

**International Studies Program  
Working Paper 07-16  
June 2007**

**Consumption-Based Direct Taxes:  
A Guided Tour of the Amusement  
Park**

Charles E. McLure, Jr.  
George R. Zodrow





**International Studies Program  
Working Paper 07-16**

**Consumption-Based Direct Taxes:  
A Guided Tour of the Amusement Park**

**Charles E. McLure, Jr.  
George R. Zodrow**

**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](mailto: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](mailto:ispaysps@gsu.edu).

# *Consumption-Based Direct Taxes: A Guided Tour of the Amusement Park*

**Charles E. McLure, Jr.**

*Hoover Institution, Stanford University*

and

**George R. Zodrow**

*Baker Institute for Public Policy, Rice University*

## **Abstract**

Although consumption-based direct taxation has long been advocated in academic and policy circles, very few countries have actually implemented such taxes. This article analyzes numerous attempts to implement various forms of consumption-based direct taxation around the world, drawing on the authors' experiences with some of these efforts. It provides an overview of alternative approaches to direct consumption taxation, examines arguments favoring consumption taxes over income taxes, and then analyzes efforts at "fundamental tax reform" – that involved replacing an income tax with a consumption tax – in both the United States and numerous developing countries and countries in transition from socialism.

**Keywords:** Consumption-based taxes, fundamental tax reform, tax reform in developing countries, tax reform in transition countries

*JEL Classification:* H20, H24

## 1. Introduction

The modern discussion of consumption-based direct taxation – with its ups and downs and ins and outs – has sometimes resembled a never-ending series of rides in an amusement park. Our purpose is to review key aspects of that discussion, noting that many of the issues that have bedeviled tax policy experts over the past 30 years are still unresolved. Since we have ridden some of the rides, often together, we will draw on our own personal experiences to motivate some of the discussion. We begin with a bird’s-eye view of the historical development of the amusement park and then zoom in on particular issues, before beginning the guided tour.

## 2. The Bird’s Eye View

The modern discussion of consumption-based taxes began with Irving Fisher (1939), who emphasized that proportional consumption taxation achieves neutrality toward the choice of when to consume.<sup>1</sup> By comparison, the taxation of capital income under an income tax increases the relative price of future consumption and thus favors present over future consumption. Subsequently, consumption-tax advocates have noted that consumption-based taxation achieves horizontal equity between taxpayers with a given lifetime endowment (defined in present value terms), regardless of whether they earn early or late in life or choose to consume early or late. In addition, they have stressed that concerns that an expenditure tax would reduce the progressivity of the tax system are misplaced, since under a direct consumption tax vertical equity could be maintained by appropriately adjusting the rate structure.

In 1955, in *An Expenditure Tax*, Nicholas Kaldor advocated basing direct taxation on consumption. At that time most tax experts thought that implementing a consumption-based direct tax would be infeasible, because taxpayers would need to maintain either detailed records of expenditures or balance sheets, allowing saving to be deducted from

---

<sup>1</sup> However, by following Mill (1921) in describing the problem as “double taxation of saving,” Fisher obscured its nature, diverting attention from the intertemporal distortion of consumption. Earlier advocacy of consumption-based taxation by Hobbes was based on the philosophical argument that individuals should in principle be taxed on what they took from society, as measured by their consumption, rather than what they contributed, as measured by their income (Musgrave, 1959, pp. 161-64).

income to calculate consumption.<sup>2</sup> Kaldor showed that consumption could be calculated much more easily indirectly, by using accounting similar to that under an income tax except that individuals receive a deduction for net saving and are taxed on net withdrawals from saving.

In 1974, in a seminal paper published in the *Harvard Law Review*, Bill Andrews (1974) questioned the conventional wisdom of that time that consumption-based taxes are more difficult to administer than income taxes. Indeed, he argued convincingly that the exact opposite is true, as taxation based on consumption eliminates the timing problems (e.g., of deductions for depreciation, depletion and amortization) that greatly complicate the income tax.

Shortly after Andrews refuted the charge that a consumption-based tax was not administratively feasible, the US Department of the Treasury (1977) and the Meade Commission in the UK (Institute for Fiscal Studies, 1978) produced the first detailed studies of alternative methods of implementing consumption-based direct taxes. One of their many important contributions was to show the conditions under which taxes based on consumption and taxes on labor income are equivalent. Nevertheless, it is important to remember that there are important differences between the two approaches, especially during the lengthy period of transition from an income tax, during which a consumption tax would apply to income from old capital while a wage tax would exempt deferred capital income from tax. In 1983, Hall and Rabushka proposed what has become the most famous form of consumption-based direct tax – and perhaps the most widely misunderstood – the “flat tax,” which combines a single rate income tax on wages and salaries above an exemption at the individual level with a business level tax levied at the

---

<sup>2</sup> Slitor (1972, pp. 229-30) notes that John Stuart Mill, A. C. Pigou, and John Maynard Keynes all doubted the feasibility of an expenditure tax, but concludes (p. 257) that an expenditure tax as a permanent adjunct to the income tax “is probably practicable within a relatively restricted scope of high-income, substantial wealth taxpayers. Kelley (1970, p.237, 253) suggests, “A fresh consideration of the problem may suggest, however, that an expenditure tax would not be substantially more difficult to impose than other forms of direct taxation currently enforced by developed and developed countries. . . . In the context of highly developed societies, there seems little reason to doubt the possibility of effectively imposing an expenditure tax.” Kelley notes that analysts at the US Treasury Department had earlier reached a similar conclusion regarding a wartime tax on spending. By comparison, Shoup (1969, p. 349) writes, “[T]he formidable administrative problems facing a mass expenditure tax make detailed discussion of it unfruitful at this time.

same rate on real cash flow, with immediate write-off (expensing) of all expenditures, exemption of interest income, and the elimination of interest deductions (Hall and Rabushka, 1983, 1985).

These various proposals for consumption-based direct taxation were part of the background during the development of the US Department of the Treasury's 1984 report to President Ronald Reagan, *Tax Reform for Fairness, Simplicity and Economic Growth*. Given the widespread interest in consumption taxes, that report's endorsement of a traditional income tax may have surprised many.

David Bradford (1986) subsequently proposed that graduated rates be applied to the individual level base of the flat tax, producing his celebrated X-tax. Similarly, we proposed progressive consumption-based taxes for Colombia, Bolivia and other developing countries (McLure, Mutti, Thuronyi and Zodrow, 1990; Zodrow and McLure, 1991, McLure and Zodrow, 1996a, b), and McLure made similar proposals for Russia and other eastern bloc countries (McLure, 1992 a, b, c). We called the proposed tax the Simplified Alternative Tax (a term coined by McLure), to stress that it would be a simpler alternative to the income tax.

Twenty years after the Treasury Department proposals, the Tax Reform Panel appointed by President Bush proposed consideration of a hybrid system in which an individual level flat rate tax on financial income would be combined with what is essentially the Bradford X-tax. The subsequent debate has focused on three issues: a) the effects on investment, labor supply, economic output, and welfare, which depend in turn on b) the transition and wealth effects of introducing a consumption-based direct tax, and c) international issues. Our discussion will concentrate on the issues of simplicity in administration and compliance and the international aspects of consumption taxes, issues that have been especially prominent in our work in developing countries and countries in transition. For discussions of the equally important issues of economic efficiency, equity, and transition, see Zodrow (forthcoming) and Diamond and Zodrow (this issue), and literature cited there.

### **3. Some Preliminaries**

#### **3.1. Two Approaches to Taxing Consumption**

A tax on income that is not saved is a tax on consumption. Since consumption can be financed by borrowing or by drawing down previous saving, the consumption-tax base must include the proceeds of loans and dissaving and must allow deductions for saving and loan repayment. Traditional Individual Retirement Accounts (IRAs), with a deduction for contributions, tax-free accumulation of interest, and taxation of both principal and interest (or other earnings on investment) when withdrawn, implement this approach. Because tax is postponed until saving is withdrawn for consumption, this can be characterized as the “tax postpaid” approach to taxing consumption.

A key theorem underlying the economic case for consumption-based taxation is that such a tax does not reduce the return to marginal saving and investment and is thus neutral with respect to the choice between present and future consumption. Thus, assuming constant tax rates and ignoring bequests, inheritances, and above-normal returns, a tax that excludes the return on investment such as a wage tax is economically equivalent to a tax on consumption.<sup>3</sup> The Roth IRA operates in this way; no deduction is allowed for saving, but interest (and other returns to capital) are never subject to tax. Thus the tax that would be paid under the traditional IRA when principal and interest are withdrawn is “prepaid” at the time saving occurs. The Hall-Rabushka flat tax, the Bradford X-tax, the Simplified Alternative Tax, and (for individuals only) the McLure-Zodrow (1996 a, c) proposal for a hybrid consumption tax all follow this approach.

Under most consumption-tax proposals, the financial transactions of business would be treated in the same way as those of individuals. In addition, all business expenditures would be deducted immediately in the year in which incurred, rather than being capitalized and deducted over time via depreciation allowances, amortization, depletion, etc. Another theorem says that, for equity-financed business investment, expensing implies that the marginal effective tax rate (METR) at the business level – the tax rate on income from marginal investments – is zero (Brown, 1948). Combining this treatment of

expenditures on real assets with tax prepaid treatment of financial transactions yields what the Meade Committee called the real business cash flow tax base, or “R-base,” and combining it with the tax postpaid approach yields the “real plus financial” business cash flow tax base, or “R+F base.”<sup>4</sup> The hybrid we proposed would employ the tax prepaid method for individuals with the tax postpaid method for businesses.

### **3.2. What’s Flat about the Flat Tax? What’s Unique?**

The Hall-Rabushka flat tax proposal consists of five separable components that, when combined, create its simplicity: business real cash flow and the labor income of individuals are taxed separately, business expenditures are expensed, financial transactions are ignored, there are no itemized deductions, and a single “flat” rate is applied to the tax bases of both individuals and businesses. Unfortunately, the term “flat tax” is often applied to tax systems and proposals for reform that exhibit only the last of these features, the flat rate. Thus when it is said that a country has a flat tax or that someone has proposed one, it is unclear what this means. An income tax of the traditional type that is based on depreciation allowances and deductions for, and taxation of, interest (such as those recently enacted in Russia and several European countries in transition from socialism<sup>5</sup>) is a far cry from the prototypical flat tax, even if it has a flat rate and especially if it applies different tax rates to businesses and individuals and/or is shot through with exemptions, deductions, and credits.

Of the five features of the flat tax, only one, the expensing of business expenditures, is unique to consumption-based taxation. By comparison, all the other features of the flat tax are consistent with an income-based tax, and all have been proposed, if not

---

<sup>3</sup> This equivalence can be extended to the case of uncertain returns (Kaplow, 1994; Zodrow, 1995).

<sup>4</sup> See Institute for Fiscal Studies (1978). Two additional approaches deserve mention, although they have not received much attention in the US debate. The S-base consumption tax, a version of which was adopted in Estonia in 1994, would apply (only) to all business distributions to shareholders. From 1994-2000 Croatia employed a tax that allowed an Allowance for Corporate Equity (ACE) – an additional deduction equal to the product of the book value of equity capital and a risk-free interest rate. See Boadway and Bruce (1984), IFS Capital Taxes Group (1991), and Devereux and Freeman (1991) for the intellectual origins and development of the ACE tax and Rose and Wiswesser (1998) and Keen and King (2002) for descriptions and evaluations of the Croatian experience.

<sup>5</sup> See Ivanova, Keen and Klemm (2005).

implemented, in that context (Slemrod, 1997; McLure, 1997).<sup>6</sup> In a fundamental sense, the X Tax and the SAT are more like the flat tax than are “income” taxes with flat rates.

### **3.3. The Case for Consumption-Based Taxation: Simplicity Issues**

Consumption-based taxation is arguably simpler than income-based taxation, especially in an inflationary environment, and much of our work stresses the administrative and compliance aspects of the consumption vs. income tax debate (McLure and Zodrow, 1990), as do Bradford (1986), Slemrod (1996), Gale and Holtzblatt (2002) and Bankman and Schler (forthcoming).

#### **3.3.1. Basic simplicity**

The Holy Grail of income tax reform has long been to implement the comprehensive Haig-Simon income tax base, defined as annual consumption plus the change in net worth over the year. At the very least, achieving this goal would require keeping track of changes in the value of assets and liabilities. In the United States, to a greater degree than in many countries, the values of these changes for tax purposes do not need to be the same as what is recorded on the balance sheets in a company’s financial accounts, although they must be reconciled in a separate tax schedule. Much worse, knowing how much net worth changes in a particular year entails, among other things, knowing how much an asset has depreciated, to what extent a mineral deposit has been depleted, how the current value of intellectual property compares with last year’s value, the change in the value of real estate and other unique assets, etc. Inaccurate answers to these questions compromise the accuracy of the measurement of income, and imply that the essential economic neutrality goal of the income tax cannot be achieved.<sup>7</sup> Moreover, because it is exceedingly difficult to establish empirically the true pattern of decline in asset values, tax provisions are susceptible to alteration for political reasons.

---

<sup>6</sup> This statement is most suspect with regard to ignoring financial transactions. The proposal for a comprehensive business income tax (CBIT) in U.S. Department of the Treasury (1992) would “flip” the treatment of interest income and expense, making interest non-deductible at the business level and exempt at the individual level. The CBIT would continue capitalization and depreciation, rather than allowing expensing.

<sup>7</sup> By attempting (at least with regard to many issues) to create a conceptually attractive definition of taxable income, the Tax Reform Act of 1986 demonstrated just how complicated an income tax can be (McLure, 1988).

Consumption-based taxation avoids most problems of income measurement, as its base does not include change in net worth.<sup>8</sup> This is most easily seen in the case of the tax prepaid version. Neither principal nor interest transactions affect the tax base. There is no need to distinguish between debt and equity, since both are treated the same way. Capital gains are exempt, so there is no need to account for basis. Since all business expenditures are written off immediately, there is no need for depreciation accounting, amortization, depletion, etc. Being based on current-period cash flow, the tax postpaid method also avoids almost all timing issues.

### 3.3.2. Immunity to inflation

Although commonly stated as above, the Haig-Simon definition of income should be consumption plus *real* change in net worth. That is, income measurement should be independent of the rate of inflation. Inflation erodes the value of depreciable assets, inventories (if valued at historical cost, especially under FIFO), the basis of capital gains, and the principal of debt. Unless the measurement of income accounts for inflation, income will be mismeasured.<sup>9</sup>

Unlike the base of an income tax, the base of a consumption tax is independent of the rate of inflation. Since consumption taxes are based on cash flows, there is no opportunity for inflation to erode the real values of the quantities that enter calculation of the tax base.

## 3.4. International Issues<sup>10</sup>

Bilateral tax treaties are employed to prevent double taxation of income. Double taxation – by the country where the income is earned (the source country) and the country of residence of the recipient of income – can be avoided in either of two ways: a) the

---

<sup>8</sup> The clear exception occurs when expensing results in an excess of deductions over gross income, what would be called net operating loss under an income tax. To achieve the economic neutrality and equity benefits associated with consumption-based taxation, it is necessary to carry such excess deductions forward with interest. This is problematic, because of the need to know the right rate of interest to use.

<sup>9</sup> Chile has long had a comprehensive balance-sheet-based system of inflation adjustment (Thuronyi, 1996). While the system is relatively simple, it cannot be as simple as consumption-based taxation, which requires no inflation adjustments to be accurate.

<sup>10</sup> Our discussion will focus on the issue of creditability; for more general discussions of international issues, see Ballard (2002) and Bradford (2004).

country of residence can exempt such income, or b) it can provide foreign tax credits for income tax paid to the source country, up to the amount of the residence-country tax on the income in question.<sup>11</sup>

The three most important model tax treaties (the OECD model treaty, which is by far the most important since virtually all treaties involving developed countries are based on it, the US model treaty, and the UN model treaty), as well as all extant treaties, are, if only implicitly, based on the assumption that the contracting parties tax *income* and that it is avoidance of double taxation of *income* that is being sought. Consumption-based direct taxes of either the R or R+F types differ significantly from a common definition of income, the former because it does not tax interest income or allow a deduction for interest expense and the latter because it includes the proceeds of borrowing in the tax base and allows a deduction for repayment of principal. Any country that adopted a consumption-based direct tax of either of these types might thus need to renegotiate its tax treaties – a daunting task, not only because negotiating a treaty ordinarily takes many years, during which time international transactions would be conducted under a cloud of uncertainty, but especially because the negotiators would be operating in unknown territory, thus exacerbating the uncertainty.<sup>12</sup> It has thus long been recognized that a consumption-based direct tax might not qualify for relief from double taxation.<sup>13</sup> Since

---

<sup>11</sup> To the extent income is earned by foreign branches (permanent establishments) operating in the source country, the statement in the text applies without qualification. In the case of income earned by a foreign subsidiary, credit is allowed upon repatriation for income taxes paid by the subsidiary (and perhaps by one or more levels of sub-subsidiaries), as well as for withholding taxes on dividends paid to the parent.

<sup>12</sup> The US Department of the Treasury (1992, p. 48) acknowledges that elimination of the interest deduction under the CBIT, one aspect of the R-base, would require “extensive international discussions with tax authorities and market participants.” Somewhat anomalously, both an S-based tax and an ACE tax would be much less likely to be denied creditability. US rules on creditability can be traced to the need to avoid providing tax credits for production taxes levied on petroleum. Thus the emphasis has been on whether the tax in question is a tax on *net* income. A tax that allows no deduction for interest (the R-base tax) or that includes the proceeds of borrowing in the tax base (the R+F -base tax) is suspect, whereas an economically equivalent tax such as an S-based tax (which is applied only to corporate distributions) or an ACE tax (which allows a deduction for imputed interest on equity) is not problematical. Keen and King (2002) note that the creditability of the Croatian tax of the latter type that was levied from 1994 to 2000 was never challenged.

<sup>13</sup> Thus, when sometime during the late 1990s Alvin Rabushka asked McLure (roughly), “What’s this about a foreign tax credit,” McLure said, “I was wondering when you were going to ask.” Hall and Rabushka (1983) devote barely a page to international issues. They could hardly be more inaccurate when they state regarding a flat tax proposed for the US (1983, p. 52), “Under the principle of taxing only domestic activities, the U.S. tax system would mesh neatly with the tax systems of our major trading partners.”

the United States is the “800-pound gorilla” in the world economy – and also has the most detailed and restrictive rules regarding crediting – most attention has focused on whether the US would allow a foreign tax credit for a consumption-based tax. No country seeking to attract investment from the US could afford to levy a tax that would not be creditable, thus subjecting domestic-source income in the form of above-normal returns earned by US multinationals on FDI to double taxation. (Since normal returns are untaxed under a consumption tax, the US tax would be the only tax on such returns.)

### **3.5. Investment Incentives: Not a Rose by Another Name**

Apparently focusing on the fact that expensing of equity-financed investment is equivalent to a zero effective tax rate on the normal return to capital – a result that presumably is favorable to investment and growth and that does not depend on the rate of inflation – some seem to believe that expensing can – and perhaps should – be allowed in the context of an income tax. This is, however, unwise, especially in an inflationary environment. First, the combination of expensing and debt finance creates negative marginal effective tax rates at the entity level, and probably for the economy as a whole, implying that it might be profitable from the private after-tax point of view – but not from a social point of view – to borrow to make unproductive investments. Second, expensing allows growing firms – and debt-financed firms that are not even growing – to pay no tax. Aside from the undesirable effects on the perception of fairness, this undermines economic neutrality by encouraging mergers and acquisitions.

These problems were illustrated by the US experience of the early 1980s when a combination of investment tax credits and accelerated depreciation created a tax system that was more generous than expensing at prevailing inflation rates. A provision for “safe-harbor leasing” was enacted which, in effect, allowed firms to sell excessive deductions and credits to firms that could use them. The specter of large and profitable multinational corporations paying no tax helped fuel the US Tax Reform Act of 1986 (Birnbaum and Murray, 1987)

## 4. Riding the Rides

Our experiences over the past two decades illustrate the importance of the issues discussed in the previous section.

### 4.1. Jamaica: Nipped in the Bud

During the early 1980s, McLure participated briefly in the tax reform project in Jamaica headed by Roy Bahl, before his participation was cut short by his decision to accept a Treasury Department position with the Reagan administration. Had he continued in the Jamaica project, McLure almost certainly would have examined – and perhaps championed – the case for a consumption-based direct tax, but only after examining its creditability. As it was, he focused on explaining why it is unwise to grant expensing of investment in the context of an income tax, especially in an inflationary environment.<sup>14</sup>

### 4.2. Treasury I: the Dog That Did Not Bark<sup>15</sup>

In the fall of 1983, McLure became the Deputy Assistant Secretary of the Treasury for Tax Analysis. During the State of the Union address in January 1984, President Ronald Reagan instructed Treasury Secretary Donald Regan to develop a tax reform plan “for fairness, simplicity, and economic growth,” and within a few days Regan had assigned McLure primary responsibility for developing that plan. As a visiting economist in the Office of Tax Analysis (OTA), Zodrow participated in preparation of the Treasury report, which Regan submitted to the White House in late November 1984. The tax reform plan became known as “Treasury I,” in recognition of the fact that it was, in Regan’s words, “written on a word processor” and thus could be modified by the White House before being submitted to the Congress.

---

<sup>14</sup> See Section 3.4 above and McLure (1991).

<sup>15</sup> The idea for this subtitle is shamelessly stolen from Hellerstein (forthcoming), who quotes Arthur Conan Doyle regarding “the incident of the dog in the night-time”:

“Is there any point to which you would wish to draw my attention?”

“To the curious incident of the dog in the night-time.”

“The dog did nothing in the night-time.”

“That was the curious incident,” remarked Sherlock Holmes.

Two things about the process and product of Treasury I surprised many observers: that the proposals could be kept under wraps until near the end and that they did not include a consumption-based alternative to the income tax. We will concentrate on the second.

As noted previously, by 1984 a consensus was developing among public finance economists that a consumption-based tax would be preferable to the existing income tax – and even to an ideal “reformed” income tax. Nevertheless, what Treasury I proposed was, despite proposed continuation of some features of then-current law, including consumption-tax treatment of many pension plans, essentially a Haig-Simons income tax, with a primary objective of “taxing all income uniformly and consistently, without regard to source or use.” That definition does not allow exempting income from capital or allowing a deduction for saving. Even now many economists question the decision to opt for reforming the income tax, rather than replacing it with a consumption-based tax. (Indeed, it appears that some would have favored enactment of expensing in the context of an income tax, despite the pitfalls described earlier.)

To understand that choice, it is necessary to appreciate the political context in which the Treasury Department was operating. The President of the United States had asked for a plan to reform the tax code. There was at least some chance that a presidential proposal that resembled whatever was proposed could be enacted. If Treasury had proposed a consumption-based tax, perhaps President Reagan could have sold it. That would have been truly historic. We will never know, but it was not a sure bet. Moreover, the Treasury staff was concerned that if it put too many eggs in the consumption-tax basket, it might encounter “show-stoppers” – problems for which it had no solution – late in the game.

Three problems seemed particularly troublesome. First, given the political climate, it seemed unlikely that bequests would be treated as consumption and thus made subject to the consumption tax – as recommended, for example, in the R+F-based plan proposed by Aaron and Galper (1985). Many on the Treasury staff felt that such an outcome would be highly inequitable. Second, the international aspects of moving to a consumption tax

raised serious concerns. In particular, adopting a consumption tax while our trading partners continued to tax on the basis of income would create a variety of opportunities for tax avoidance, tax evasion, and long or indefinite deferrals of tax. In addition, as discussed above, enacting a consumption tax would imply that all foreign tax treaties would have to be renegotiated, and existing provisions for relieving the double taxation of foreign source income via foreign tax credits would have to be revised. Finally, many on the Treasury staff were concerned that the transition to a consumption tax would be especially difficult. For all these reasons, the consumption tax route was abandoned early in the process of fundamental tax reform. (McLure and Zodrow, 1987).

#### **4.3. Colombia: Justifiably Cold Feet**

In 1986, shortly after passage of the historic tax reform act in the US, McLure was invited to undertake a statutorily mandated study of the need for inflation adjustment of the income tax in Colombia. Based on the manifest advantages of a consumption-based direct tax, especially in an inflationary environment, McLure proposed successfully that the terms of reference be interpreted to include a detailed examination of the case for such a tax.

This examination focused on the administrative aspects of implementing taxes based on both the R and R+F models (McLure, Mutti, Thuronyi and Zodrow, 1990). Notably, we did not fully examine the issue of creditability. In the final analysis, the government of Colombia settled on a system of inflation adjustment that resembled that pioneered by Chile some years earlier. This choice was fully justified, given the short time between submission of our report and the statutorily imposed deadline for modifying the system to introduce inflation adjustment, the novelty of consumption-based direct taxation, and the unresolved issue of creditability.

#### **4.4. Bolivia: More Cold Feet**

In the spring of 1994, Juan Cariaga, the former Finance Minister of Bolivia, invited us to La Paz to discuss with President Gonzalo Sánchez de Lozada the latter's ideas for a

consumption-based direct tax. Despite warnings that such a tax might not be creditable in the US, both the president and Cariaga wanted to proceed.

Bolivia was an ideal place to introduce a consumption-based direct tax. First, there was no corporate income tax; the consumption-based tax would be an additional source of revenue. Thus from an administrative-compliance viewpoint the transition would have been simpler than in virtually any other western country, and capital levy issues would have been much simpler. Second, the Bolivian value added tax (VAT) was one of the “cleanest” of any developing country; it had few exemptions and only one rate. This would have greatly simplified linking compliance and administration of the two consumption-based taxes. Third, this was the president’s idea; it did not come from foreign advisers or the Ministry of Finance, and was thus much more likely to be implemented or at least considered seriously.

#### **4.4.1. The hybrid**

We were convinced that the “tax prepaid” method should be used for the taxation of individuals, in order to avoid the complexity of the “tax-postpaid” method. We were, however, reluctant to propose the same approach for business, as that would imply the exemption of the margin of financial intermediaries – not a politically attractive alternative, regardless of any economic rationale for such treatment. Moreover, despite its considerable theoretical appeal, the tax prepaid approach suffered from several additional serious practical problems. For example, expensing not combined with cash flow treatment of loans implied that the government would suffer relatively large initial revenue losses and that more firms would initially be in a negative cash flow position, putting greater stress on the choice of the carryforward interest rate. In addition, although the fact that financial transactions are ignored under the tax prepaid approach is the source of many of its simplicity advantages, it also creates problems, especially in transactions with foreign companies that are subject to an income tax. In particular, we felt that various avoidance schemes involving the manipulation of taxable receipts or deductible expenses and non-taxable interest income or non-deductible interest expense posed serious problems for the pre-paid approach that were not amenable to easy

solutions. (For more details, see McLure and Zodrow (1996 a, b, c)). All of these problems are much more manageable if the postpaid or R+F approach is utilized at the business level.

We ultimately decided that we could sensibly do what no one had ever proposed – apply the tax prepaid method to individuals and the tax postpaid method to businesses, without creating an asymmetrical system that would be an open invitation for tax arbitrage. We described and appraised obvious opportunities for arbitrage under this “hybrid” system and concluded that the risks of arbitrage were less than the clear costs of either “pure” system.

#### **4.4.2. The 800-pound gorilla swats a gnat**

As noted above, a consumption-based direct tax was likely to be a non-starter if it were not eligible for foreign tax credits in capital-exporting countries, especially the United States. In Bolivia, despite not being lawyers, we undertook a serious attempt to determine whether such a tax would or should be creditable in the US. In a potentially felicitous coincidence, a representative of the IRS came to La Paz while we were there and accompanied us to see President Sánchez de Lozada. She should have seen that the proposed hybrid tax was a well-conceived plan to improve the nation’s economic performance, and not a scheme to raid the US Treasury. (Indeed, the amount of Bolivian taxes credited in the US would almost assuredly have been less than under a conventional income tax.) But she took a very legalistic stance against creditability. We argued that the inclusion of the proceeds of borrowing in the tax base was exactly offset in present value by the subsequent deduction of debt repayment, but were told the IRS looks at form, not substance! We even undertook, with some assistance from the IRS representative, a demonstration that the business tax base under the hybrid tax would depart by only a few percentage points from that of an income tax. Again, she could not be persuaded.<sup>16</sup>

---

<sup>16</sup> See McLure and Zodrow (1996a, b, c) for further description, discussion, and documentation.

Finally, back in the US, we met with the technical staff of the Office of Tax Analysis of the US Treasury Department, who, much to the consternation of the IRS representative, seemed to accept our economic arguments favoring creditability. (The OTA staff consists of economists.) We then visited Joseph Guttentag, the International Tax Counsel, and received a far different reaction. First, we made the mistake of being accompanied by an attaché from the Bolivian embassy, which elevated the meeting to a “state-to-state” plane and eliminated all possibility of open and frank discussion. Second, we suspect that the US Treasury would not have cared very much if only a Bolivian tax were at stake. But agreeing that a consumption-based Bolivian direct tax would be creditable might pave the way for a request for creditability for a similar tax from other much larger countries. Bureaucratic risk aversion could easily explain the cool reception our proposal received.

#### **4.4.3. The cold feet**

President Sánchez de Lozada had initially told us that he wanted to go ahead with the proposal for a consumption-based direct tax, despite our concerns about creditability. Ultimately, however, reason prevailed and he realized that his country could not afford to impose a tax that might not be creditable in the US, as doing so could bring direct investment from the US to a halt. Somewhat surprisingly, we were asked to return the following year to examine the possibility of imposing an R-based tax on the resource sector in Bolivia – an exercise that ultimately also came to naught due to creditability concerns.

In many respects, it was unfortunate that we were representing Bolivia in our efforts to have the IRS deem a consumption tax to be creditable, rather than a country to which the US could not so easily say “No,” such as Russia or China – and that the proposal was not floated before an administration that would presumably have been more receptive to the idea of consumption-based direct taxation and thus to creditability, such as that of George H. W. Bush. Indeed, the IRS in 1999 granted partial creditability to an Italian income/origin-based VAT – a tax that does not allow deductions for interest expense or wages. However, the relevance of this treatment for the general issue of the creditability

of consumption taxes is limited as, consistent with earlier IRS positions on this issue, the amount of credit granted in the U.S. reflected an adjustment that reduced the credit by implicitly introducing deductions for interest expense and wages in the calculation of the tax base (Rossi, 2002).

#### **4.5. The Former Soviet Union**

A consumption-based direct tax would have been highly appropriate for countries in transition from socialism. First, the stimulus to investment provided by expensing and the associated zero METR seems appropriate for countries needing to replace the outmoded industrial infrastructure inherited from the Soviet period. A consumption-based direct tax would be far superior in that regard to the tax holidays that surely would be – and in fact were – proposed and adopted to achieve the same purpose under an income tax. Second, a consumption-based direct tax would be immune to the inflation that would almost certainly occur. Third, the simplicity of a consumption-based direct tax would be a great advantage for a region that lacked both the resources for tax administration and compliance and a history of compliance. Finally, transition problems did not seem to be much of a problem; since massive transition to something was inevitable, it might as well be to a consumption-based direct tax. Accordingly, McLure floated the idea of a consumption-based alternative to the income tax in a number of countries in transition from socialism (McLure, 1992a, b, c).

##### **4.5.1. Russia: Betting on Dead and Dying Horses**

Shortly before the demise of the Soviet Union, a group of Hoover scholars began visiting Russia and working with successive Chairmen of the Supreme Economic Council of the Russian Federation. In 1992 several, including McLure, were even appointed foreign advisers to that body. In that capacity McLure (1991) proposed that Russia adopt the SAT. As it turned out, the Economic Council did not have – or could not retain – enough influence to matter.<sup>17</sup>

---

<sup>17</sup> Another obstacle to the enactment of consumption-based tax reforms has been the opposition of the IMF. Indeed, at some point Milka Casanegra of the IMF, in effect, said to McLure, “I fought you in Colombia and I fought you in Venezuela and I will fight you here,” but never explained her – or the IMF’s – antipathy to consumption-based direct taxation.

#### **4.5.2. Kazakhstan: “Don’t bother”**

In Kazakhstan a representative of Chevron, then by far the largest foreign investor in the country, told McLure, in effect, of the SAT, “Forget it. It would not be creditable.” Since that view echoed the concerns that McLure had expressed earlier in Jamaica, Colombia, and Bolivia, it was not hard to accept.

#### **4.6. Colombia: Another Spin at the Wheel**

The overwhelming reelection of President Alvaro Uribe in Colombia has prompted interest in tax reform, especially of the business tax which is currently characterized by the relatively high tax statutory tax rate, including a temporary ten percent surcharge, of 38.5 percent. Toward that end, Zodrow was recently invited to discuss options for fundamental tax reform. Although the discussions are at a preliminary stage, many of the issues discussed in the paper thus far have played a prominent role in the deliberations. In particular, there is great interest in Colombia in both the Hall-Rabushka Flat Tax and the flat rate income taxes enacted in Russia and other countries in transition from socialism. The appeal of a consumption-based tax regime that is relatively favorable to foreign (and domestic) direct investment is tempered by concerns related to immediate revenue needs, creditability in the US, and design issues related to limiting avoidance opportunities. Similarly, an interest in the simplicity benefits of a flat rate is tempered by concerns about the distributional implications of flattening the individual rate structure. Finally, there is increasing recognition that although a consumption-based business tax system is desirable because it eliminates distortions of marginal investment decisions while taxing location-specific economic rents at the statutory rate, that rate simply cannot be too high; in particular, a high statutory rate exacerbates problems with transfer pricing and other financial accounting manipulations, and discourages investment by multinationals with relatively mobile firm-specific rents – highly desirable investments that generate positive externalities, especially in the area of technology transfer. It remains to be seen what lies at the end of this latest “ride.”

#### **4.7. The Recommendations of the President's Tax Reform Panel in the US**

The two alternatives for tax reform recently presented by the President's Panel on Federal Tax Reform reflect the current status of debate regarding the relative desirability of income-based and consumption-based direct taxes.<sup>18</sup> Specifically, there is widespread agreement that an "ideal" or comprehensive accrual-based tax on real economic income is not administrable, and less but still considerable agreement that the taxation of the normal returns to capital that is inherent under an income tax is relatively undesirable. On the other hand, many observers are unconvinced that a movement to a true consumption tax is desirable or could be implemented in practice, citing uncertainty about the magnitudes of efficiency gains and improvements in administrative and compliance simplicity, as well as concerns about the distributional implications of such a reform and transitional problems.<sup>19</sup>

Reflecting this lack of consensus, the panel was unwilling to recommend either a true consumption-based tax or significant movement toward a more comprehensive income tax. Instead, the panel recommended replacing the current hybrid income-consumption tax system with one of two alternative hybrid systems. The first, the Simplified Income Tax, is an integrated income tax system that follows the traditional base-broadening, rate-lowering approach, especially for the individual income tax, but nevertheless includes a wide variety of consumption tax features. The second, the Growth and Investment Tax, is best described as a consumption tax system based on the X-Tax, supplemented with a layer of flat rate capital income taxation at the individual level. Adoption of either of the panel's recommendations would move the US tax system closer, but not all the way, to a system of direct taxation based on consumption. By comparison, the alternative of a pure consumption tax based on the X-Tax, discussed at length in the report as its "Progressive Consumption Tax" option, was unable to achieve the unanimous approval required for the panel to recommend it.

---

<sup>18</sup> For further evaluation of the panel's report, see Zodrow and McLure (2006). Zodrow, along with John Diamond, assisted the U.S. Treasury Department in calculating the estimates presented in the panel's report of the economic effects of the various reforms proposed, using a dynamic, overlapping generations, computable general equilibrium model similar to that utilized in Diamond and Zodrow (2006, this issue).

<sup>19</sup> For recent collections of articles that reflect the current status of the debate on these issues, see Zodrow and Mieszkowski (2002b) and Aaron, Burman and Steuerle (forthcoming).

## **5. Concluding Remarks**

As we stagger from the amusement park, perhaps a bit dizzy from the rides, we note that enthusiasm for consumption-based direct taxation has ebbed and flowed over time. Exuberant advocacy of a switch to such a tax initially followed Andrews' article debunking the view that a consumption-based direct tax would be administratively infeasible. However, this exuberance gave way to more measured support as tax experts examined more carefully the economic effects of such a switch, which depend crucially on how the transition is handled, the progressivity of the new system,<sup>20</sup> and the administrative problems raised by various versions of consumption-based taxation. On economic grounds the case for the switch may be strong, but it is not the proverbial "slam dunk." (Zodrow and Mieszkowski, 2002a). And, hovering over the park is the black cloud of international issues. On the one hand, if the US (or any other country) were to enact a tax of either the R or R+F varieties, it would need to undertake the daunting task of renegotiating its double taxation treaties. On the other hand, no other country can afford to enact such a tax without assurance that the US would allow foreign tax credits for it. Failing to recognize this problem in the current situation is naive — and only time will tell whether the recent expression of interest in consumption-based taxation by the President's tax reform panel in the US will ultimately lead to more flexibility on the part of the IRS in deeming consumption-based direct taxes to be creditable against the domestic tax liability of US multinationals.

---

<sup>20</sup> For example, see Altig, Auerbach, Kotlikoff, Smetters and Walliser (2001) and Diamond and Zodrow (this issue).

## References

- Aaron, H.J., Burman, L., and Steuerle, C.E., forthcoming, *Taxing Capital Income*, Urban Institute Press, Washington DC.
- Aaron, H.J., and Galper, H. (1985), *Assessing Tax Reform*, Brookings Institution, Washington DC.
- Andrews, W.D. (1974), A Consumption-Type or Cash Flow Personal Income Tax, *Harvard Law Review* 87, 1113-88.
- Ballard, C.L. (2002), International Aspects of Fundamental Tax Reform, in: Zodrow, G.R., and Mieszkowski, P. (eds.), *United States Tax Reform in the 21st Century*, Cambridge University Press, Cambridge UK.
- Bankman, J., and Schler, M., forthcoming, Tax Planning Under the Flat Tax/X-Tax, in: Aaron, H.J., Burman, L., and Steuerle, C.E., *Taxing Capital Income*, Urban Institute Press, Washington DC.
- Birnbaum, J.H., and Murray, A.S. (1987), *Showdown at Gucci Gulch: Lawmakers, Lobbyists, and the Unlikely Triumph of Tax Reform*, Random House, New York.
- Boadway, R., and Bruce, N. (1984), A General Proposition on the Design of a Neutral Business Tax, *Journal of Public Economics* 24, 231-39.
- Bradford, D.F. (1986), *Untangling the Income Tax*, Harvard University Press, Cambridge MA.
- Bradford, D.F. (2004), The X Tax in the World Economy, American Enterprise Institute, Washington.
- Brown, E.C. (1948), Business-Income Taxation and Investment Incentives, in: Metzler, L.A., et al. (eds.), *Income, Employment, and Public Policy: Essays in Honor of Alvin Hansen*, Norton, New York, 300-16.
- Devereux, M.P., and Freeman, H. (1991), A General Neutral Profits Tax, *Fiscal Studies* 12, 1-15.
- Diamond, J., and Zodrow, G.R. (2006), Consumption Tax Reform: Changes in Business Equity and Housing Prices and Intergenerational Redistributions, paper presented at a conference on "Is It Time for Fundamental Tax Reform?," sponsored by the Tax and Expenditure Policy Program, Baker Institute for Public Policy, Rice University.
- Fisher, I. (1939), Double Taxation of Savings, *American Economic Review* 29, 16-33.
- Gale, W.G. and Holtzblatt, J. (2002), The Role of Administrative Issues in Tax Reform: Simplicity, Compliance and Administration, in: Zodrow, G.R., and Mieszkowski, P. (eds.), *United States Tax Reform in the 21st Century*, Cambridge University Press, Cambridge UK
- Hall, R.E., and Rabushka A. (1983), *Low Tax, Simple Tax, Flat Tax*, McGraw-Hill, New York.
- Hall, R.E., and Rabushka A. (1995), *The Flat Tax*, Hoover Institution Press, Stanford CA.
- Hellerstein, W., The U.S. Supreme Court's State Tax Jurisprudence: A Template for Comparison, forthcoming in: Avi-Yonah, R.S., Hines, J.R., and Lang, M., (eds.), *Comparative Fiscal Federalism: Comparing the European Court of Justice and the U.S. Supreme Court's Tax Jurisprudence*, Kluwer, New York.
- IFS Capital Taxes Group (1991), *Equity for Companies: A Corporate Tax for the 1990s*, Commentary No. 26, Institute for Fiscal Studies, London.
- Institute for Fiscal Studies (1978), *The Structure and Reform of Direct Taxation: Report of the Committee Chaired by Professor J.E. Meade*, Allen and Unwin, London.
- Ivanova, A., Keen, M., and Klemm, A. (2005), Russia's "Flat Tax," *Economic Policy* 20, 397-444.
- Kaldor, N. (1955), *An Expenditure Tax*, Allen and Unwin, London.
- Keen, M., and King, J. (2002), The Croatian Profit Tax: An ACE in Practice, *Fiscal Studies* 23, 401-18.
- Kelley, P.L. (1970), Is an Expenditure Tax Feasible? *National Tax Journal* 23, 237-253.
- McLure, C.E., Jr. (1988), The Tax Reform Act of 1986: Tax Reform's Finest Hour or Death Throes of the Income Tax? *National Tax Journal* 41, 305-15.
- McLure, C.E., Jr. (1991), Expensing, in: Bahl R. (ed.), *The Jamaican Tax Reform*. Lincoln Institute of Land Policy, Cambridge MA, 324-38.
- McLure, C.E., Jr. (1992a), Income Tax Policy for the Russian Republic, *Communist Economies and Economic Transformation* 4, 425-36.
- McLure, C.E., Jr. (1992b), A Consumption-Based Direct Tax for Countries in Transition from Socialism, *The Wayne Law Review* 38, 1697-1756.
- McLure, Charles E., Jr., (1992c), A Simpler Consumption-Based Alternative to the Income Tax for Socialist Economies in Transition, *World Bank Research Observer* 7, 221-37.
- McLure, C.E., Jr. (1997), The Simplicity of the Flat Tax: Is It Unique? *American Journal of Tax Policy* 14, 283-98.

- McLure, C.E., Jr., and Zodrow, G.R. (1987), Treasury I and the Tax Reform Act of 1986: The Economics and Politics of Tax Reform, *Journal of Economic Perspectives* 1, 37-58.
- McLure, C.E., Jr., and Zodrow, G.R. (1990), Administrative Advantages of the Individual Tax Prepayment Approach to the Direct Taxation of Consumption, in: Rose, M. (ed.), *Heidelberg Congress on Taxing Consumption*. Springer-Verlag, New York, 335-82.
- McLure, C.E., Jr., and Zodrow, G.R. (1996a), A Hybrid Consumption-Based Tax Proposed for Bolivia, *International Tax and Public Finance* 3, 97-112.
- McLure, C.E., Jr., and Zodrow, G.R. (1996b), Creditability Concerns Doom Bolivian Flat Tax, *Tax Notes International* 12, 825-29.
- McLure, C.E., Jr., and Zodrow, G.R. (1996c), A Hybrid Approach to the Direct Taxation of Consumption, in: Boskin, M. (ed.), *Frontiers of Tax Reform*, Hoover Institution Press, Palo Alto CA, 70-90.
- McLure, C.E., Jr., Mutti, J., Thuronyi, V., and Zodrow, G.R. (1990), *The Taxation of Income from Business and Capital in Colombia*, Duke University Press, Durham NC.
- Mill, J.S. (1921), *Principles of Political Economy*, Ashley, Longmans, Green and Company, London.
- Musgrave, R.A. (1959), *The Theory of Public Finance*, McGraw-Hill, New York.
- Rose, M., and Wiswesser, R. (1998), Tax Reform in Transition Economies: Experiences from Participating in the Croatian Tax Reform Process of the 1990s, in: Sorensen, P.B. (ed.), *Public Finance in a Changing World*, Macmillan Press, Houndmills.
- Rossi, A.A. (2002), Relief from Double Taxation under the New U.S.-Italy Tax Treaty, *Tax Notes International* 28, 487-502.
- Shoup, C.S. (1969), *Public Finance*, Aldine Publishing, Chicago.
- Slemrod, J. (1996), Which Is the Simplest Tax System of Them All? in: Aaron, H.J., and Gale, W.G. (eds.), *Economic Effects of Fundamental Tax Reform*, Brookings Institution Press, Washington DC, 355-84.
- Slemrod, J. (1997), Deconstructing the Income Tax, *American Economic Review*, 87, 151-55
- Slitor, R.E. (1973), Administrative Aspects of Expenditures Taxation, in: Musgrave, R.E. (ed.), *Broad-Based Taxes: New Options and Sources*, Johns Hopkins University Press, Baltimore, 227-63.
- Thuronyi, V. (1996), Adjusting Taxes for Inflation, in: Thuronyi, V. (ed.), *Tax Law Design and Drafting*, International Monetary Fund, Washington DC, 434-76.
- U.S. Department of the Treasury (1977), *Blueprints for Basic Tax Reform*, U.S. Government Printing Office, Washington DC.
- U.S. Department of the Treasury (1984), *Tax Reform for Fairness, Simplicity, and Economic Growth*, U.S. Government Printing Office, Washington DC.
- U.S. Department of the Treasury (1992), *Integration of the Individual and Corporate Tax Systems*, U.S. Government Printing Office, Washington DC.
- Zodrow, G.R. (1995), Taxation, Uncertainty, and the Choice of a Consumption Tax Base, *Journal of Public Economics* 58, 257-65.
- Zodrow, G.R. (2002), Transitional Issues in the Implementation of a Flat Tax or a National Retail Sales Tax, in: Zodrow, G.R., and Mieszkowski, P. (eds.), *United States Tax Reform in the 21st Century*, Cambridge University Press, Cambridge UK.
- Zodrow, G.R., forthcoming. Should Capital Income Be Subject to Consumption-Based Taxation? in: Aaron, H.J., Burman, L., and Steuerle, C.E. (eds.), *Taxing Capital Income*, Urban Institute Press, Washington DC.
- Zodrow, G.R., and McLure, C.E., Jr. (1991), Implementing Direct Consumption Taxes in Developing Countries, *Tax Law Review* 46, 405-87.
- Zodrow, G.R., and McLure, C.E., Jr. (2006), Time for US Tax Reform? The Tax Reform Panel's Recommendations, *Bulletin for International Taxation* 60, 134-149.
- Zodrow, G.R., and Mieszkowski, P. (2002a), Introduction: The Fundamental Question in Fundamental Tax Reform, in: Zodrow, G.R. and Mieszkowski, P. (eds.), *United States Tax Reform in the 21st Century*, Cambridge University Press, Cambridge UK.
- Zodrow, G.R., and Mieszkowski, P. (2002b), *United States Tax Reform in the 21st Century*, Cambridge University Press, Cambridge UK.