of the system.

Another dimension of fairness is the distributional impact of a consumption tax. It is likely that a pure consumption tax would be more regressive than Jamaica's current income/consumption tax system (Alleyne et al. 2004). If redistribution is an important consideration for shaping the tax structure, consumption taxes might be expected to co-exist with some form of income tax.

5.5 A Universal Consumption Tax?

How would government "integrate" the consumption tax base for income taxes with the consumption tax base of the VAT? This question is not often raised, and in fact many of the best scholars on this subject restrict their inquiry to either "direct" consumption taxes (McLure and Zodrow, 2006) or to the VAT (Bird and Gendron, 2006).

There would seem to be three choices in this regard. First, as Zodrow and McLure (1988) argue, one can make the case for replacing the VAT with a direct tax on consumption. The primary rationale here is equity, i.e., that under a direct consumption tax, statutory rates could be graduated and exemptions could be provided to protect low income families. Targeted exemptions under a VAT are a much more difficult way to build equity into the system. However, a direct consumption tax would miss the informal sector in most developing countries, just as the present income tax misses this sector.

There is an argument that the VAT is the consumption tax of choice because it by-passes the hard political problems of disallowing interest expense deductions under

the income tax or determining the tax status of pensions and fringe benefits. Some would argue that in developing countries the VAT is more easily administered than the individual income tax. The VAT also can capture some of the transactions involving the informal sector of the economy, more easily than can an individual income tax. However, the VAT as a single consumption tax is not without problems. Most importantly, it would require quite a high statutory rate, and would put great pressure on government to provide more tax relief to the poor (which a VAT is ill-equipped to do), and to businesses who feel “overburdened”.

The third choice, and the one that makes the most practical sense for developing countries, is the simultaneous operation of both a VAT and a direct consumption tax. This is the practice followed in most countries, though only the Slovak Republic (of the countries we have surveyed) have introduced a single rate for VAT, individual income tax, and corporate income tax (Keen, Kim, and Varsano, 2006).

In Jamaica, a direct consumption tax and VAT could exist together, uncoordinated, and this would enable keeping the statutory rates for both taxes lower. The threshold under the direct consumption tax would allow some accounting for low income families and could keep the pressure off the VAT for more exemptions. The VAT would provide some coverage of the informal sector, until that day when the tax administration catches up and is able to effectively reach the hard-to-tax. On the other hand, the simultaneous operation of a direct consumption tax and a VAT creates some anomalies. Consumption expenditures are in effect taxed twice, as income received other than from savings, and as direct consumption. So, for example, in Jamaica, an income earner is taxed 25 percent on what he has available to spend, and at 15 percent on what he

consumes. On the other hand, a capital expenditure by a company is expensed and is also creditable against VAT liability.

Jamaica fits in this third category. It has adopted a VAT. It also has adopted some features of a direct consumption tax, but major additional revisions are required to complete the transition. What we show here is that this can be done with a revenue neutral impact, administrative savings, and distributional impacts that probably would be acceptable.

The constraints to adopting a direct consumption tax are the political will to accept such a big shock to the system, the administrative capability to handle the shift, and the revenue risk. A bigger question is whether any country could do so and whether policy advisors should encourage that movement.

5.6 Good Public Policy?

Would the switch to a consumption tax be good public policy? The main contribution in this paper is to show that it could be accomplished without significant revenue loss. In addition, we can argue that there might be long run gains in terms of the efficiency of taxation in the economy, and possibly significant tax administration advantages. It might also be a rationale for removing longstanding tax distortions that many believe have plagued the Jamaican tax system (Bahl and Wallace, forthcoming). But the possibility of these favorable outcomes must be tempered by the various risks implied, i.e., whether a consumption tax would be eligible for U.S. foreign tax credits, and whether the removal of incentives in favor of a more level playing field for investors would do great long run harm to the economy.

Table 1. Revenue Effects of a Shift to a Direct Consumption Tax: The Case of Jamaica

Required Change	Revenue Gain (Loss) As a percent of total taxes (2003 levels)				Comments
	PIT	CIT	Payroll Tax and other taxes	Net	
1. Eliminate non-contribution Payroll Taxes; Payments to Contribution Programs (NIS, and CSFBS)	+0.6	+3.3	-7.0	-3.1	HEART, Education Tax eliminated; disallow company-level deductions for NIS, NHT, CSFBS
2. Tax fringe benefits		+2.8		+2.8	Disallow company-level deductions for fringe benefits
3. Bring income from private pensions fully into tax system	Negligible	Negligible		Negligible	Disallow deductions for contributions (employers and employees) and eliminate current level of exemption for pensions received ^a ; public pensions controlled for in (1)
4. Disallow Corporate deductions for interest costs		+11.9		+11.9	Tax once at the corporate level
5. Eliminate individual income tax on interest and dividends	-9.2			-9.2	Tax once at the corporate level
6. Eliminate company tax incentives		+1.55		+1.55	Eliminate all incentives
7. Tax sales of assets		+0.9		+0.9	Gains are effectively taxed only at business level; requires no change at individual level as gains are not currently taxed
8. Expense capital investments		-3.0		-3.0	Assumes current compliance rates
9. Impact of (1) – (8)	-8.6	17.45	-7.0	+1.85	
10. Harmonize individual and company income tax rates at:					
(a) 25%		-1.4		-1.4	
(b) 28%	+2.8	-1.0		+1.8	
(c) 30%	+4.7	-0.6		+4.1	
11. Revenue from a decrease/increase in general consumption tax of:					
(a) -2%			-3.00	-3.00	
(b) -1%			-1.65	-1.65	
(c) +1%			+1.79	+1.79	

^a Public pensions controlled for in line (1).

Source: Estimates by authors based on data from Bahl and Wallace (forthcoming)

References

- Alleyne, D., Alm, J., Bahl, R. & Wallace, S. (2004). Tax burden in Jamaica. *International Studies Program Working Paper*, Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- Alm, J. & Wallace, S. (2004). Payroll taxes in Jamaica. *Jamaican Tax Reform Project, Working Paper 4*. Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- Alm, J., Martinez-Vazquez, J., & Schneider, F. (2004). Sizing the problem of the hard-to-tax. In J. Alm, J. Martinez-Vazquez, S. Wallace (Eds.), *Taxing the hard-to-tax*. (pp. 11-76): Amsterdam, Elsevier.
- Andrews, W. (1974). A consumption-type or cash flow personal income tax. *Harvard Law Review*, 87, 1113.
- Auerbach, A. (1997). Quantifying the current U.S. fiscal imbalance. National Bureau of Economic Research Working Paper 6248, October 1997.
- Bahl, R. & Wallace, S. (forthcoming). *Tax reform and economic development*. Kingston, Jamaica: Planning Institute of Jamaica.
- Bird, R. & Gendron, P. (July 2006). Is VAT the best way to impose a general consumption tax in developing countries? *Bulletin For International Fiscal Documentation*, 287-296.
- Bradford, D. (1986). *Untangling the Income Tax*. Cambridge, MA: Harvard University Press.
- Cnossen, S. (1998). Administrative and compliance cost of the VAT: A review of evidence. *Tax Notes International*, June 20.
- Friedman, M. (1962). *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Hadler, S., Moloi, C. & Wallace, S. (2006). Flat or flattened? A review of international trends in tax simplification and reform. *USAID Fiscal Reform in Support of Trade Liberalization Report*, <http://www.fiscalreform.net/research/pdfs/Flat%20or%20Flattened%20USAID%20final%2007-11-06.pdf>.
- Hall, R. & Rabushka, A. (1995). The flat tax: A simple, progressive consumption tax. In M. Boskin (Ed.), *Frontiers of Tax Reform*. (pp. 27- 53). Stanford University Hoover Institution Press.
- Hall, R. E. & Rabushka, A. (1985, 1995). *The flat tax*. California: Hoover Press Publication.
- Hall, R. E. and Rabushka, A. (1983). *Low tax, simple tax, flat tax*. New York: McGraw-Hill Book Company.
- Institute for Fiscal Studies (1973). *The Structure and Reform of Direct Taxation: Report of a Committee Chaired by Professor James E. Meade*. London: George Allen and Unwin.
- Kaldor, N. (1955). *An Expenditure Tax*. London: George Allen and Unwin.
- Keen, M., Kim, Y., & Varsano, R. (2006). The “flat tax(es)”: principles and evidence. *International Monetary Fund working paper 6/218*, Washington, D.C: International Monetary Fund.
- Light, M. (2004). Taxation and economic efficiency in Jamaica. *Jamaica Tax Reform Working Paper #8*, Atlanta, Georgia: Andrew Young School of Policy Studies, Georgia State University.
- Martinez-Vazquez, J., Rider, M., Qibbayth, R. & Wallace, S. (2006). Russia’s flat rate income tax reform and revenue growth. *Proceedings of the Ninety-Eighth Annual Conference*, Boston, MA: National Tax Association.
- McLure, C. & Zodrow, G. (2006). *Consumption-based direct taxes: A guided tour of the amusement park*.
- Mieszkowski, P. (1977). A cash flow version of an expenditure tax. Washington, D.C.: U.S. Department of Treasury, Office of Tax Analysis Working Paper No. 26.
- Rider, M. (2004). Corporate income tax in Jamaica. *Jamaica Tax Reform Working Paper #3*, Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- Rutherford, T. F., Light, M., & Barrera, F. (2005) Equity and efficiency costs of raising tax revenues in Colombia. In R. Bird, J. Poterba & J. Slemrod (Eds.), *Fiscal Reform in Colombia: Problems and Prospects*. (pp. 93-138). Cambridge Mass: MIT Press.
- Slemrod, J. (2005), The Costs of Tax Complexity: Presentation to the President’s Advisory Panel on Tax Reform, from website: http://www.taxreformpanel.gov/meetings/docs/slemrod_03032005.ppt, accessed November 25, 2006.
- Wallace, S. & Alm, J. (2004). The Jamaican individual income tax. *Jamaican Tax Reform Project, Working Paper 5*. Atlanta, GA: Andrew Young School of Policy Studies, Georgia State University.
- Zodrow, G. & McLure, C. (1988). Implementing direct consumption taxes in developing countries. *World Bank Working Paper WPS 131*, Washington DC: The World Bank.