

## Lessons for Tax Policy in the Great Recession

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Conference draft. Comments welcome.

May 7, 2009

This paper has been prepared for the National Tax Association Spring meeting in Washington, DC, May 21, 2009. I have benefited from conversations on related topics with Julian Alworth, Alan Auerbach, Vieri Ceriani, Michael Devereux, Sam Eddins, Brandon Gipper, Michael Keen, Geoff Lloyd, Kyle Logue, Doug Shackelford, Matthew Shapiro, and Dan Shaviro; none of these individuals is, however, responsible for any misstatements or infelicitous interpretations in this paper.

While policymakers struggle with identifying and enacting the appropriate short-term policy response to the financial crisis and economic downturn of 2008, 2009, and perhaps beyond (henceforth “the crisis”), both academics and policymakers are examining the causes of the crisis and what lessons this might bring to bear on longer-term policy. With near unanimity attention to both the causes and appropriate long-term policy response has focused on the financial sector,<sup>1</sup> although fiscal policy, including tax policy, has certainly figured prominently in countries’ short-term policy response to the economic contraction. In recent months, though, officials from two international organizations, the IMF and the OECD<sup>2</sup>, have produced reports addressing what aspects of the tax system may have helped cause or exacerbate the crisis, and whether tax policy need to be re-evaluated in light of the recent events. That the public finance community participate in such a re-examination is appropriate; indeed, it is a professional responsibility. There is likely enough policy blame to be spread among many policy areas and, even if bad tax policy is not the (or even *a*) proximate cause of the crisis, our view of how the world works has fundamentally changed in ways that invite a thoughtful and perhaps humbling reassessment of what good tax policy looks like.

In this article I do not, alas, offer such a fundamental reassessment of tax policy. Instead I offer some speculations about the lessons for tax policy, and the analysis of tax policy, from the Great Recession. What did we get wrong? What did we underestimate the importance of? What do we need to think more about?

### *The Tax Preference for Corporate Debt Financing*

One obvious link between tax policy and the crisis is the tax preference for corporate debt finance. The U.S. income tax system, and that of most other countries, favors debt financing over equity financing because of the deductibility of interest payments and the

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<sup>1</sup> For example, one prominent and thoughtful treatment of the causes and appropriate policy response to the crisis, known as the Turner Review (The Financial Services Authority, 2009), mentions tax policy only in passing.

<sup>2</sup> See IMF (forthcoming) and Lloyd (2009), which provide more comprehensive treatments of most of the issues discussed here and of some others that, because of limitations of space and author expertise, I do not address here.

non-deductibility of the cost of equity capital. To some extent this may be offset by preferential individual tax treatment of the returns to equity investments, such as the enactment in the U.S. of capped rates of tax on dividends beginning in 2003, but offsetting this is the growing importance of effectively tax-exempt investors, for whom any investor-level tax preference for equity does not apply: overall, a net preference for debt finance almost certainly prevails. To the extent that leverage is thereby higher than otherwise, so also is the susceptibility of the corporate sector to bankruptcy.

This link is no surprise to public finance economists, who have addressed this issue theoretically and tried to estimate by how much the tax system increases corporate leverage. Hindsight circa 2009 suggests that we might have underestimated the social costs of increased leverage. A literature in finance has focused on the real costs of bankruptcy, and struggled to find them to be large.<sup>3</sup> In retrospect what was missing was an examination of the contagion effects, or externalities, of bankruptcies in an economic climate like the current one.

The familiar story about the tax-related incentive to debt finance is worth another look. Note that it presumes that, in order to obtain the tax advantages of interest deductibility, corporations must change the risk profile of their obligations to the providers of capital. This may not be true, though, if a corporation can obtain the tax advantages without altering the character of its obligations. In principle this could be done by issuing hybrid instruments such as convertible debt obligations, which qualify as debt according to IRS rules, but which have equity-like characteristics.<sup>4</sup> As Shaviro (2009) emphasizes, divorcing the tax treatment from the true underlying financing characteristics effectively allows investors to elect whether they wish to be taxed at the corporate tax rate (through equity finance) or their own individual marginal tax rate (through debt finance). Especially in the presence of heterogeneous individual marginal tax rates, the social cost then comes in the form of lost revenue rather than a distorted

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<sup>3</sup> An influential early paper is Altman (1984, p. 1087), who concludes that bankruptcy costs “are not trivial.” A subsequent literature has questioned this conclusion. Another literature stresses that debt finance provides an incentive for corporations to choose especially risky projects that yield profits if successful but, if unsuccessful, lead to a bankruptcy whose costs are borne in part by creditors.

<sup>4</sup> As Shaviro (2009, p. 52) notes, corporations often favor hybrid financing that qualifies as debt for tax but not for accounting purposes, thereby generating deductions against taxable income but not against financial statement earnings.

corporate risk profile and in that event is unlikely to have played a direct role in precipitating or exacerbating the crisis.

### *The Taxation of Financial Institutions*

Although the bankruptcy of prominent nonfinancial American corporations has received a lot of attention, the viability of financial institutions is closer to the core of the crisis. There is no question that the total system leverage of the financial sector increased markedly from about 2003 and, in the opinion of, e.g., the Turner Review, this played an important role in increasing the severity of the crisis. The role of the tax system in the level and growth of financial system leverage has not to my knowledge been addressed and, in general, the public finance community has not devoted enough attention to modeling and empirically analyzing the consequences of the (inevitably and ubiquitously) special tax treatment of financial institutions.<sup>5</sup> To be sure this is difficult, in part because financial institutions are heavily regulated and so their behavior, including their leverage, will depend on tax, accounting, as well as regulatory considerations, and also because creative re-characterization opportunities abound. For example, bank holding companies may issue trust-preferred securities, which are treated like debt obligations for tax purposes (i.e., interest payments are deductible), but they are treated as capital rather than liabilities under banking regulations.

One recent report on the regulatory response to the financial crisis (Acharya and Richardson, 2009) stressed the negative externalities of large, complex financial institutions and recommended that policy makers quantify their systemic risk and *tax* their contributions to this risk. This language alludes to the notion of a Pigouvian tax for correcting externalities, about which the public finance has accumulated much expertise, both in theory and concerning practical implementation issues. The authors of this report suggest that the tax be implemented through capital requirements or deposit insurance fees, rather than by trying to apply a tax directly to a base associated with the negative externality. On many dimensions systemic financial risk is unlike, say, pollution, but some insight may be gained from applying the economics of Pigouvian taxes to this issue.

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<sup>5</sup> For a theoretical treatment of the taxation of financial services, see Boadway and Keen (2003).

There are other financial sector issues at the intersection of tax and accounting. For example, accounting rules follow mark-to-market concepts, but tax follows a more traditional approach so that companies cannot recognize as deductible for tax purposes losses that must be recognized on their financial statements. In 2008 many observers blamed the mark-to-market rules for forcing a spiral of write-downs that in turn required financial firms to raise money to shore up their capital cushions. Indeed, the Securities and Exchange Commission announced an easing of the mark-to-market rules in the heat of the financial crisis, on September 30, 2008.

### *The Tax Preference for Housing*

Housing, and in particular the collapse of the housing price bubble, has been singled out as a triggering cause of the crisis. Public finance economists can hardly be accused of overlooking the tax system's effect on housing. In the U.S. the non-taxation of the rental return to owner-occupied housing, coupled with the deductibility of mortgage interest and home equity loan interest for itemizers and especially favorable treatment of capital gains on housing, adds up to a substantial tax preference. This preference increases the attractiveness of home ownership, especially for predominantly high-income itemizers, subsidizes the amount of housing purchased, and encourages leveraged ownership of housing, a particular difficult asset out of which to diversify.<sup>6</sup> Proposals to reduce the inefficient over-investment in housing and the related risks are a staple of comprehensive tax reform proposals.

As has been noted elsewhere, there is no smoking gun linking the tax treatment of housing to the inflation or bursting of the housing bubble, across time or across countries. The beginning of the bubble did not closely follow any significant change in the tax treatment of housing in the U.S., nor has anyone claimed there is a clear correlation across countries between the extent of the tax preference accorded to housing (due, for example, to the fact there is no mortgage interest deduction in many countries) and the size of the housing price bubble or even the extent of home ownership. The most

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<sup>6</sup> Tax-induced overleveraging of households has a higher social cost than over-leveraging of corporations. The latter may generate excessive social costs related to bankruptcy, but the riskiness of individual corporate equities can in principle be offset by portfolio adjustments at the level of individual wealth owners.

promising place to look for a link between tax policy and the housing crisis may be the tax treatment of collateralized mortgage securities, discussed below, but that link remains speculative.

### *The Tax Preference for Capital Gains*

The U.S. income tax system, and that of most other countries, provides a tax preference to returns to investment that come in the form of capital gains. In the U.S. capital gains for individuals are subject to a special lower tax rate structure, are taxed upon realization rather than accrual (which offers deferral of tax liability), and are excused entirely from taxation upon the death of the asset owner because of the basis step-up rule. The U.S. tax treatment of capital gains on a principal residence is even more attractive, since 1997 exempting \$500,000 of gain for a married couple.

Other things equal, then, the tax system favors assets that are expected to appreciate whose return can be classified as capital gains for tax purposes. Did the preferential tax treatment of capital gains encourage investment in assets whose return could come largely in the form of appreciation? In a world with no capital losses, the answer would surely be yes, but a complete answer must address the tax treatment of capital losses. The absence of full loss offset against ordinary individual taxable income means that the expected tax consequences of a risky asset (i.e., one whose value might actually decline) are not as favorable as looking only at the taxation of gains would suggest. This consideration would, of course, not apply to investors who did not consider the possibility of price declines, as anecdotally seems to have characterized many investors. Whether the tax treatment of capital encourages investments whose returns can be characterized for tax purposes as capital gains is a different question than whether the tax treatment encourages riskier investment. The latter follows from the former if the returns to inherently riskier investments are more easily characterized as capital gains; this seems right to me, but I do not have empirical evidence to prove it.<sup>7</sup>

The tax preference for capital gains affects not only the relative attractiveness of assets, but also the relative attractiveness of some occupations, depending on whether the

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<sup>7</sup> Ideal is an investment whose upside is taxed as a capital gain and whose downside is deemed to be ordinary income. See the discussion of CDOs below.

compensation can be characterized as capital gains. This can be achieved for those who apply their effort to fixing up, or “flipping”, houses because the effort results in a higher sale price. It can also be achieved by the general partners of private equity funds or hedge funds to the extent that the compensation for their effort is characterized as carried interest and therefore treated for tax purposes as capital gains. By granting preferential tax treatment, the capital gains preference thereby further encourages relatively risky activities.<sup>8</sup>

Finally, the realization-based tax on capital gains causes a “lock-in” incentive for investors to hold on to assets with appreciation (especially for older investors closer to the step-up of basis at death) and a “lock-out” inducement to sell assets with losses. Given the limitation on taking capital losses against ordinary income, the lock-out effect applies with most effect to those who also have realized gains in the same year, which may apply more to 2008 than 2009, and therefore was arguably a factor in the decline of stock prices in the latter part of 2008. Note also that the advantage of stepping up at death the tax basis for inherited assets provides a tax break only with regard to assets with appreciation. In the post-crisis world riddled with assets that have accrued losses, for tax purposes it is better to sell assets before death to take advantage of the capital loss that will not be available to whoever inherits the asset.

*The Incoherence of Capital Income Taxation: Tax Arbitrage, Tax Clienteles, and Derivative Securities*

That interest is taxed differently than dividends, and capital gains are taxed differently than either interest or dividends, are both symptoms of the general incoherence of the taxation of capital income that tax economists have long recognized and which has convinced many economists to favor abandoning income taxation for some form of consumption-based tax system.

The incoherence has a number of consequences. One is that the effective tax rate on the income from real assets varies capriciously, creating an inefficient allocation of

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<sup>8</sup> One silver lining of the crisis may be the demise of the common but misleading political rhetoric that it is good policy to “encourage risk.” One might make an argument that the spillover effects of entrepreneurship make some form of subsidy appropriate, but exposure to risk per se is, it can now be said, a bad thing.

resources. Another is that the incoherence generates the possibility of tax arbitrage, which arises when the same risk pattern of returns has different tax treatment depending on how it is packaged, or characterized. In the simplest example of tax arbitrage, a taxable individual borrows to buy a tax-exempt municipal bond. If both assets were risk-free, as long as the after-tax (i.e., accounting for the deductibility of interest expense) cost of borrowing was lower than the (pre- and post-tax) return to the municipal bond, a debt-financed purchase of tax-exempt bonds produces a private tax saving, and a tax revenue loss, with no portfolio or risk-bearing change required.<sup>9</sup> The drain in tax revenue has a social cost because it must be made up with inevitably distorting taxes.

Of course this arbitrage forces down the return to tax-exempt bonds and forces up the interest rate on taxable securities. If everyone were in the same tax bracket, the pre-tax rates of return on the two types of assets would adjust to eliminate the arbitrage. But when there are wealth owners in different tax situations, this is impossible: there is no pair of pre-tax rates of return that will produce equal after-tax returns for both a fully taxable investor and, say, a completely tax-exempt investor. The result is the formation of tax clienteles, where certain securities are more likely to be held by certain parties based in part on tax attributes, and there are may be tax arbitrage opportunity for at least one party, and perhaps all.<sup>10</sup> Short-selling constraints, restrictions on tax loss refundability, or the desire for diversification may limit the extent of possible gain. The formation of tax clienteles limits the achievement of otherwise efficient risk diversification, unless the tax advantage is accomplished entirely by re-characterizing for tax purposes the capital flows rather than their underlying nature.

Eddins (2009) argues that collateralized debt obligations (CDOs) organized as pass-through entities became especially attractive because their owners entered into credit default swaps with sellers that could treat default losses as ordinary loss, while the CDO has pass-through tax treatment and therefore would have to treat defaults as capital losses. The differential tax treatment allowed the CDO tranches to offer a higher after-tax expected rate of return because the expected losses effectively generated more tax offsets

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<sup>9</sup> In this particular example, the IRS disallows the interest payment, but enforcing it requires complicated and perhaps infeasible tracing rules that link the loan to the purchase of the tax-exempt securities.

<sup>10</sup> These clienteles need not be exclusive, in that each investor holds *only* those assets whose tax treatment best suits their tax status.

by attaching them to the mark-to-market seller of the swaps. The strategy was especially advantageous for the riskier tranches with higher expected default rates.

The packaging of “slice-and-dice” derivatives may also have facilitated the assignment of ownership of flows of capital income based on the match between the tax attributes of the flows and the tax attributes of owners. To the extent that individuals choose their portfolios based on tax considerations, this may inhibit the efficient allocation of risk. More generally, derivatives magnify the consequences of the incoherence of capital income taxation.

### *Tax Havens*

Long before the 2008-9 crisis there was a lively debate among policymakers and academics about whether tax havens were “bad” or “good.” A 1998 OECD report concluded that “governments cannot stand back while their tax bases are eroded through the actions of countries which offer taxpayers ways to exploit tax havens...to reduce the tax that would otherwise be payable to them” (p. 37) and offered several policy recommendations concerning domestic legislation, tax treaties, and international cooperation. In sharp contrast to the OECD view, a recent academic literature has focused on a potentially beneficial role for tax havens: they provide a way for countries to move toward a non-distorting tax regime they should, but for some reason cannot explicitly, enact. For example, in Hong and Smart (2005), residents of high-tax countries can benefit from haven-related tax planning because it allows the country to levy tax on immobile domestic entrepreneurs (in a lump-sum way) without driving away mobile multinational capital; the presence of the haven thus reduces the (distorting) effective marginal tax rate for any given statutory tax rate. In contrast, in the model developed by Slemrod and Wilson (2008) tax havens lead to a wasteful expenditure of resources, both by firms in their participation in havens and by governments in their attempts to enforce their tax codes, and worsen tax competition problems by causing countries to reduce their tax rates further below levels that are efficient from the viewpoint of all countries combined. In this model either full or partial elimination of havens improves welfare in no-haven countries and initiatives to limit some, but not all, havens may raise welfare both in the non-haven countries and in the remaining havens.

The crisis has renewed policy attention on tax havens, and the April 2009 G20 meeting threatened multilateral sanctions against unreconstructed tax havens that do not accede to information exchange standards. This occurred for two reasons. For one thing, observing the cross-border spillover of the financial crisis has suggested that effective regulation must be more multilateral than it is currently and that non-transparent offshore financial arrangements hamper effective regulation. Restricting access to financial information is central to the appeal of tax havens, and there is much overlap between countries that have facilitated avoidance of domestic financial regulations and those that have facilitated tax avoidance and evasion. Second, post-crisis countries face large deficits, and cracking down on tax avoidance and evasion holds the promise of raising revenue without the need to explicitly raise tax rates.

A successful multilateral crackdown on tax havens combined with the reduced demand for their services by multinational companies (because so many are now in a loss position) may mean that the tax haven, financial-opaqueness business model will no longer appeal to the mostly small jurisdictions that have adopted it. It apparently had its run: Hines (2005) shows the growth rate of tax havens from 1982 to 1999 was substantially above average. But a casual analysis of recent economic performance suggests that on average countries known for their low tax rate structure have experienced relatively big economic declines.<sup>11</sup> They may have to look to other ways to commercialize their state sovereignty, as suggested by Slemrod (2008).

### *Public Finance and Macroeconomics*

As the magnitude of the economic crisis became apparent the criteria by which tax policy was evaluated changed abruptly. For the most part, the traditional criteria—efficiency, equity, and simplicity—were jettisoned and replaced by the marginal propensity to spend (and undertake business investment) out of different kinds of tax cuts, and of tax cuts versus spending. Overnight these Keynesian yardsticks replaced public-finance-textbook tax policy criteria.

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<sup>11</sup> I have in mind Ireland and Singapore, low-tax countries that are on some lists of tax havens but not others, but recognize that it is impossible to know what about these countries' policies and economic structure have contributed to their relatively poor recent performance.

This is an awkward transition not only for policy but for policy analysts, because for decades now the economic analysis of taxation—especially in North America—has been mostly conducted in a full-employment context. Our measures of the social cost of taxation have concerned misallocation of resources—measured by Harberger triangles—rather than idleness of resources, whose social cost is, in the case of capital, measured by a trapezoid because, unlike the non-market time of people, “capital leisure” has no social value.

Although the theory of taxation has addressed the appropriate policy toward traditional externalities such as pollution, including Pigouvian taxes, it has hardly addressed what might be called “Keynesian externalities” that arise in situations of under-employed resources or in the presence of spillover (or contagion) externalities caused by interlocking financial relationships. To be sure, integrating macroeconomic considerations into tax policy analysis will not be straightforward, in part because macroeconomists do not speak with one voice how to address these issues, which suggests that public finance economists need to consider eclectic modeling approaches with respect to, e.g., sticky-price models versus continuous market-clearing models, perfect foresight models versus rule-of-thumb adaptive expectations, “behavioral” models or not.

Tax economists can, though, address some important questions without taking a stand on these internecine macroeconomic controversies. For example, one of the major issues in the assessment of the financial rescue operations has been the tradeoff between the alleged short-term benefits and the adverse long-term consequences that would ensue once financial institutions built in expectations of government behavior in the event of a future crisis. The same issues arise in taxation, as well. Arguably we are now in what might be called an “amnesty equilibrium,” where ex post tax policy changes in the event of a downturn, such as the extension of loss limits, the forgiveness of tax liability normally attendant to debt forgiveness, and temporary accelerated depreciation, affect expected tax rates.

Several questions at the interface between macroeconomics and public finance become important. For example, what tax systems provide the best automatic

stabilization?<sup>12</sup> How does the marginal propensity to consume vary by taxpayer, and how (if at all) should this affect tax structure, including its progressivity? Does the marginal propensity to consume vary by time, i.e., go down during recessions? Are these time effects different by income group? Does the delivery mechanism—for example, lump-sum rebates versus changes in withholding—of counter-recession tax policy matter?

One aspect of the macroeconomic policy debate resonates especially with the public finance community: the balance between relying on income and substitution effects in countercyclical policy. Tax cuts, delivered as a rebate check or as reduced employer withholding, “work” as a countercyclical tool primarily to the extent that households increase spending in response to higher after-tax incomes. The permanent income hypothesis suggests that tax changes perceived to be temporary will have little effect on spending (and the Ricardian view suggests they will have none at all), but much recent evidence suggests that this is not true. Other tax measures rely on inducing businesses and individuals to move forward investment and consumption, respectively, that they otherwise would do later, by reducing the relative price for some window of time. In the U.S., the primary example of such an investment incentive is temporary “bonus” depreciation, used both in the 2001 recession and again in 2008; the U.K. doubled the main capital allowance rate from 20% to 40% for tax year 2009-10.<sup>13</sup> In the U.S. a tax credit of up to \$8,000 became available for qualified first-time home buyers purchasing a principal residence on or after January 1, 2009, but before December 1, 2009.

This discussion resonates because of the importance of intertemporal substitution in assessing the welfare consequences of estimated behavioral elasticities. Consider the behavioral response to the anticipated increases in the income tax rate for high-income families beginning in 1993. The large decline from 1992 to 1993 in reported taxable income on high-income tax returns suggested a substantial elasticity of taxable income, which in turn implies a high welfare cost per dollar of revenue collected. But closer analysis shows that much of the response was the result of moving into 1992 taxable income that would otherwise have been reported in 1993 and thereafter. This suggests

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<sup>12</sup> See Auerbach and Feenberg (2000). The arguably more extensive automatic stabilizers in Europe compared to the U.S. figured in the recent controversy about whether the European countries’ stimulus packages are sufficiently large.

<sup>13</sup> See House and Shapiro (2008) for evidence on the effectiveness of temporary investment incentives, and bonus depreciation in particular.

that the behavioral response to a permanent change in tax rates is much smaller than otherwise, but that the short-term intertemporal response to anticipated tax rate changes can be substantial.<sup>14</sup> On the surface this bodes well for the effectiveness of countercyclical policies that work by changing intertemporal relative prices, but an important caveat applies. Keynesian multipliers do not apply to taxable income *reports*, but rather to consumer purchases and business investment.<sup>15</sup> The 1992-1993 shift was largely the former.

This discussion naturally leads to the question of whether a consumption tax system would have differing counter-recession properties than an income tax system. One aspect of this is the cyclicity of revenues, and here the evidence from state tax systems indicates that sales tax revenues have been less pro-cyclical than income tax revenues, although the depth of the recent fall in retail sales suggests that this question should be re-visited. Another issue is whether consumption tax systems naturally allow more flexibility for enacting changes in the intertemporal relative price of consumption. Note that, as part of its counter-cyclical policy, the U.K. reduced its standard VAT rate from 17.5% to 15% for December 2008 and all of 2009.<sup>16</sup> This type of policy will be more effective the larger is the intertemporal elasticity of substitution, and the more credible is the implicit promise to restore the tax rate to its pre-crisis level once the crisis is over. Note, though, that Blundell (2009) has cautioned that the amount of intertemporal substitution might be lower in a recession plagued by uncertainty about the future. Although in the absence of uncertainty the intertemporal substitution effect should be especially large for durable purchases, uncertainty increases the option value of waiting to make irreversible investments.

### *Policy Lessons and Research Challenges*

The incoherence in the taxation of capital income has serious economic consequences, including an inefficient encouragement to over-invest in housing and to

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<sup>14</sup> Recent research regarding state sales tax holidays is consistent with this. See Cole (2009).

<sup>15</sup> Although note that an anticipated shift of consumer purchases from, say, January 2010 to December 2009 may not affect the time pattern of production much.

<sup>16</sup> In the U.S., lacking a federal consumption tax, Kotlikoff and Leamer (2008) suggested, in vain, that state governments suspend their sales taxes and the federal government make up the lost sales tax revenue.

bear risk, as well as a misallocation of risk. Financial innovations can magnify the adverse revenue and efficiency consequences of tax arbitrage opportunities created by this incoherence. The incoherence also applies to the way national tax systems interact.

Of course fundamental tax reform is difficult. Moreover, those countries that have pursued fundamental reform of capital income taxation have not all chosen the same path, and a tax system that is sensible if adopted by all countries may not be sensible if adopted unilaterally. We are more likely to see some multilateral action against tax havens than we are to see countries ceding sovereignty over their tax systems in the pursuit of international coordination. There are some promising signs. The movement toward international financial accounting standards is noteworthy and laudable, as is the serious discussion (although apparently now waning prospects) of a common European corporate tax base definition. Policy coordination to limit tax arbitrage that takes advantage of inconsistencies among the tax systems of high-tax countries would also be valuable. Cross-country coordination of such somewhat technical issues can perhaps be achieved without ceding sovereignty over more politically and ethically charged issues such as the progressivity of the tax burden and the balance between taxation of labor and capital income.

There are challenges for scholarship, as well. One is to verify which hypothesized links between tax policy and the economic downturn were quantitatively significant. This is hampered by the complexity and opaqueness of the financial arrangements, complexity that apparently befuddled many participants in these arrangements, to their ex post detriment.<sup>17</sup> Empirical analysis of cross-country data aimed at uncovering correlates with the magnitude of recession will probably not be compelling, in part because countries differ on many policy dimensions, tax and non-tax, as well as with regard to other characteristics. With hindsight it is easier to see that some countries placed gambles on risky economic policies that turned out to be ruinous, and we should be concerned that country bailouts by multilateral institutions may create moral hazard problems for future policy making. Finally, we public finance economists are challenged to better integrate the economic analysis of taxation with the concerns and

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<sup>17</sup> Desai, Dyck, and Zingales (2007) suggest that the organizational complexity that comes with sophisticated multinational corporate tax planning also facilitates insider exploitation of outside investors, and thus contributes to a weakening of corporate governance.

expertise of macroeconomists, finance economists, and accountants. This is especially important for getting a better understanding of financial institutions, whose behavior is affected by the tax, accounting, and regulatory rules it faces, rules that are inter-related but not coordinated.

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