# Taxing Simply 

District of Columbia Tax Revision Commission
Tcoxing Fciliply

## Full Report

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## The District of Columbia's Individual IncomeTax

# Structure, C haracteristics, and Policy Alternatives 

Robert P. Strauss

## Structure of paper

This paper seeks to address four broad questions related to the D istrict's personal incometax:

- What are the major structural characteristics of the District's personal income tax and those of its neighbors, and what are their empirical characteristics?
- What has been happening to the population base on which personal taxes are levied, and for whom are services provided? Can one ascribe the District's declining population to adverse tax policies or are other factors at work?
- Given the current status of the District's personal income tax, what policy options are available, especially to achieve the goals of revenue adequacy and administrability? W hat are the implications of various types of conformity to the federal individual income tax?
- What might be the dimensionality of a commuter tax in terms of base and rate?

To address these questions, the chapter is organized as follows: The beginning sections give an overview of state and local income taxes and their role in central city finances as well as a history of the District's personal income tax. These sections are followed by: 1) an examination of the major components of the District's personal income tax in terms of structural and empirical characteristics, and 2) a comparison of the D istrict and its tax burdens to those of $M$ aryland and Virginia.

The next several sections discuss the issue of in- and out-migration of District taxpayers by examining:

- resident population and income of residents and nonresidents over the period 1969-1995 as measured by the Bureau of Economic Analysis;
- aggregate migration into and out of the D istrict based on federal tax returns;
- migration into and out of the District through analysis of 1989 and 1995 District tax returns; and
- the effect of changes in the District's crime level on movements of taxpayers by zip code.

The final sections examine policy options for the District's personal income tax by discussing:

- policy options that would enhance the revenue productivity and ease of administration of the District's individual income tax through simplification and greater conformity with the Internal Revenue Code; and
- arguments for and against taxing commuters, empirical aspects of commuter taxes, and possible rates, revenues, and administrative issues associated with a commuter tax.

Unless otherwise noted, all tables and graphs reflect the author's calculations based on tax return data.

## State personal incometaxes

State taxation of personal income dates back to America's colonial period, when property and income taxes were combined in the form of "faculty taxes." Pennsylvania levied a 1 percent tax on salaries in 1840, and income taxes were prominent in the N orth and South to finance the costs of the Civil War. ${ }^{1}$

The first modern state personal income tax was adopted by H awaii in 1901. Wisconsin became the first continental state to adopt a personal income tax in 1911; it had a top marginal tax rate of 6 percent. By the close of that decade, eight other states had adopted personal income taxes, and another six did so the following decade. ${ }^{2}$ The D epression witnessed an additional 16 states adopting a personal income tax. ${ }^{3}$ TheD istrict adopted its income tax in 1947, and Alaska adopted its in 1949. From 1961 through the mid-1970s, 11 additional states added personal income taxes. ${ }^{4}$

## Local income taxation and central city finance

The long-run decline in central city populations, especially older industrial cities, has been well chronicled by demographers through analyses of census data. Of the 218 cities with populations over 100,000 in 1994, 67 lost population over the last quarter century. While these cities overall accounted for 33.1 million of the 1970 population of 203.3 million ( 16 percent), they accounted for only 27.4 million of the 1994 pop-

| Figure l-I |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Large Cities Losing Population 1970-1994 by Size of 1970 Population (in thousands) |  |  |  |  |
| City | $1970$ <br> Population | $1994$ <br> Population | Population Loss | Percent Population Loss |
| N ew York, N.Y. | 7,896 | 7,333 | -563 | -7\% |
| Chicago, III. | 3,369 | 2,732 | -637 | -19 |
| Philadelphia, Pa. | 1,949 | 1,524 | -425 | -22 |
| D etroit, M ich. | 1,514 | 992 | -522 | -35 |
| Baltimore, M d. | 905 | 703 | -202 | -22 |
| W ashington, D.C. | 757 | 567 | -190 | -25 |
| Cleveland, O hio | 751 | 503 | -248 | -33 |
| M ilwaukee, W is. | 717 | 617 | -100 | -14 |
| Boston, M ass. | 641 | 548 | -93 | -15 |
| Source: U.S. Census Bureau. |  |  |  |  |

ulation of 258.1 million ( 10.6 percent). The 5.3 million residents lost between 1970 and 1994 amounted to 15.9 percent of these cities total 1970 population.

As Figure I-1 shows, many of these cities lost more than 20 percent of their 1970 population. Some lost very large numbers between 1970 and 1994: New York, Chicago, Philadelphia, and Detroit each lost more than 500,000 residents during this period.

The District is among 15 major cities that lost more than 15 percent of their population between 1970 and 1994. N ot only have its finances been headline news over the past several years, but its population loss, decline in public services, and crime have been especially troubling for all elected federal officials.

The assertion that central city population loss has been especially heavy for middle- and upper-income households can be found throughout much of the demographic and urban literature on central city decline. Attracting middle- and upper-income residents and retaining residents is often argued to be a crucial ingredient to rebuilding the tax base and civic life of these cities. ${ }^{5}$

## History and importance of theD istricts personal income tax

The District's individual income tax dates back to 1939, although the broad-based version was adopted in 1947. It has amounted to about 25 percent of the District's

| Figure I-2 |  |  |
| :--- | :--- | :--- |
|  |  |  |
| Individual Income Taxes as Percent of Personal Income |  |  |
|  | 1975 Tax B urden | 1993 Tax Burden |
| District of Columbia | $2.9 \%$ | $3.8 \%$ |
| M aryland | 4.1 | 4.1 |
| Virginia | 2.9 | 2.7 |
| Average, U.S. | $\mathbf{1 . 9}$ | $\mathbf{2 . 4}$ |

Source: U.S. D epartment of Commerce, Bureau of Economic Analysis.
annual own-source tax collections over the past decade. W ith regard to the District's neighboring states, Virginia's state and local governments relied on the individual income tax for 26 percent of the state's tax revenues, while M aryland's state and local income taxes accounted for 38 percent of total $M$ aryland state and local taxes. ${ }^{6}$ Nationally, state and local governments relied on the individual income tax for one out of every five tax dollars raised. ${ }^{7}$ Thus, the D istrict is above average in its reliance on the personal incometax to finance services to D istrict residents, but in the region relies less than its major competitor (M aryland). Figure I-2 compares 1993-1994 personal income tax burdens to those in 1975. While the D istrict's burden rose, it was primarily due to personal income rising more slowly than taxes. The District's 1993 personal income tax collections were 4.5 times that of 1975, but its personal income in 1993 was only 3.4 times that of 1975 . In M aryland, personal income tax collections in 1993 were about 4.9 times that of 1975.8

In 1989, 310,000 District individual income taxpayers had a personal income tax liability of $\$ 534.9$ million, while in 1995, 251,000 taxpayers had a net personal income tax liability of $\$ 556$ million. The District's decline in resident population and decline in resident tax paying population and the resulting sluggish growth in revenues will be a constant focus of the research reported below.

## Public finance principles and personal incometaxation

State and local governments have generally been enabled to employ a broad arsenal of revenue instruments to finance state and local services. The U.S. C onstitution imposes few impediments to their use of property, sales, gross receipts, excise, franchise, and income taxes. Tax systems have multiple and sometimes conflicting objectives to:

- finance the budget for needed public services;
- achieve agreed-upon equity objectives;
- interfere as little as possible with private household and business choices through the imposition of taxes; and
- apply taxes in a certain and transparent fashion so that frequent rate changes are not needed, and compliance and administration are inexpensive.

Therefore, the question arises as to how a small geographic area such as the District should employ a tax as visible as a personal income tax.

W hen raising public revenues to finance public services, there is merit in determining at the outset if the service is general or narrow in impact. If the latter is true, then a case can be made for supporting its budgetary cost through benefitrelated taxes or even fees. At the local level, resident use of police and fire services may be measured by the value each resident derives from the protection of his or her real estate. A local property tax applied at a proportional rate can be viewed as a benefit tax. Other services, such as public education or health, are provided to achieve distributional objectives. H ere, one typically favors financing such activities through ability-to-pay taxes such as income or broad-based consumption taxes. W hen the geographic area of a government is small, one typically expects a government which covers a larger geographic area to assist in financing income redistribution activities. O therwise, one asks poor areas of a state to finance their contributions to income maintenance and the provision of services which are income redistribution in kind. As the District has no higher level of government other than the federal government to look for assistance in financing services, there is likely to be a constant tension between the service needs of the community, and the willingness of its residents to finance it. ${ }^{9}$

Unlike most states, the finances of the District are impacted by two other important phenomena:

- The presence of significant federal, tax-exempt property makes relying on local benefit taxation to finance property-related services (e.g., fire, police, housing inspection, zoning, etc.) more difficult.
- The presence of large numbers of commuters who use significant amounts of municipal (but not education) services. While 724,412 individuals worked in the District in 1990, only 236,734 were both District residents and worked in the District. ${ }^{10}$ Another 67,694 District residents worked outside the District in 1990. The ratio of nonresident workers to resident workers was $2: 1$ in 1990 and was among the highest of any major city in the United States. Almost half a million people commuted into the District in 1990 to work.

W hile the District is not enabled, as a condition of its H ome Rule Act of 1971, to impose a personal income tax on commuters, the renegotiation of the federal payment and reshuffling of financing and service responsibilities which occurred in 1997 make the analysis of a commuter tax of some interest to those seeking to reform the D istrict's tax system.

## Structural features of the Districts individual incometax

The District of Columbia is one of 37 states to impose an individual income tax based initially on an income concept derived from the Internal Revenue Code (IRC), which governs the federal income tax. Of the states with an individual income tax, only five are uncoupled from the IRC. ${ }^{11}$ The District individual income tax follows 25 others in beginning its definition of income subject to tax by reference to federal Adjusted Gross Income (AGI). Five states begin with federal taxable income, and three (N orth Dakota, Rhode Island, and Vermont) base their individual income tax on federal liability. ${ }^{12}$

O ver the last 30 years, changes in tax rates and brackets have been enacted. In 1965, the top marginal tax rate was 5 percent of taxable income in excess of $\$ 25,000$; this was increased to 11 percent in 1976. The top marginal rate was lowered to 10 percent for tax year 1987, and 9.5 percent for tax year 1988. In 1970, the District conformed its taxation of capital gains to the federal definition, and in 1975, conformed personal exemption and child care deductions. ${ }^{13}$ Since 1988, the tax rate has been 6 percent for taxable incomes under $\$ 10,000$, 8 percent for taxable incomes of $\$ 10,000-\$ 20,000$, and 9.5 percent for taxable incomes in excess of $\$ 20,000$ of taxable income.

0 ver time the value of the personal exemption has been increased: $\$ 885$ for tax year 1987, $\$ 1,025$ for tax year 1988, $\$ 1,160$ for tax year 1989, $\$ 1,270$ for tax year 1990, and $\$ 1,370$ for tax year 1991 to the present. ${ }^{14}$

## Determining place of residence

A key element of the taxation of household income is the determination of whether or not the income is subject to a jurisdiction's authority to tax, and whether or not taxes imposed at the place of work are recognized, through credit or deduction, at the place of residence. Given the generally high level of mobility of individuals and households, the determination of residence has significant implications for both revenue and administration of the D istrict's personal income tax. ${ }^{15}$

Four concepts of "resident" may be found among state personal income taxes:

- domiciled in the state
- presence in the state for other than a temporary or transitory purpose
- presence in the state for a specified period of time, measured in months or days
- maintenance of a permanent place of abode in the state ${ }^{16}$

Evidence of being domiciled often includes registering a motor vehicle in the state, maintaining bank accounts in the state, obtaining a driver's license in the state, and voting in the state.

The District taxes a resident's income, but cannot, under Paul S. Davis v. District of Columbia, tax income earned outside of the District of an individual prior to his or her becoming a resident. For the District's personal income tax purposes, a resident is defined as one who either:

- is domiciled at any time in the District during the taxable year; or
- maintains a place of abode within the District for an aggregate of 183 days or more. Temporary absences from a D.C. residence for vacations, hospitalization, or business trips are deemed to be periods of D.C. residency under case law.

The D istrict also taxes nonresidents' income earned in the D istrict from unincorporated business sources at a rate of 9.5 percent plus a surcharge of 2.5 percent for an effective rate of 9.975 percent, the same as the corporate tax rate, less a $\$ 5,000$ exemption. N onresident personal service income, where capital is not a material income-producing factor, is exempted from the nonresident tax. ${ }^{17}$ T hus, nonresident income earned by the legal profession is exempt, but partnership income earned from the rental of apartment buildings owned by nonresident partners is taxable.

The District individual income tax form instructions add an obligation to file a return if:

- "Your permanent residence was in the D istrict for part of or the full taxable year";
- "You lived in the District for 183 days or more during the taxable year, even though your permanent residence was outside the D istrict";
- "You were a member of the armed forces and your home of record was the District for part of or the full taxable year";
- "You are a spouse of an exempt military person or of any other exempt person such as a nonresident presidential appointee."

M embers of C ongress who maintain a place of abode in the District in relation to their attending sessions are not taxable, nor are such officials as Supreme Court justices. In addition, foreign embassy personnel are generally exempt from District individual income taxation.

Disputes over District residency rules have been prominent for a long period of time, and there is significant case law dealing with the precise nature of having a

District domicile in comparison to that of another state of residence, the determination of intent to return to another place of domicile, and the domiciliary treatment of Foreign Service officers and others appointed by the president to positions in the executive branch of government.

Disputes have arisen in M aryland and Virginia over whether ther tax statutes allow their residents to take credits for District taxes paid against their M aryland and Virginia resident income tax liability. While the M aryland statute permits residents a credit for "income tax" paid to "another State upon such part of his net income," the M aryland Supreme Court in 1957 denied a credit paid for the District's tax on unincorporated business because the tax was determined by the court to be a privilege tax rather than an income tax. The Virginia Supreme Court reached the opposite conclusion about the nature of the unincorporated business income tax, and allowed its residents a credit against the Virginia individual incometax on the same set of facts in 1990. ${ }^{18}$

Recently, the Virginia tax department's denial of a Virginia resident's claim for a credit for the District's nonresident income tax on unincorporated business income paid was upheld, because the District's nonresident income tax was found by the Virginia Supreme Court to be a commuter tax in violation of the District of C olumbia H ome Rule Act. ${ }^{19}$ Virginia currently provides a credit only for other states' taxes which are legal and authorized under other states' laws.

## Filing status

The District's personal income tax recognizes five major filing categories.

- Single - unmarried individuals living alone, or married individuals who are not living with their spouse on the last day of the year.
- Head of Household - follows the federal definition in the Internal Revenue Code, e.g., an unmarried individual with a son, daughter, descendent of either, or stepchild.
- Married Filing Jointly - for District tax purposes, couples must file a M arried Filing Jointly return or a M arried Filing Combined Separate return if they are required to file federally as M arried Filing Jointly to get federal tax benefits (i.e., the federal earned income tax credit).
- Married Filing Separately - married persons if the gross income of each exceeds the sum of his/her personal exemptions.
- Married Filing Combined Separate - allows each spouse to be treated in effect as a single taxpayer with dependents. They agree to share the number of dependents and deductions in a mutually agreeable manner, and file on one return, filling in Column A and Column B of D.C. Tax Form D-40. There is no federal counterpart to this. Note that M aryland (but not Virginia) accords married taxpayers this filing alternative.


## Trends in numbers of District tax filers

The number of District individual income tax filers has dropped over time. Figure I-3 displays the number of individual incometax filers by AGI class and type of filing unit for 1989 and 1995. N ote that the AGI classification is based on the sum of each person's federal adjusted gross income shown on Line 1 of the D-40 and is as close an approximation to household economic income as is possible.

Several things are immediately evident from an inspection of this table. First, the number of tax returns dropped overall by 20 percent during this six-year period. ${ }^{20}$ Second, the fall occurred in returns with AGI of less than $\$ 45,000$; there was some growth in the highest brackets overall. N ote that the number of taxpayers in the $\$ 100,000-\$ 500,000$ income class grew by 30 percent. Second, while there was modest overall growth in the number of tax filers in the AGI classes above $\$ 45,000$, this was not the case for M arried Filing Combined Separate; their numbers dropped in all brackets except the $\$ 100,000-\$ 500,000$ AGI class. O verall, this group of taxpayers showed the largest percentage reduction overall among all filers, falling by 31 percent.

The results for 1995 of matching District taxpayers to their federal tax returns are as follows: O verall, there were 246,399 returns which could be matched by social security number. ${ }^{21}$ T here were 46,190 District tax filers who did not file federal tax returns; this likely reflects the fact that the income level at which District income tax is owed is well below the federal level. Thus, 29,432 single taxpayers filed for District tax purposes but not for federal tax purposes.

The relationship between District and federal filing status is generally quite strong. The largest exception is among those who file $M$ arried Filing Jointly for federal purposes. Of the 34,995 District filers in this category, 18,310 filed District returns in the same status and 15,921 filed M arried Filing C ombined Separate.

Figure I-4 displays the amount of District tax paid by different filing units in 1995 scaled in thousands of dollars. Single taxpayers were the largest filing group in 1995: O verall they paid $\$ 246.4$ million out of the $\$ 556$ million in 1995 District tax liability shown on District returns. This was 44 percent of total tax liability although singles were 54.9 percent of total 1995 D istrict tax filers.

The next largest group in terms of tax liability in 1995 was M arried Filing Combined Separate; these filers had $\$ 149.2$ million in 1995 liability or 26.8 percent of the total; however, such taxpayers numbered only 19,693 or 8 percent of total District tax return filers. Also, note that $\$ 32$ million of District M arried Filing Combined Separate liability was attributable to those for whom no federal returns could be matched.

The third most important filing status in terms of tax liability was M arried Filing Jointly; their tax liability was 15.1 percent of the total, while they constituted 7.7 percent of tax returns filed for District tax purposes. The Head of H ousehold
Maried Filing Married Filing Combined Separate



D.C. Tax Filers in 1989 and 1995

1995
586
419
1,068
1,861
2,218
2,055
2,903 n
$\stackrel{\infty}{0}$
$\underset{N}{N}$

$\stackrel{N}{N}$ 1,716 1,452 1,170 ${ }^{\circ}{ }_{i}^{\circ}$ n $\stackrel{g}{N}$ | N |
| :---: |
| N |
|  |

1989


| $\begin{array}{r}\text { Heqd of } \\ \text { Houschold }\end{array}$ |  |
| ---: | ---: |
| $\mathbf{1 9 8 9}$ | $\mathbf{1 9 9 5}$ |
| 708 | 983 |
| 3,535 | 2,670 |
| 8,522 | 6,495 |
| 11,777 | 9,031 |
| 13,279 | 9,242 |
| 10,071 | 8,294 |
| 9,722 | 9,871 |
| 3,679 | 4,836 |
| 1,226 | 2,185 |
| 534 | 950 |
| 275 | 431 |
| 291 | 431 |
| 262 | 396 |
| 25 | 18 |
| $\mathbf{6 3 , 9 0 6}$ | $\mathbf{5 5 , 8 3 3}$ |

Source Author's calculations based on D.C. tax data files

| AGI Class | Single |  |
| :---: | :---: | :---: |
|  | 1989 | 1995 |
| \$0-1,500 | 6,611 | 8,389 |
| 1,500-5,000 | 18,786 | 7,587 |
| 5,000-10,000 | 24,547 | 13,614 |
| 10,000-15,000 | 22,946 | 14,408 |
| 15,000-20,000 | 23,244 | 14,140 |
| 20,000-25,000 | 19,866 | 14,088 |
| 25,000-35,000 | 25,493 | 22,640 |
| 35,000-45,000 | 13,760 | 13,779 |
| 45,000-55,000 | 7,244 | 8,685 |
| 55,000-65,000 | 4,160 | 5,360 |
| 65,000-75,000 | 2,622 | 3,706 |
| 75,000-100,000 | 2,965 | 4,673 |
| 100,000-500,000 | 2,645 | 3,999 |
| 500,000+ | 188 | 163 |
| Totel | 175,077 | 135,231 |



D.C. Tax Filers in 1989 and 1995
tax datafiles
Single



Toted 175,077 135,231




1995 D.C. Tax Liability
by Federal and D.C. Filing Status (\$ thousands)
Federal FilingStatus

| D.C. FilingStatus | Single | Married Filing Jointly | Married Filing Separathy | Head of Household | Wicom(er) | Married Filing Separdily/ Other | No Return Filed | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Single \$ | \$203,088 | \$216 | \$211 | \$1,847 | \$28 | \$5 | \$41,013 | \$246,408 |
| Head of Housenold | 736 | 202 | 36 | 46,829 | 230 | 4 | 7,169 | 55,206 |
| Maried FilingJointly | $y \quad 15$ | 63,183 | 65 | 61 | 23 | 11 | 20,568 | 83,926 |
| Maried Filing Separately | 84 | 1,352 | 9,035 | 35 | 0 | 71 | 7,612 | 18,189 |
| Married Filing Combined Separate | 74 | 115,843 | 898 | 18 | 0 | 0 | 32,333 | 149,166 |
| Dependent T axpayer | 2,281 | 17 | 8 | 39 | 0 | 0 | 769 | 3,114 |
| Total \$ | \$206,278 | \$180,813 | \$10,253 | \$48,829 | \$281 | \$91 | \$109,464 | \$556,009 |

filers were 22.7 percent of total returns but only 9.9 percent of tax liability. Single parents evidently have significantly lower taxable income than couples filing joint or combined separate returns.

## Income

D erivation of taxable income for District tax laws begins with federal adjusted gross income. The District tax instructions indicate that the taxpayer must first complete his federal return before completing the District of C olumbia tax return. District taxpayers may use all adjustments provided under the federal income tax, although there are a series of add-backs as well. 22 Excluded from District gross income are: 1) interest and dividend income on federal obligations or U.S. securities that are includable in federal gross income; 2) interest on District obligations and other state and local bonds; 3) state and local tax refunds includable in federal taxable income; 4) income received during nonresidence; 5) social security and Tier 1 railroad retirement income; 6) interest and dividend income reported on federal form 8814; 7) pension and annuity income; and 8) amounts previously taxed as unincorporated business tax.

The total value of these subtractions is substantial. In tax year 1995, D istrict taxpayers reported on their District tax returns $\$ 10.191$ billion in federal adjusted gross income, additions of $\$ 23.6$ million, and subtractions of $\$ 1.015$ billion; District adjusted gross income in 1995 was $\$ 9.179$ billion. ${ }^{23}$ For those D istrict tax returns for which federal tax returns could be matched, District federal AGI was 98.7 percent of AGI on the IRS transactions file. ${ }^{24}$

## Personal exemption, deductions, tax rates

The District's adjusted gross income is reduced to taxable income by reductions for the larger of the standard or itemized deductions, and personal exemptions. A standard deduction of $\$ 2,000$ is available for Single, Head of Household, and M arried Filing Jointly filers, and $\$ 1,000$ each for M arried Filing Separately or M arried Filing Combined Separate. Alternatively, the taxpayer may take itemized deductions shown on their federal return (Schedule A) with add-backs for deductions taken during periods of nonresidence, and deductions for District taxes. As noted earlier, the District's income tax has three income brackets, and three marginal tax rates (Figure I-5).

Additional personal exemptions are accorded for those over age 65 and blind. Figure I-6 compares the tax entry points for the federal income tax and state income taxes for the District, M aryland, and Virginia to the federal poverty level for house holds of size one to nine for 1995. The District, M aryland, and Virginia each has gross tax entry points at below one-half of the federal poverty line. It is evident that the federal income tax generally does not tax persons or households below the poverty line.

| Figure I-5 |  |
| :--- | :--- |
|  | D.C. Income Tax Rate Schedule, Form D-40 |
| Taxable Income | Tax Rate |
| Less than $\$ 10,000$ | $6 \%$ of Taxable Income |
| $\$ 10,000-\$ 20,000$ | $\$ 600+8 \%$ of excess over $\$ 10,000$ |
| M ore than $\$ 20,000$ | $\$ 1,400+9.5 \%$ of excess over $\$ 20,000$ |

For a District couple of three (husband, wife, and one child) with earnings at the poverty threshold of $\$ 12,267$, the couple's taxable income would be $\$ 6,157$ ( $\$ 12,267$ minus the standard deduction of $\$ 2,000$, minus $\$ 4,110$ for the three exemptions ( 3 x $\$ 1,370)$ ). Gross tax due would be $\$ 369$ (.06 x taxable income of $\$ 5,157$ ); however, the Low Income C redit for 1996 for this family (joint return with three exemptions) is $\$ 494$ and thus eliminates taxation of the family at the poverty line. If the husband worked full-time to earn the $\$ 12,267$, he would be subject to District withholding and have to file a return to obtain the refund due to the Low IncomeCredit. ${ }^{25}$

M aryland alleviates the potential problem of taxing low-wage workers below the poverty line in two ways. First, $M$ aryland has a $\$ 11,800$ minimum federal AGI filing requirement for joint returns, (\$6,550 for Single returns, and \$8,450 for Head of H ousehold). Second, the $M$ aryland personal income tax does not tax incomes that are less than the poverty line (the so-called poverty income deduction). For the above family of three in 1996, earnings below the poverty income level of $\$ 12,980$ are subtracted from federal adjusted gross income before the standard deduction and exemptions are deducted from federal AGI. Thus, in M aryland the family of three would be tax-free since income reduced by earnings would be further reduced by the standard deduction and the value of personal exemptions. Finally, since the local county income tax is a percentage of the state ( 60 percent in M ontgomery and Prince George's counties), the household would not pay a local income tax.

Virginia partially addresses the problem of taxing households with income at or below the poverty line through a rate schedule with four brackets: 1) 2 percent for taxable incomes under $\$ 3,000 ; 2$ ) 3 percent for taxable incomes of $\$ 3,000-\$ 5,000 ; 3$ ) 5 percent for taxable incomes of $\$ 5,000-\$ 17,000$; and 4$) 5.75$ percent for incomes in excess of $\$ 17,000$. Thus, for a family of three (husband, wife, one child) in Virginia earning the poverty line of $\$ 12,267$, the first $\$ 7,400$ of earnings is tax-free (adjusted gross income is reduced by the $\$ 5,000$ standard deduction plus the exemptions of $\$ 2,400(3 \times \$ 800)$ ). The taxable income of $\$ 4,867$ is subject to a tax of $\$ 116.01$ (2 percent of the first $\$ 3,000$ or $\$ 60$ plus 3 percent of the remaining $\$ 1,867$ or $\$ 56.01$ ).

| Figure I-6 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household Size |  | Federal Poverty Line and Gross Tax Entry Points Federal, D.C., Md., and Va. Individual Income Taxes |  |  |  |  |  | 1996 Va Tax |  |
|  |  | 1995 Federal Tax |  | 1995 D.C. Tax |  | 1996 Md. Tax |  |  |  |
|  |  | Entry Point | Percent of Poverty Line | Entry Point | Percent of Poverty Line | Entry Point | Percent of Poverty Line | Entry Point | Percent of Poverty Line |
| 1 | \$7,763 | \$6,400 | 82.4\% | \$2,370 | 30.5\% | \$2,700 | 34.8\% | \$3,800 | 49.0\% |
| 2 | 10,504 | 11,500 | 109.5 | 4,740 | 45.1 | 5,400 | 51.4 | 6,600 | 62.8 |
| 3 | 12,267 | 14,000 | 114.1 | 6,110 | 49.8 | 6,600 | 53.8 | 7,400 | 60.3 |
| 4 | 15,455 | 16,500 | 106.8 | 7,480 | 48.4 | 7,800 | 50.5 | 8,200 | 53.1 |
| 5 | 18,330 | 19,000 | 103.7 | 8,850 | 48.3 | 9,000 | 49.1 | 9,000 | 49.1 |
| 6 | 20,965 | 21,500 | 102.6 | 10,220 | 48.7 | 10,200 | 48.7 | 9,800 | 46.7 |
| 7 | 23,482 | 24,000 | 102.2 | 11,590 | 49.4 | 11,400 | 48.5 | 10,600 | 45.1 |
| 8 | 25,818 | 26,500 | 102.6 | 12,960 | 50.2 | 12,600 | 48.8 | 11,400 | 44.2 |
| 9 | 25,597 | 29,000 | 113.3 | 14,330 | 56.0 | 13,800 | 53.9 | 12,200 | 47.7 |

## Credits against the income tax

As already noted, D.C. tax law accords low-income earners a Low Income Tax Credit. The District provides four types of tax credits.

- Individual income taxes required and actually paid to other jurisdictions. In 1995, 3,945 D.C. taxpayers took an average credit of $\$ 3,626$ for income taxes paid to other jurisdictions; the total value of the credit (revenue cost) in 1995 was $\$ 14.3$ million.
- A child and dependent care credit equal to 32 percent of the federal credit. In 1995, 15,337 D.C. taxpayers took an average child care credit of \$190, and the preponderance ( 72 percent) were taken by H ead of H ousehold filers; the total value of the credit (revenue cost) in 1995 was $\$ 2.9$ million.
- The low-income credit. In 1995, 11,099 D.C. taxpayers took an average lowincome credit of $\$ 276$; the total value of the credit (revenue cost) in 1995 was $\$ 3.1$ million.
- A property tax credit available to homeowners and renters living in taxable real estate with gross income less than $\$ 20,000 .{ }^{26}$ In 1995, 18,249 D.C. taxpayers took an average property tax credit of $\$ 370$; the total value of the credit (revenue cost) in 1995 was $\$ 6.8$ million.


## Progressivity of District income taxes: 1989 compared to 1995

While the primary purpose of any revenue source is to finance needed public services, the individual income tax also is used by many jurisdictions to achieve distributional objectives. Tax progression is usually defined to mean that the rate of taxation should rise with ability to pay. While there are a variety of ways to measure progres sion, perhaps the most intuitive is to examine across income classes the ratio of net taxes to as broad a measure of income as possible. This study measures ability to pay using federal adjusted gross income as reported to the District. Figure I-7 shows the number of taxpayers for 1989 and 1995 and three representative taxpayers in each income interval. For example, in the fourth income interval ( $\$ 10,000-\$ 15,000$ ), there were 26,805 District taxpayers (aggregated to one filing unit). The third and fourth columns display the effective tax rate of the 25th percentile of the distribution of all 26,805 taxpayers, ordered from lowest to highest effective tax rate. That tax return showed an effective tax rate of 1.6 percent in 1995, and 2.3 percent in 1989.

In 1995, there were 364 taxpayers with federal adjusted gross income of $\$ 500,000$ or more and effective tax rates of less than 5 percent. Inspection of this high-income, low effective-tax-rate group indicates that some of the taxpayers were in the District less than a year, and many had very large aggregate subtractions and itemized deductions. Unfortunately, the District does not enter the underlying detail of subtractions and itemized deductions into its tax database, so it is not pos-
Figure I-7

sible to ascertain the economic reality of the reductions in taxable income without examining individual returns.

The opportunity to deduct District taxes from the federal individual income taxes softens the impact of the District tax. Since federal marginal tax rates rise with income, it follows that federal deductibility is more valuable to higher-income taxpayers. It also follows that federal deductibility makes the overall impact of the D istrict income tax less progressive. ${ }^{27}$

Figure I-8 shows the pattern of the D istrict's effective tax rates for taxpayers who itemized in 1995 and for whom federal income tax information was matched. The marginal federal tax rate is approximated by the ratio of federal income taxes to federal adjusted gross income. Columns to the right show the effective tax rate with and without federal offset. For example, the $\$ 35,000-\$ 45,000$ income interval has 9,593 taxpayers. The first quartile effective tax rate is 3.8 percent, but after federal offset it is 3.5 percent. M oving across we note that the median District federal effective tax rate with federal offset is lower than the rate that does not take federal deductibility into account. (One can also note, by comparing Figure I-7 and Figure I-8, that itemizers in 1995 often had lower effective tax rates than all taxpayers. $)^{28}$

## Comparison of tax burdens with Maryland and Virginia

Each year the 0 ffice of Tax and Revenue publishes a comparison of tax rates and burdens across all major revenue sources with the major neighboring $M$ aryland and Virginia counties. ${ }^{29}$ The methodology of the analysis is to construct four hypothetical couples at incomes of $\$ 25,000, \$ 50,000, \$ 75,000$, and $\$ 100,000$. The composition of income between husband and wife, the nature of their transportation methods, and housing choices are chosen to represent realistic demographic groups. Figure I-9 displays the analysis using 1996 tax law. The top panel shows the estimated personal income tax burdens in dollars, and the bottom panel restates the District's personal income tax burden as a percentage of the suburban personal income tax burdens. For households with $\$ 25,000$ in income, the D istrict's personal income tax burden is 126 percent of the personal income tax burden in M ontgomery and Prince George's counties, and 189 percent of the personal income tax burden in various Virginia counties. The high relative tax burdens reappear for the $\$ 100,000$ couples. According to the analysis, District tax burdens are reasonably competitive with suburban M aryland for incomes in the $\$ 50,000$ and $\$ 75,000$ levels.

Theeconomic and demographic situation

## Census data on resident population: 1969-1994

As is well known, the resident population of the District has declined for a long period of time. The D istrict's 1994 population was 75 percent of its 1969 level.
1995 D.C. Itemizers: Effective Tax Rates With and Without Federal Offset
75th Percentile
0.0\%
 $\stackrel{m}{N} \stackrel{\infty}{i}$ in 4.7 ஸ゙ 6.0 6.1 6.2 $\circ$莫
5
3
3 0.0\%
 2.5
3.0 4.1 4.1
5.2 6.1
6.8 7.1
7.4
7.5
7.9
8.7 Without With

$0 \%$
 ) -


 $+$
-
AGI Class

| AGI Class | Number of <br> Itemizes | $c$ <br> Without <br> Offset | With <br> Offset |
| :--- | ---: | ---: | :---: |
| $\$ \mathbf{N 0 - 1 , 5 0 0}$ | 104 | $0.0 \%$ | $0.0 \%$ |
| $1,500-5,000$ | 303 | 0.0 | 0.0 |
| $5,000-10,000$ | 1,018 | 0.0 | 0.0 |
| $10,000-15,000$ | 2,224 | 0.0 | 0.0 |
| $15,000-20,000$ | 3,409 | 0.9 | 0.9 |
| $20,000-25,000$ | 4,541 | 1.9 | 1.8 |
| $25,000-35,000$ | 10,220 | 2.8 | 2.7 |
| $35,000-45,000$ | 9,593 | 3.8 | 3.5 |
| $45,000-55,000$ | 8,037 | 4.7 | 4.3 |
| $55,000-65,000$ | 6,309 | 5.2 | 4.6 |
| $65,000-75,000$ | 4,999 | 5.5 | 4.8 |
| $75,000-100,000$ | 7,698 | 5.9 | 5.0 |
| $100,000-500,000$ | 10,919 | 6.4 | 5.2 |
| $500,000+$ | 581 | 5.1 | 3.6 |

Source Author's calculations based on D.C. tax data files

| Figure l-9 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Personal Income Tax Burden in 1996 D.C. and Neighboring Jurisdictions |  |  |  |  |
| Taxes | \$25,000 | \$50,000 | \$75,000 | \$100,000 |
| District of C olumbia | \$1,096 | \$2,695 | \$4,723 | \$6,842 |
| M ontgomery County | 870 | 2,890 | 4,674 | 6,470 |
| Prince George's C ounty | 870 | 2,870 | 4,642 | 6,434 |
| City of Alexandria | 580 | 1,796 | 2,997 | 4,269 |
| Arlington County | 580 | 1,808 | 3,014 | 4,292 |
| Fairfax County | 580 | 1,792 | 2,990 | 4,460 |
| D.C. Personal Income Tax |  |  |  |  |
| D istrict of C olumbia | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| M ontgomery County | 126.0 | 93.3 | 101.0 | 105.7 |
| Prince George's C ounty | 126.0 | 93.9 | 101.7 | 106.3 |
| City of Alexandria | 189.0 | 150.1 | 157.6 | 160.3 |
| Arlington County | 189.0 | 149.1 | 156.7 | 159.4 |
| Fairfax County | 189.0 | 150.4 | 158.0 | 153.4 |
| Source: D.C O Office of T ax and | Revenue. |  |  |  |

A way to examine demographic trends is to examine the number of federal tax returns filed annually in the District, and those filed in neighboring states ( M aryland and Virginia). The residence concept is the mailing address of the federal individual income taxpayer, and while the address may reflect the location of an accountant or tax attorney, over time the numbers are indicative of broad trends. Figure I-10 indicates that, overall, M aryland and Virginia experienced small increases in the number of federal tax returns filed from 1990 to 1995 (increases of under 5 percent) while the D istrict's 1995 count of federal tax returns was about 86 percent of its 1990 level.

## Employment and security administration tabulations of wages Place of work

While resident population and federal tax returns show that the District is experiencing a consistent decline in residents and taxpayers, total wages paid in the


District - or measured by the place of work of the employee receiving the wages - have been rising steadily. The Bureau of Economic Analysis (BEA) estimates that from 1969 to 1994, total wages paid in the District grew from about $\$ 5$ billion to about $\$ 27$ billion. Figure $\mathrm{I}-11$ displays the ratio of the BEA estimate of resident earnings (wages, salaries, and self-employment earnings, but not including capital income such as rent, royalties, and dividends and interest) to that of the total earned in the District. District residents' share of those earnings from employment fell from about 46 percent in 1969 to about 36 percent in 1995.

While the District experienced growth in earnings by place of work, it did not do as well as any of its suburban neighbors. If capital income is added to the above earnings concept, we see that the economic position of the suburbs grew far faster on an absolute basis (Figure I-12) than did their population. The Fairfax suburban area's 1994 resident wage and capital income was better than 1,200 percent of the 1969 level, while the District's resident wage and capital income level was slightly over 400 percent of its 1969 level.

## Figure I-II

## Estimated Earnings of D.C. Residents as Percent of Total Earnings in D.C.



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Place of residence

Figure I-13 shows the composition of the District's resident income base, again using BEA concepts, and it is evident that capital income has become somewhat more important and net earnings somewhat less important. Transfers (social security, AFDC, M edicaid, food stamps, public assistance, etc.) are shown as a percentage of nontransfer income, and they have grown from 15 percent to about 28 percent. In one sense this suggests a combination of greater generosity in transfer payments as well as a greater tax burden on the nonpoor and the federal government to finance these transfers. Resident wage earners are also being asked to help finance larger and larger service demands by nonresident workers (commuters).

In terms of the starting point of calculating D istrict taxable income, the District's personal income tax base, as reflected on federal tax returns, has been stuck at the $\$ 10$ bil-lion- $\$ 10.5$ billion level for the past seven years. Figure I-14 shows the total amount of AGI in Virginia and M aryland returns compared to the District, with 1990 set at 100


Source: U.S. D epartment of Commerce, Bureau of Economic Analysis.
percent. W hile the D istrict's total AGI rose less than 5 percent in the 1990-1995 period, M aryland's total AGI grew by almost 20 percent, and Virginia's AGI grew by 25 percent.

## Employment and wages of District resident and NONRESIDENT WORKERS: 1980-1990

In 1990, 724,412 individuals were employed in the District, or 11.8 percent more than the 650,137 employed in 1980, and 43 percent more than the 504,611 employed in 1970. As noted above, this employment growth contrasts markedly with the resident population decline of the D istrict. In 1980, the federal government was the single largest employer of District residents; however, in 1990, the service industry was the single largest industry employing D istrict residents. During that decade, federal employment of District residents dropped 32 percent (Figure I-15). O verall, federal employment in the District was 212,000 in 1982 and 1990, but fell to 204,000 in 1994, and to


Source: U.S. Department of C ommerce, Bureau of Economic Analysis.

189,000 in 1998. Federal employment in D.C. of M ontgomery County residents actually grew, but federal employment in the District fell among Prince George's County residents. N ot only did service industry employment grow strongly for District residents ( 20 percent across the decade), it grew by 49 percent for Prince George's C ounty residents, and 59 percent for $M$ ontgomery C ounty residents.

District residents have generally held lower-paying federal jobs in the District than their commuting counterparts; this was also true in the service industry in both 1980 and 1990.

## Distribution of federal AGI over time: 1989-1995

W hile the D istrict's aggregate federal AGI has been stagnant, which implies stagnant District individual income tax revenues to the extent the two bases move together, an

examination of the composition of the District's federal income tax base shows that the number of returns in the $\$ 0-\$ 50,000 \mathrm{AGI}$ classes has declined substantially, while the number of returns in the $\$ 50,000$ or above AGI brackets has grown (Figurel-16). The amount of AGI attributable to the two lowest income classes has also fallen.

If we compare the number of returns in the lower AGI groupings in the District to those of $M$ aryland and Virginia, we see that the number of the District's federal returns fell more dramatically than those of M aryland and Virginia. Also, the number of returns in the $\$ 50,000$ and above classes grew more slowly in the District than those in M aryland or Virginia (Figures I-17, I-18, and I-19).

## M igration into and out of the Disrict of Columbia:

## Evidence from federal tax returns

As demographers are aware, change in an area's population is the net effect of natural increase, or in-migration, as well as out-migration. Each year the IRS' Statistics of

| Figure l-15 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Resident Employment Levels and Wages Major D.C. Industries, 1980 and 1990 |  |  |  |  |
| Area of Residence 1 | 1980 Jobs | 1990 Jobs | 1980 W ages | 1990 W ages |
| Service Industry |  |  |  |  |
| D istrict of C olumbia | 68,207 | 81,921 | \$12,262 | \$26,731 |
| Prince George's C ounty | 24,539 | 36,567 | 12,889 | 24,967 |
| M ontgomery C ounty | 22,877 | 36,399 | 21,195 | 45,044 |
| Fairfax County | 17,772 | 26,683 | 20,288 | 42,797 |
| Arlington County | 12,804 | 16,183 | 14,500 | 34,204 |
| City of Alexandria | 6,480 | 8,285 | 16,129 | 40,575 |
| Federal Civilian Government |  |  |  |  |
| D istrict of Columbia | 70,775 | 48,342 | \$17,139 | \$30,355 |
| M ontgomery C ounty | 25,830 | 27,284 | 27,173 | 44,259 |
| Prince G eorge's C ounty | 51,336 | 49,394 | 17,332 | 30,106 |
| Fairfax County | 39,629 | 39,899 | 26,192 | 45,185 |
| Arlington County | 15,523 | 14,112 | 22,264 | 40,294 |
| City of Alexandria | 10,689 | 8,592 | 21,109 | 38,804 |
| Prince W illiam/M anassas | as 5,548 | 7,069 | 22,263 | 40,086 |
| State and Local G overnment |  |  |  |  |
| D istrict of C olumbia | 25,492 | 29,643 | \$14,204 | \$25,957 |
| Prince George's County | 14,596 | 17,613 | 18,037 | 30,624 |
| M ontgomery C ounty | 4,314 | 4,350 | 20,211 | 36,273 |
| Arlington County | 1,277 | 1,009 | 17,644 | 33,307 |
| Source: U.S. Census Bureau. |  |  |  |  |

Income Division analyzes the location of federal taxpayers in terms of their prior year's mailing address, and compares the number of returns to the prior year. Also, this data permits the identification of the origin and destination, in terms of state and county, of such movers. 30

Figure I-20 shows that by the mid-1980s, the number of federal taxpayers moving out of the District grew dramatically - from about 21,000 to about 28,000 per year. At the same time, the number of federal taxpayers moving into the District fell

## Figure l-16

## D.C. Federal Tax Returns 1989-1995 (1989 = 100\%)




off from a high of 24,500 in 1980-1981 to less than 21,000 in 1990-1991 and slightly more than 20,000 in 1995-1996. The difference between these two lines is the net out-migration.

Singles and couples have moved in, and larger households have moved out (Figure I-21). Since 1985-1986, the number of exemptions per return by filers moving into the District has fallen to around 1.4-1.5 exemptions per return, while the number of exemptions per return of out-migrants has risen to as high as 1.75 and closed at 1.7 in 1995.

These large flows into and out of the $D$ istrict have personal income tax administration implications. With about 26,000 federal tax returns departing with 1.7 exemptions per return, there are about 44,200 annual out-migrants. If we add to this number the 28,000 in-migrants (computed by multiplying the 20,000 returns by the average 1.4 exemptions per return), 72,200 out of 550,500 residents move in or move out each year. The gross turnover rate of 13 percent is well above the U.S. average of the population changing counties each year.

## Figure l-18



Figure I-22 displays the net of total exemptions on returns migrating in and migrating out. Since 1985-1986 the flow has been a net out-migration. It has been stable in the 1990s at about 15,000 per year. On a five-year basis that means that, on net, 75,000 persons reflected on federal tax returns have left the D istrict.

Interestingly, if we examine the AGI per tax return of migrants, we see that outmigrants have slightly higher average AGI than in-migrants. The difference in 1995-1996 was on the order of $\$ 5,000$ (Figurel-23).

## Origins and destinations of migrants

The same federal tax return information from the IRS allows a more detailed geographic identification of the origin and destination of migrants. Focusing just on the number of returns, we see that Prince George's C ounty historically has been the largest source of people moving into the District, on the order of $3,500-4,000$ annually in the past five years, while $M$ ontgomery County lost about 2,000 movers annually into the District each year. M ovement from subur-

ban Virginia into the District was on the order of 1,000 per year (Figures I-24 and I-25).

For the last eight years, the D istrict has lost annually about 7,000 federal tax filers to Prince George's County, and 3,000-4,000 to M ontgomery County. M igration from the District to suburban Virginia was no more than 2,000 per year to Arlington C ounty (which has been rising), and about 1,600 per year to Fairfax County. This implies that the substantial population growth in Fairfax County is not due to the District's out-migration but to other factors such as Fairfax C ounty's gain in residents from outside the region (Figures I-26 and I-27).

## M overs and stayers: evidence from Distrid tax returns

Another way to examine the issue of the stability of the District's economy and its tax base is to examine the same taxpayers over time. As a consequence of having

access to two years of D istrict tax return data (1989 and 1995), it is possible to focus more completely on the nature of District in- and out-migration, and in particular the areas which seem to have experienced the greatest turnover in D istrict taxpayers.

In 1989, approximately 310,000 District tax returns were filed, and in 1995, approximately 251,000 returns were filed. Figure I-28 compares the characteristics of movers and stayers.

An examination of the net taxable incomes of stayers vs. movers into the D istrict in 1995 shows that the stayers generally tend to have higher income. The median net taxable income of singles present in 1989 and 1995 was $\$ 20,585$ compared to $\$ 13,158$ of those moving into the District. ${ }^{31}$ This pattern is true across all filing types. N ote also that the mean incomes are considerably greater than the medians, indicating that there are some very high-income filers (Figurel-29).

## TAXES NOT PAID DUE TO OUT-MIGRATION

The out-migration of significant numbers of District residents over time undoubtedly has affected the revenue base of the $D$ istrict. The data from federal tax returns col-

lected by the IRS indicates that, on average, out-migrants from the District had higher income than in-migrants, and that about 5,000 per year, on net, have been leaving. Given that the average AGI of those leaving has been about $\$ 34,000$, the question arises of how much revenue has been lost from this net migration. The average tax payment attributable to taxpayers in the $\$ 25,000-\$ 35,000$ bracket is roughly $\$ 2,000$, with about 5,000 net returns leaving with an average AGI of $\$ 34,000$ (Figure I-30). We can make a first estimate of the revenue loss per year of the net out-migration: 5,000 taxpayers $\times \$ 2,000$ average taxes/taxpayer $=$ $\$ 10,000,000$ revenue lost.

A second approach to estimating the amount of revenues foregone due to the net out-migration of District residents is to examine the distribution of income of taxpayers in 1989 and 1995. The analysis is confined to taxpayers in 1989 and 1995 who had positive District taxes. Figure I-30 displays the distribution of taxpayers by federal AGI and compares the number of taxpayers in 1995 to the number of taxpayers in 1989 by federal AGI class. $O$ verall, there was a decline of 60,523 tax-

payers, with the decline occurring in the federal AGI classes from \$1,500 to $\$ 45,000$. H ad these 60,523 taxpayers remained and paid taxes comparable to those with the same average AGI in 1995, the District would have collected an additional $\$ 39,113,889$ in revenue. This compares to actual liabilities in 1995 of $\$ 556$ million or 7 percent.

N ote that this analysis assumes that the decline in tax returns by income class is due to out-migration; "departures" simply indicates that there were fewer returns in the income class in 1995 as compared to 1989. The number of tax returns grew in the higher brackets, especially the $\$ 100,000-\$ 500,000$ income class. This change could be due to in-migration as well as to better earnings for those who remained; their higher 1995 income put them in a higher income class in 1995 than in 1989.

## Moving and staying within the District: A zip code analysis

This study analyzes movement within the D istrict by examining tax filers who were present in 1989 and not present in 1995 (deemed to be out-migrants) and tax filers present in 1995 but not present in 1989 (deemed to be in-migrants). By taking the

ratio of those leaving by zip code to the total number of 1989 returns by zip code, and the ratio of those coming into the District by zip code compared to the number of returns by zip code in 1989, we can get some idea of the spatial variability in migration patterns (Figure I-31).

## Effect of crime on moving and staying in the District

A question arises about what might be the cause of the extreme variability observed in Figure I-31. The study of household location decisions typically focuses on housing demand, educational services, proximity to work and shopping, crime, and the price of foregone private consumption imposed by taxation. Recently, Nechyba and Strauss (1997) showed that location decisions, holding constant housing demand, and proximity to work and shopping, were quite sensitive to educational service quality as well as the level of crime in neighboring municipalities around Trenton, $\mathrm{N} . \mathrm{J}$. W ith regard to educational services, a 1 percent increase in educational services was associated with a 1.65 percent to 3.1 percent increase in the probability of moving to

## Figure l-24

Federal Returns Moving Into D.C. From Md. Montgomery and Prince George's Counties

that jurisdiction. The elasticity of locating in a municipality given differential violent crime rates varied from -0.1 to -0.4; a 1 percent increase in violent crime is associated with a 0.1 percent to 0.4 percent reduction in the probability of moving to that jurisdiction. ${ }^{32}$

Cullen and Levitt (1996) found with a sample of 80 cities and 1980 census data that each additional reported crime is associated with a one-person decline in city residents. They find that "... almost all of the crime related population decline is attributable to increased out-migration rather than a decrease in new arrivals to a city."33

To examine if differential crime in the District is associated with differential out-migration and in-migration over time, annual crime data were obtained from the District of C olumbia Police D epartment. These data, which are different types of crimes reported to the Police Department, were aggregated from census tracts to zip codes, and then matched to the number of tax returns by zip code. ${ }^{34}$

Since population changes are of particular interest, the statistical model estimated was of the following form:


Zip codes for which crime and tax returns in 1989 and 1995 could be matched showed that the average decline in number of tax returns per zip code was 3,256. Since the number of returns filed in 1989 generally exceeded the number of returns filed in 1995, we expect that as the number of crimes increased in 1995 compared to 1989, in a given zip code, that b should be negative, e.g., more crimes in an area compared to 1989 will "push out" taxpayers in 1995 compared to 1989 if outmigration is systematically related to crime.

Figure I-32 shows the statistical analysis results of different crimes. The first column shows the mean increase in crimes reported to D istrict police, 1995 compared to 1989, by zip code. 0 verall, there were 275.9 more crimes per zip code reported in 1995 than in 1989; there were 5.7 more rapes per zip code reported and so forth. The second column displays the estimated effect of one more reported crime on the number of taxpayers in a zip code, 1995 compared to 1989. Thus, one more overall

crime reported is associated with -2.7 fewer taxpayers in an average zip code in 1995 vs. 1989. The third column shows the probability that the associated effect is due to randomness; a value of 0.05 or smaller is extremely reliable. Finally, the fourth column shows the percentage of variation in the decline in taxpayers explained by the crime variable in question.

While there were not that many more rapes (5.7) reported in an average zip code in 1995 compared to 1989, the drop-off in taxpayers associated with one more rape is very large: 256.9. N ote also that 79 percent of the variation in the decline in number of taxpayers is explained by the increased number of rapes.

A second way to examine the effect of crime on the number of taxpayers is to take advantage of what we know. That is, we examine all 1989 taxpayers who were no longer present in the District in 1995. Equation 2 states the relationship between the growth in crime by zip code on the number of taxpayers per zip code absent in 1995. That is, we estimate the effect of the growth in crime per zip code on the number of taxpayers who actually left the District in an average zip code. Figurel-33 displays the

## Figure l-27


statistical analysis results. Because we are now predicting that more crime causes more taxpayers to leave, we expect that the effect of crime in this model will be positive.

We find, again, that increases in crime operate in the expected direction, and in statistically significant ways. O verall, an increase in one crime per zip code over the period 1989-1995 is associated with 5.3 taxpayers who are no longer in the District. This is about one departure per year or remarkably close to the results of Cullen and Levitt (1996). Again, one more rape is associated with a very large number of taxpayer departures (416.3), although the explanatory power is now lower than in the previous model (compare 79 percent above with 53 percent here).
(Returns Absent $\mathrm{in}_{1995}$ ) i'th zip code $=a+b\left(\right.$ Crime $_{1995}-$ Crime $\left._{1989}\right)$ i'th zip code (2)

| Figure l-28 |  |  |  |
| :---: | :---: | :---: | :---: |
| D.C. Tax Return Filing Characteristics of Movers Out of and Into the District Comparison of 1989 and 1995 |  |  |  |
| D.C. Filing Status | M overs Out of D.C. | M overs Into D.C. | Stayers |
| Single | 118,641 | 82,029 | 53,202 |
| H ead of H ousehold | 42,828 | 32,677 | 23,156 |
| $M$ arried Filing Jointly | 17,453 | 11,458 | 12,044 |
| M arried Filing Separately | 6,792 | 4,881 | 3,140 |
| M arried Combined Separate | 14,727 | 6,952 | 12,741 |
| D ependent T axpayer |  | 7,610 | 1,054 |
| T otal | 200,441 | 145,607 | 105,337 |

Source: Author's analysis of D.C. tax return files.

## Policy alternatives for the Distrid's individual incometax

The sluggish individual income tax revenues noted at the outset, and the District's financial crises warrant a critical review of policy alternatives. H owever, "reform" of the District's personal income tax rests on an definition of the "problem" that may not be universally accepted. M oving towards any of three goals of a good tax system outlined earlier (revenue adequacy, simplicity and administrability, and distributional fairness) can readily imply different policies for the personal income tax, and, depending on one's behavioral assumptions, different policies. M oreover, without an agreed-upon revenue target for the District's overall own-source taxes, and a well defined role for the personal income tax, reform can take on an overall tax cut or tax increase flavor.

The following sections will discuss how the District's personal income tax might be changed to achieve, separately, each of the three good tax system objectives.

## Enhancing the revenue productivity of <br> the District's individual income tax <br> Supply side approaches

Were the District to engage in significant tax reduction as a strategy to make the District a more attractive place to live in comparison to surrounding areas (as has been suggested by a variety of policymakers), it is unlikely that greater economic

## Figure I-29

## Incomes of New and Continuing D.C. Residents 1995 and 1989 Compared

| D.C. Filing/Resident Status | Mean 1995 Income | Median 1995 Income |
| :--- | :---: | :---: |
| Single |  |  |
| In-migrants | $\$ 19,399$ | $\$ 13,158$ |
| Stayers | 29,387 | 20,585 |
| H ead of H ousehold |  |  |
| In-migrants | 11,933 | 13,915 |
| Stayers | 17,159 |  |
| M arried Filing Jointly |  | 16,911 |
| $\quad$ In-migrants | 36,975 | 24,245 |
| Stayers | 54,266 | 16,413 |
| M arried Filing Separately |  | 20,386 |
| In-migrants | 26,613 |  |
| Stayers | 35,716 | 49,295 |
| M arried Filing Combined Separately |  | 62,199 |

Source: Author's analysis of D.C. tax return files.
growth in resident taxable incomes would occur quickly. The earlier analysis of BEA estimates of earnings by place of work showed that the District wages and selfemployment income have been growing, albeit at a slower pace than in most suburban areas. Some of those commuter earnings would become resident earnings because of tax cuts. Relocation decisions would take time as commuters would need to be convinced that the tax reductions were likely to remain in place.

M eanwhile, personal income tax would be lower because District residents also would benefit from low tax rates. Without unusual improvements in service productivity, balancing the budget would require curtailing services. Should educational services and police protection deteriorate through higher crime rates, it is likely that the tax reduction would not be offset through greater migration into the city. Indeed, it might be that during the initial adjustment period, matters could compound to the disadvantage of the District.

$$
686 t
$$

Distribution of Federal AGI and Average D.C. Taxes per Federal AGI Class

| Men | otal | Taxes Not Paid |
| :---: | :---: | :---: |
| 1995 Taxes |  | Due |

$$
\$ 0
$$

 100,000-500,000 11,499 500,000+ 874 267,095
Federal AGI \$0-1,500 $1,500-5,000$
$5,000-10,000$
$10,000-15,000$
$15,000-20,000$
$20,000-25,000$
$25,000-35,000$ 35,000-45,000 45,000-55,000 55,000-65,000 65,000-75,000

$$
50
$$

$$
\begin{array}{r}
7,344 \\
28,066 \\
36,857 \\
40,841 \\
34,381 \\
43,035
\end{array}
$$

$$
\begin{aligned}
& 43,035 \\
& 24,654
\end{aligned}
$$

$$
\begin{array}{r}
14,441 \\
9,480
\end{array}
$$

$$
\begin{aligned}
& 9,480 \\
& 6,546
\end{aligned}
$$

$$
\begin{gathered}
\text { Menn } \\
1989 \text { Taves }
\end{gathered}
$$

$$
\begin{array}{r}
\$ 319,828 \\
333,550 \\
3,219,048 \\
9,459,486 \\
17,293,683 \\
25,292,900 \\
\hline 57,117,159 \\
\hline 50,945,364 \\
\hline 42,782,319 \\
\hline 35,400,333 \\
\hline 30,600,115 \\
\hline 57,698,336 \\
\hline 175,123,800 \\
50,423,170 \\
\hline \$ 556,009,091
\end{array}
$$

$$
\begin{array}{r}
\text { 180,530 } \\
2,843,208
\end{array}
$$

10,110,628
8,916,195

$$
7,822,656
$$

3,441,360

## Figure l-31

## D.C. Out-Migrants and In-Migrants, by Zip Code, as Percent of 1989 Tax Returns

| Zip Code | O ut-M igrants | In-M igrants |
| :---: | :---: | :---: |
| 20001 | $72.3 \%$ | $42.2 \%$ |
| 20002 | 68.7 | 37.4 |
| 2003 | 66.3 | 43.5 |
| 20004 | 69.3 | 114.8 |
| 2005 | 69.2 | 61.3 |
| 20006 | 71.6 | 40.0 |
| 20007 | 63.3 | 52.7 |
| 20008 | 59.9 | 53.0 |
| 20009 | 68.3 | 61.7 |
| 20010 | 70.9 | 54.5 |
| 20011 | 63.2 | 38.6 |
| 20012 | 58.1 | 36.4 |
| 20015 | 54.8 | 42.2 |
| 20016 | 58.8 | 44.3 |
| 20017 | 61.8 | 36.8 |
| 2018 | 61.6 | 34.8 |
| 20019 | 66.6 | 35.2 |
| 20020 | 65.9 | 36.7 |
| 20024 | 59.6 | 35.8 |
| 20032 | 68.9 | 35.8 |
| 20036 | 63.5 | 56.0 |
| 20037 | 57.8 | 49.9 |

Source: Author's calculations based on D.C. tax data files.

## D istrict and federal tax filers: A puzzle and revenue opportunity

W hen the District obtains tax return information from the IRS under its information exchange agreement, it receives all federal tax returns filed with a D istrict mailing address. Analysis of data files with District tax return information indicates that about 50,000 District tax filers did not file federal tax returns (with District mailing addresses). A question arises as to whether those federal tax filers who used District of Columbia mailing addresses and who did not file D istrict tax returns do in fact owe D istrict incometax.

| Figure l-32 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Effects of Growth in Crime on Decline in D.C. Taxpayers 1989 and 1995 Data Compared by Zip Code |  |  |  |  |
|  | Mean of Crime | "Push" Effect on Taxpayers (1995 M inus 1989) | PValue | $\mathrm{R}^{\mathbf{2}}$ |
| Rape | 5.7 | -256.9 | 0.0001 | 0.7974 |
| Street robbery | 355.4 | -5.3 | 0.0603 | 0.1371 |
| Assault | 85.2 | -21.3 | 0.0003 | 0.4674 |
| Burglary other | 8.9 | -53.9 | 0.0034 | 0.3237 |
| Burglary home | 152.6 | -18.4 | 0.0037 | 0.3184 |
| Auto theft | 124.9 | -10.1 | 0.0047 | 0.3032 |
| T otal reported crimes | 275.9 | -2.7 | 0.0007 | 0.4009 |

Source: D.C. Police D epartment and author's analysis of D .C. tax data files.

Comparing the 1995 District and federal files by social security number showed the following results ( 14,034 very late federal filers are not included):

- 200,209 filed both District and federal tax returns
- 50,735 filed a D istrict tax return but did not file a federal tax return
- 51,405 did not file a District tax return but filed a federal tax return

W hile District tax information is not available for the federal taxpayers who did not file $D$ istrict returns, and for the very late $D$ istrict taxpayers, there is enough federal tax information to construct a simple District tax calculator based on federal filing status. Application of the calculator shows:

- the 51,404 taxpayers have a computed D istrict liability of $\$ 83.2$ million
- the 14,034 additional very late federal taxpayers have a computed District liability of $\$ 50.8$ million

Thus, if all of the 65,438 taxpayers are indeed subject to District tax, individual income tax liabilities for 1995 would be $\$ 134$ million or 24 percent higher.

Whether or not these taxpayers are legally subject to District income tax is beyond the scope of this study. As noted earlier, there are a variety of circumstances in which those with District mailing addresses are legally exempt from the District

| Figure l-33 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Effects of Growth in Crime on Number of D.C. Taxpayers Leaving D.C. 1989 and 1995 Data Compared by Zip Code |  |  |  |  |
|  | M ean of Crime | Number Who Left | PValue | $\mathrm{R}^{\mathbf{2}}$ |
| Rape | 5.7 | 416.3 | 0.0001 | 0.5298 |
| Street robbery | 355.4 | 15.8 | 0.0008 | 0.4463 |
| Assault | 85.2 | 41 | 0.0001 | 0.5995 |
| Burglary other | 8.9 | 121.1 | 0.001 | 0.3995 |
| Burglary home | 152.6 | 40.1 | 0.0001 | 0.5563 |
| Auto theft | 124.9 | 24.5 | 0.0001 | 0.556 |
| T otal reported crimes | - 275.9 | 5.3 | 0.0021 | 0.3388 |

Source: D.C. Police D epartment and author's analysis of D .C. tax data files.
personal income tax. These federal taxpayers may elect to have their federal tax returns mailed to their place of work (they may be residents of M aryland or Virginia) or mailed directly to their tax advisors. Some of these taxpayers may be congressional or embassy employees who are exempt. These possibilities aside, 65,438 is a large number, as is the computed potential liability of $\$ 134$ million, which is the outer bound of what might be collected under audit and compliance work. Presumably systematic investigation of these tax returns for District collection activity is worthy of consideration.

## Approaches to piggybacking the District's incometax

In O ctober 1972, the Congress enacted optional federal collection of state individual income taxes. ${ }^{35}$ U pon prospectively entering into an agreement with the Secretary of the Treasury, a "qualified" state would have its income taxes collected by the federal government in such a manner as if the taxes were imposed by the federal government. Supporters of the measure hoped that such a voluntary system would substantially simplify the efforts of taxpayers who were required under federal, state, and sometimes local law to maintain separate records because of the differences in information required by different income tax provisions.

D espite some obvious attractions, no state ever triggered the system, and in 1990, the provisions were eliminated from the Internal Revenue Code as part of an omnibus budget package that eliminated so-called "deadwood" provisions of the IRC.

In January 1997, President Clinton in his State of the Union message proposed that the Internal Revenue Service take over responsibility for collecting and administering the District's individual income and payroll taxes. This plan was part of his proposed replacement of the $\$ 660$ million annual "federal payment" to the District with federally provided services. Initially, the administration proposal provided for $\$ 15$ million in fiscal year 1998 start-up costs, and $\$ 25$ million a year in annual operating expenses for fiscal year 1999 and thereafter. Since the piggybacking provisions in the Internal Revenue C ode no longer were operative, actual implementation of the proposal would have required federal tax legislation. Subsequently, the proposal to have the District income tax piggybacked as contemplated in the 1972 legislation was dropped.

While actual federal collection no longer is being actively discussed, moving the District's income tax to greater conformity with the federal income tax has been recommended for a considerable period of time. The D istrict tax already uses much of the Internal Revenue Code. The starting point of any taxpayer's calculations is federal adjusted gross income as reported on his federal return, and many of the modifications rely on federal concepts. 36

We explore here several different adjustments to the District income tax: 1) piggybacking the District income tax as a percent of federal liability with the federal filing unit; 2) moving the District income tax to the federal filing unit while maintaining the District's three tax brackets and rates, exemption structure, and deduction structure; and 3) moving the District income tax to the federal filing unit, using the federal standard deduction and exemption amounts, and using the D istrict's three tax brackets and rates.

In the summer of 1997, C arol 0 'Cleireacain suggested replacing the District's individual income tax with a 28 percent surcharge on District liability along the lines of N orth D akota, Rhode Island, and Vermont. ${ }^{37}$ Figure I-34 displays the results of simulating the proposed 28 percent piggyback tax as a surcharge on federal liability as well as a revenue-neutral surcharge proposal. Several points about these simula tions are important to keep in mind. First, they are based on matched 1995 District and federal returns whose total District 1995 liability was $\$ 446$ million, well below total liability of $\$ 556$ million. As long as those not in this portion of the universe of D istrict returns are no different than the others whose federal returns were not available, using $\$ 446$ million as a benchmark is accurate. Second, because actual tax return data are available, the total revenue effects of any scenario are inherently more accurate than those estimated from published Statistics of Income tables because those necessarily aggregate across filing units and different marginal tax rates.

With these caveats in mind, note that the 28 percent surcharge on 1995 federal liability would yield only $\$ 339$ million from the same taxpayers or a 23.9 percent tax reduction. O 'C leireacain (1997) estimates with 1994 data that, overall, the 28

## Figure l-34

# Analysis of Piggybacking Proposals, Surcharge on Federal Tax 

| Tax Experiment | 1995 Liability |
| :--- | :--- |
| Base C ase | $\$ 446.5$ million |
| $28 \%$ Surcharge | $\$ 349.9$ million |
| $36.7 \%$ Surcharge (Revenue N eutral) | $\$ 446.5$ million |

Source: Author's calculations based on D.C. tax data files.
percent proposal would entail a 30 percent tax reduction, and that all taxpayers would receive a tax cut. 38

Examination of the distributional effects of these two proposals with micro-data indicates that the 28 percent and 36.7 percent surcharges would lower the vast majority of District taxpayer's taxes compared to what they actually paid in 1995. High-income taxpayers would experience significant increases in ther effective tax rates (and therefore actual tax payments since the comparison is being made to current law). Under the 28 percent surcharge, the 587 taxpayers with federal AGI over $\$ 500,000$ for whom federal returns were available for surcharge analysis, the median tax rate in 1995 was 8 percent (Figurel-35). This is below the statutory rate of 9.5 percent because the value of exemptions and deductions reduce the liability below this theoretical maximum. Imposition of a 28 percent surcharge on high-incometaxpayers would create a higher median effective tax rate of 8.7 percent, or a 7.9 percent increase in effective tax rate (and actual tax dollars). Taxpayers whose effective tax rate was in the 75th percentile would experience an increase in effective tax rate from 8.7 percent to 9.3 percent.

Figurel-36 displays the distributional effects of the 36.7 percent surcharge on federal tax liabilities that is revenue neutral across those taxpayers for whom both 1995 D istrict and federal tax returns were available. It is evident that the taxpayers in the highest income class will experience very substantial tax increases as a result of this form of piggybacking. N ote that the highest income taxpayers, whose effective tax rate was in the 75 th percentile, would experience an effective tax rate of 12 percent, or well above the current-law 9.5 percent top marginal tax rate.

## Administrative simplification of <br> the District's individual income tax

A second approach to tying the District's personal income tax more closely to the federal personal income tax is to eliminate the various subtractions accorded
Effect of a 28 Percent Federal Surcharge on 1995 D.C. Tax Rates

| Federal AGI Class | Number of Taxpayers | 25th Percentile |  |  | Median |  |  | 75th Percentile |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | $\begin{gathered} 28 \% \\ \text { Surcharge } \\ \hline \end{gathered}$ | Percent Change | $\begin{aligned} & 1995 \\ & \text { Lan } \\ & \hline \end{aligned}$ | $\begin{gathered} 28 \% \\ \text { Surcharge } \\ \hline \end{gathered}$ | Percent Change | $\begin{aligned} & 1995 \\ & \text { Law } \\ & \hline \end{aligned}$ | $\begin{gathered} 28 \% \\ \text { Surcharge } \\ \hline \end{gathered}$ | Percent Change |
| \$0-1,500 | 3,078 | 0.0\% | 0.0\% | -92.0\% | 0.0\% | 0.0\% | -59.0\% | 0.0\% | 0.0\% | -39.0\% |
| 1,500-5,000 | 10,987 | 0.0 | 0.0 | -100.0 | 0.0 | 0.0 | -100.0 | 0.5 | 0.0 | -33.0 |
| 5,000-10,000 | 18,928 | 0.0 | 0.0 | -100.0 | 1.2 | 0.0 | -75.0 | 3.3 | 1.1 | -59.0 |
| 10,000-15,000 | 22,141 | 1.6 | 0.1 | -83.0 | 3.0 | 1.2 | -57.0 | 4.2 | 2.0 | -50.0 |
| 15,000-20,000 | 22,508 | 2.8 | 1.0 | -66.0 | 3.8 | 1.9 | -50.0 | 5.0 | 2.6 | -45.0 |
| 20,000-25,000 | 21,749 | 3.5 | 1.6 | -59.0 | 4.7 | 2.4 | -49.0 | 5.8 | 3.0 | -46.0 |
| 25,000-35,000 | 32,030 | 4.2 | 2.2 | -54.0 | 5.6 | 2.9 | -50.0 | 6.5 | 3.3 | -45.0 |
| 35,000-45,000 | 19,543 | 4.7 | 2.6 | -52.0 | 6.1 | 3.3 | -44.0 | 7.2 | 4.3 | -38.0 |
| 45,000-55,000 | 12,421 | 5.1 | 2.9 | -49.0 | 6.4 | 3.8 | -40.0 | 7.5 | 4.9 | -34.0 |
| 55,000-65,000 | 8,190 | 5.4 | 3.2 | -46.0 | 6.5 | 4.1 | -37.0 | 7.5 | 5.1 | -31.0 |
| 65,000-75,000 | 5,895 | 5.6 | 3.5 | -43.0 | 6.6 | 4.4 | -35.0 | 7.6 | 5.3 | -29.0 |
| 75,000-100,000 | 8,543 | 5.9 | 3.8 | -40.0 | 6.8 | 4.7 | -33.0 | 7.6 | 5.5 | -25.0 |
| 100,000-500,000 | 11,248 | 6.4 | 4.8 | -32.0 | 7.3 | 5.6 | -24.0 | 8.0 | 6.7 | -6.7 |
| 500,000+ | 587 | 4.8 | 7.9 | -2.3 | 8.0 | 8.7 | 7.9 | 8.7 | 9.3 | 67.0 |

Source Author's calculations based on D.C. tax data files
Effect of a 36.7 Percent Federal Surcharge on 1995 D.C. Tax Rates

| Federal | Number of Taxpayers | 25th Percentile |  |  | Median |  |  | 75th Percentile |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | $\begin{gathered} \hline 36.7 \% \\ \text { Surcharge } \end{gathered}$ | Percent Change | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | 36.7\% Surcharge | Percent Change | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | 36.7\% <br> Surcharge | Percent Change |
| \$0-1,500 | 3,078 | 0.0\% | 0.0\% | -89.0\% | 0.0\% | 0.0\% | -46.0\% | 0.0\% | 0.0\% | -20.0\% |
| 1,500-5,000 | 10,987 | 0.0 | 0.0 | -100.0 | 0.0 | 0.0 | -100.0 | 0.5 | 0.0 | -12.0 |
| 5,000-10,000 | 18,928 | 0.0 | 0.0 | -100.0 | 1.2 | 0.0 | -67.0 | 3.3 | 1.5 | -46.0 |
| 10,000-15,000 | 22,141 | 1.6 | 0.1 | -77.0 | 3.0 | 1.6 | -43.0 | 4.2 | 2.7 | -34.0 |
| 15,000-20,000 | 22,508 | 2.8 | 1.3 | -56.0 | 3.8 | 2.5 | -35.0 | 5.0 | 3.4 | -28.0 |
| 20,000-25,000 | 21,749 | 3.5 | 2.1 | -46.0 | 4.7 | 3.2 | -33.0 | 5.8 | 3.9 | -30.0 |
| 25,000-35,000 | 32,030 | 4.2 | 2.9 | -40.0 | 5.6 | 3.9 | -34.0 | 6.5 | 4.3 | -28.0 |
| 35,000-45,000 | 19,543 | 4.7 | 3.4 | -36.0 | 6.1 | 4.4 | -26.0 | 7.2 | 5.6 | -19.0 |
| 45,000-55,000 | 12,421 | 5.1 | 3.8 | -33.0 | 6.4 | 5.0 | -21.0 | 7.5 | 6.4 | -13.0 |
| 55,000-65,000 | 8,190 | 5.4 | 4.2 | -29.0 | 6.5 | 5.4 | -18.0 | 7.5 | 6.7 | -9.8 |
| 65,000-75,000 | 5,895 | 5.6 | 4.6 | -25.0 | 6.6 | 5.7 | -15.0 | 7.6 | 7.0 | -6.3 |
| 75,000-100,000 | -8,543 | 5.9 | 5.0 | -21.0 | 6.8 | 6.1 | -11.0 | 7.6 | 7.2 | -1.7 |
| 100,000-500,000 | 11,248 | 6.4 | 6.3 | -11.0 | 7.3 | 7.4 | -0.1 | 8.0 | 8.7 | 23.0 |
| 500,000+ | 587 | 4.8 | 10.0 | 28.0 | 8.0 | 11.0 | 42.0 | 8.7 | 12.0 | 119.0 |

Source Author's calculations based on D.C. tax data files
under District law (which amount to tax base reductions of $\$ 1$ billion in 1995), and require District taxpayers to file on the same basis as they do for federal returns. This would eliminate the M arried Filing Combined Separate class, and obligate them to file returns as M arried Filing Jointly. This would impose a marriage penalty as their current splitting arrangement is designed to overcome this. Revenues would predictably rise. The simulation model indicates this proposal would raise $\$ 658.4$ million of tax before credits (and $\$ 640.8$ million in tax after credits) compared to the base case of $\$ 556$ million from the same taxpayers at 1995 levels. The second simplification proposal of using federal instead of District standard deduction and exemption amounts, but continuing District brackets and tax rates, would create $\$ 572.9$ million in revenues compared to the base case of $\$ 556$ million.

Figure I-37 displays the effective tax rates by federal AGI class of the first simplification proposal:

- continued add-backs per District current law ${ }^{39}$
- mandatory District standard deduction amounts
- mandatory joint filing for M arried Combined Separately (imposes marriage penalty)
- District bracket amounts and rate structure
- continued provision of all District tax credits

Several things are immediately evident from this distributional analysis. First, the elimination of itemized deductions tightens up the distribution of effective tax rates among higher-income households. The first quartile of effective tax rates is no longer 3.3 percent; it is 7.9 percent. Second, the median and third quartile effective tax rates for the highest income households moves toward 9.5 percent, the theoretical maximum effective tax rate. If the additional revenue which this proposal generates is too large, given the revenue goals of the District, then the top marginal tax rate of 9.5 percent could be lowered and/or the brackets widened to account for the 8 percent inflation since their inception.

Figure I-38 displays the second simplification proposal:

- continued add backs per District current law (see endnote 39)
- mandatory federal standard deduction amounts (no itemizing); \$3,900 for Single Taxpayers, $\$ 6,500$ for Joint Returns, $\$ 5,750$ for H eads of Household, \$3,275 for M arried Filing Separately
- federal personal exemption amounts of $\$ 2,500$
- mandatory joint filing for M arried Combined Separately (imposes marriage penalty)
(Federal Filing Unit, Mandatory D.C. Standard Deduction and Exemption Amounts, and D.C. Rate Structure)
75th Percentile
Tax Rate
Current Proposal
$0.0 \%$

TaxRate - Cumate: $\square$ $\square$ $\square$ 0 か

Proposal

Median
Tax Rate
Law
$0.0 \%$
0.0
1.4
3.0
3.8
4.6
5.4
6.0
6.2
$\stackrel{\rightharpoonup}{6}$
6.5
$\stackrel{\sim}{n} \stackrel{m}{n}$

$$
\begin{gathered}
\text { m} \\
\text { m}
\end{gathered}
$$


Source Author's calculations based on D.C. tax data files
Figure l-38

## Distributional Effects of Replacing D.C. Income Tax With Simplified Tax 1995 Federal Taxpayers with D.C. Returns <br> (Federal Filing Unit and Mandatory Federal Standard Deduction and Exemption Amounts)

| 75th Percentile <br> Tax Rate |
| :---: |
| Current |

Law Proposal

Ô


O웅아

| 25th Percentile |
| :--- |
| Tax Rate |
| $\begin{array}{c}\text { Current } \\ \text { Law }\end{array}$ Proposal |

$0.0 \%$
0.0
0.0
0.0
0.0
0.0
1.5
3.9
5.4
6.1
6.6
7.1
7.8
7.8
O̊ O O O O

| $\begin{array}{c}\text { Federal } \\ \text { AGI Class }\end{array}$ | $\begin{array}{c}\text { Number of } \\ \text { Taxpayers }\end{array}$ |
| :---: | ---: |
| $\$ 00-1,500$ | 4,009 |
| $1,500-5,000$ | 14,538 |
| $5,000-10,000$ | 23,757 |
| $10,000-15,000$ | 26,805 |
| $15,000-20,000$ | 27,019 |
| $20,000-25,000$ | 25,987 |
| $25,000-35,000$ | 38,360 |
| $35,000-45,000$ | 23,376 |
| $45,000-55,000$ | 14,929 |
| $55,000-65,000$ | 9,922 |
| $65,000-75,000$ | 7,190 |
| $75,000-100,000$ | 10,701 |
| $100,000-500,000$ | 15,204 |
| $500,000+$ | 1,040 |

Source Author's calculations based on D.C. tax data files

- District bracket amounts and rate structure
- continued provision of all D istrict tax credits

This simplification proposal is analogous to basing the District personal income tax on taxable federal income but with no itemization. It would achieve tax entry points of the federal income tax shown earlier in Figurel-5 (page 327). As with the above simplification proposal, the distribution of effective tax rates "tightens up" considerably, and the lower and moderate family incomes are more favorably treated than current law. The effective tax rates in federal AGI classes up to $\$ 45,000$ in Figure I-37 are lower than the effective tax rates under current law. Yet, overall, tax revenues are roughly comparable ( $\$ 572$ million) to the base case of $\$ 556$ million.

A second way to compare the effects of the alternative based on the federal filing unit and mandatory federal standard deduction and exemption amounts, is to look at representative dollar amounts of taxes due under 1995 law and this alternative. Figure I-39 makes such comparisons by filing unit. Panel A shows how the alternative would impact single taxpayers. O verall there are 117,060 single tax returns to analyze. For single taxpayers in the $\$ 35,000-\$ 45,000$ federal AGI class, the median tax payment under 1995 law was $\$ 2,621$. Under the proposal, the median tax payment would be slightly higher at $\$ 2,763$. Since there were 11,475 single taxpayers in the $\$ 35,000-\$ 45,000$ federal AGI class in 1995, this means that half of the single taxpayers had 1995 taxes due below $\$ 2,621$, and half had more than $\$ 2,621$ due; this is the definition of the median. Again, focusing on the $\$ 35,000-\$ 45,000$ federal AGI class, we see that onequarter of the taxpayers in that income class had tax payments below $\$ 2,163$, and three quarters of the taxpayers had tax payments above $\$ 2,163$. N ote that at the 25th percentile the tax payment rises to $\$ 2,516$ under the alternative tax scheme. Finally, the 75th percentile tax payment amount is $\$ 2,940$ under 1995 law, and $\$ 3,044$ under the alternative. Generally, the alterna tive narrows the variation in taxes due compared to 1995 law, primarily because it eliminates itemization. Differences remain based on adjustments permitted in getting to federal adjusted gross income.

The largest differences in tax payments occur for a relatively small number of very high-income taxpayers (federal AGI over $\$ 500,000$ ) in the Married Filing Separately category (Figure I-39, Panel C). O therwise, the movement in tax payments does not appear to be unacceptably large. It should be remembered that the alternative is being developed on the basis of revenue neutrality - total personal income taxes under the new system are the same as they were under the 1995 system. The advantages of this simplified system are far greater conformity to the federal individual income tax by virtue of relying on the same definition of the filing unit and a taxable income concept that can be taken directly from a federal return, including the same standard deduction and exemption amounts. This simplified
Distribution of Taxes under 1995 Law and Reform Alternative

| Due |
| ---: |
| Proposal |
| $\$ 2,037$ |
| 207 |
| 262 |
| 638 |
| 1,080 |
| 1,530 |
| 2,214 |
| 3,044 |
| 3,842 |
| 4,592 |
| 5,418 |
| 6,639 |
| 12,701 |
| 80,797 |

Median
TaxDue
1995 Law Proposal


25th Percentile

|  | Tax Due |  |
| :--- | :--- | :--- |
| Number of | 1995 |  |
| Taxpayers | Law |  |

$\$ 323$
28
90
388
814
1,260
1,754
2,516
3,141
3,807
4,471
5,487
7,953
44,764

$\begin{array}{r}\text { Number of } \\ \text { Taxpayers } \\ \hline 21,220 \\ 1,756 \\ 8,196 \\ 11,417 \\ 11,299 \\ 11,422 \\ 18,599 \\ 11,475 \\ 7,270 \\ 4,469 \\ 3,081 \\ 3,793 \\ 2,980 \\ 83 \\ \hline 17,060\end{array}$
Federal
AGI Class
$\$ 0-1,500$
$1,500-5,000$
$5,000-10000$
$10,000-15,000$
$15,000-20,000$
$20,000-25,000$
$25,000-35,000$
$35,000-45,000$
$45,000-55,000$
$55,000-65,000$
$65,000-75,000$
$75,000-100,000$
$100,000-500,000$
$500,000+$
Total
Panel B: Married Filing Jointly

| Federal AGI Class | Number of | 25th Percentile Tax Due |  | Median Tax Due |  | 75th PercentileTaxDue |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1995 | Proposal | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | Proposal | $\begin{aligned} & 1995 \\ & \text { Law } \end{aligned}$ | Proposal |
| \$0-1,500 | 6,449 | \$0 | \$1,493 | \$0 | \$3,395 | \$0 | \$5,937 |
| 1,500-5,000 | 7 | 0 | 171 | 0 | 717 | 108 | 2,430 |
| 5,000-10,000 | 34 | 22 | 527 | 221 | 1,071 | 331 | 2,285 |
| 10,000-15,000 | 625 | 242 | 54 | 433 | 118 | 511 | 199 |
| 15,000-20,000 | 1,757 | 385 | 230 | 564 | 374 | 732 | 516 |
| 20,000-25,000 | 1,994 | 579 | 539 | 838 | 746 | 1,058 | 914 |
| 25,000-35,000 | 3,423 | 884 | 974 | 1,240 | 1,295 | 1,583 | 1,612 |
| 35,000-45,000 | 3,159 | 1,357 | 1,744 | 1,875 | 2,144 | 2,329 | 2,477 |
| 45,000-55,000 | 2,835 | 2,044 | 2,463 | 2,623 | 2,961 | 3,177 | 3,309 |
| 55,000-65,000 | 2,646 | 2,769 | 3,188 | 3,353 | 3,701 | 3,930 | 4,086 |
| 65,000-75,000 | 2,286 | 3,475 | 3,822 | 4,121 | 4,366 | 4,717 | 4,855 |
| 75,000-100,000 | 4,190 | 4,608 | 4,843 | 5,433 | 5,501 | 6,181 | 6,135 |
| 100,000-500,000 | 7,774 | 7,918 | 7,903 | 10,188 | 9,913 | 14,272 | 14,024 |
| 500,000+ | 481 | 40,322 | 43,598 | 49,676 | 53,633 | 66,194 | 75,758 |
| Total | 37,660 |  |  |  |  |  |  |


Panel D: Head of Household

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system could be administered on a single-page form, yet continue to provide existing District tax credits enacted for various other purposes. It is likely that compliance will be substantially enhanced as a result of this greater conformity. Unfortunately, the fiscal value of greater compliance cannot be readily estimated. The disadvantage of greater conformity is that some taxpayers who benefit from itemized deductions will find their tax payments rising.

## Dimensions of taxing Distrit commuters

The financial and political positions of capital cities are often precarious and controversial. W hen M argaret Thatcher became the Tory prime minister of Great Britain, she disbanded the Greater London C ouncil which had been dominated by the Labor Party for many years, and distributed its activities to 33 consolidated boroughs throughout metropolitan London. To make her point lasting, she sold the historic London County H all to a Japanese investor who turned it into a luxury hotel. M ost recently, Labor prime minister Tony Blair has created a London City Council with, for the first time, an elected mayor of London.

The C anadian solution to financing their national seat of government has been to create a two-tier system of local government and to empower the first tier of government to finance its provision of municipal services through a local property tax. The local tier includes narrowly defined 0 ttawa, and the second tier includes neighboring suburbs, all within $O$ ntario. C anadian law obligates the national government to make payments to the city of Ottawa (tier one) in lieu of property taxes, although the measure of the payment is the application of tier one millages to the negotiated value of all federal properties. C onflict over municipal finances is thus dealt with during negotiations over the market value of federal property.

H istorically, the District has had one of the highest ratios of nonresident workers to residents of any city in the U nited States. As of 1990, 493,716 nonresidents worked in the District; District residents who worked numbered 304,426 (including 67,694 who work outside the D istrict). ${ }^{40}$ T here are several different philosophic perspectives one might adopt about how a nation's capital should finance its services; however, it seems likely that most would agree that commuters who use municipal services at their place of work should, to the extent practical, pay for these services. M oreover, it seems likely that most would agree that the place of residence should recognize these tax payments through tax credits against resident income taxes. As already discussed, District, M aryland, and Virginia income taxes already recognize the wisdom of this for their residents. Also, some would argue (as the Virginia Supreme Court has) that the District already imposes a limited commuter tax on certain (but not all) nonresident unincorporated business income.

Were the H ome Rule Charter to be amended, within the more general context of rationalizing the District's finances to provide for a commuter tax on nonresident wages, what sort of dimensions might reason lead it to have?

Logic might suggest, for example, that the purpose of the nonresident wage tax be to defray the cost of municipal (as contrasted with educational or income redistribution) services used by nonresidents. Income redistribution among the states and the District is already accomplished by the federal government through the federal income tax, and payments to the states and District based on a redistributive formula that compares the ability to pay of each area to the national average. Recall that District residents receive AFDC, M edicaid benefits, and the District, like each of the states, is reimbursed for these income maintenance programs based on the federal reimbursement formula. ${ }^{41}$

Logic might also suggest that whatever tax on commuter wages and self-employment income is to be levied, it should be limited in rate to some fraction of the resident rate in recognition that commuters spend only a portion of their day at their place of work. Simplicity argues for the fraction to be $8 / 24$ or $1 / 3$, and simplicity further argues for a flat-rate commuter tax. Given that the District's income tax rate varies from 6 percent to 9.5 percent, we have an upper-bound, therefore, of 2 percent- 3.2 percent.

These two points suggest a variety of ways to devise a commuter tax from first principles. O ne might go through the District's budget and identify those services that are municipal, and determine the share to be borne by commuters. Let us suppose that $\$ 750$ million represents the total services which are enjoyed by residents and nonresident commuters. ${ }^{42}$ The $\$ 750$ million rough figure would include indirect costs associated with these activities. Given that commuters were 62 percent of those working and enjoying District municipal services, the total gross cost to be financed by commuters would be $\$ 465$ million.

The Bureau of Economic Analysis reported that District nonresident earnings were $\$ 21.9$ billion in 1994; C arol 0 'Cleireacain estimates nonresident wages to be $\$ 17.3$ billion. ${ }^{43}$ These figures suggest a range of commuter tax rates of 2.1 percent-2.7 percent ( $\$ 465$ million divided by $\$ 21.9$ billion and $\$ 465$ million divided by $\$ 17.3$ billion); multiplying these rates in recognition of the eight-hour work day then creates commuter tax rates of 0.7 percent- 0.9 percent ( 2.1 percent divided by 3 and 2.7 percent divided by 3 ) and revenues of $\$ 465$ divided by 3 equals $\$ 155$ million or roughly a quarter of 1995 resident income tax liabilities.

Undoubtedly, one can work with these assumptions and figures to reach different rates of commuter taxes. H owever, the above arithmetic indicates that a commuter tax of 0.5 percent- 1 percent on commuter wages and self-employment income can be derived in a logical way. H ow this relates to the existing tax on unincorporated business income and the exemption accorded to various professional services poses an interesting series of questions and is worthy of further research.

## Summary and conclusions

The purpose of this chapter has been to review the District's individual income tax in terms of structure and empirical characteristics in relation to observed popula tion shifts. Also, the chapter has sought to address how the District's income tax might be more strongly related to the federal personal income tax to aid tax administration and compliance.

The research has led to the following conclusions:

1. The decline in the District's population is similar in nature to what one observes in other major cities over a long period of time.
2. Relatively smaller filing units move into the District than leave, but the AGI of those moving in is higher than those leaving. However, the level of inmigration of taxpayers into the District has dropped off in the last five years. Prince George's and M ontgomery counties are the two largest destinations for migration out of the District. They also are the two largest sources of migrants into the D istrict.
3. Were the District to have retained those who left between 1989 and 1995, and had they paid average per return taxes for their household income class, 1995 District individual income tax liabilities would have been only $\$ 39$ million higher.
4. These large annual migrations of taxpayers undoubtedly create substantial administrative burdens on the District government in its administration of the individual income tax. Lapses in administration and procedures can have very dramatic revenue implications. Given that the federal government is not as large an employer as in the past - and employment has been spread out among smaller employers - there is likely greater difficulty in the withholding system to maintain records and revenues.
5. The continued growth in earnings by place of work in the District suggests a vibrant economy, but the stagnation of the individual income tax base and revenues suggests to this researcher that the D istrict may have more of a public service problem than a problem with taxes that are too high.
6. Statistical analysis of tax returns by zip code within the District demonstrates that increases in crime between 1989 and 1995 are associated with more taxpayers departing. The effects of another rape in a zip code are startlingly large on the decline in number of taxpayers.
7. The spectacular growth in Fairfax County probably has much to do with location of high-technology firms and a growing autonomous economy in the suburbs. This has been found in the Philadelphia metro area by researchers at the University of Pennsylvania. Long-term expansion of the Beltway and the
subway have probably encouraged this growth, as has the availability of more vacant land for development.
8. The research identified something on the order of $\$ 130$ million in potential additional revenues that might be obtained by seeking to tax those whose federal tax returns have a District mailing address but who do not currently file a District tax return. It is unlikely that all of these are subject to District income tax, but surdy some are, and their audit should result in further revenues to the District.
9. The annual D.C. Office of Tax and Revenue study suggests that there is not a great difference overall between the District's tax burden and those of its neighbors. It does, however, appear that the District may tax low-income wage earners somewhat more heavily. Coincidentally, taxpayers in the lower(up to $\$ 45,000$ of federal AGI ) to middle-income brackets have been dropping in numbers far faster in the District than in suburban $M$ aryland and Virginia.
10. Analysis of the effects of tying the D istrict income tax more tightly to the federal personal income tax indicates that a simple surcharge on federal liability would have to be on the order of 37 percent to be revenue neutral and create significantly higher tax rates for high-income households. W hether this is politically feasible or not is an important issue.
11. It appears that simplifying the District personal income tax - by requiring that all taxpayers use the standard federal deduction and federal exemption amounts in conjunction with the historical District income brackets and tax rates - could be a more promising approach that would bring in roughly the same level of revenues and not cause the dramatic tax increases that the piggyback approach could cause.
12. As nonresident employment in the District has grown, the burden of providing municipal services to nonresidents increasingly has fallen on District residents. A 0.6 percent- 0.9 percent tax on nonresident earnings is estimated to defray the costs of nonresidents' use of District municipal services.

## References

Advisory C ommission on Intergovernmental Relations (ACIR). Significant Features of Fiscal Federalism. Volume 1: Budget Processes and Tax Systems. U.S. G overnment Printing Office, February 1993.

Cullen, Julie B. and Steven D. Levitt. "C rime, Urban Flight, and the Consequences for Cities." N BER W orking Paper 5737, September 1996.
D.C. O ffice of Tax and Revenue. A C omparison of Tax Rates and Burdens in the Washington M etropolitan Area. June 1996.

Gold, Stephen D. "The Income Elasticity of State Tax Systems: N ew Evidence." State Tax Notes, Vol. 8, No. 18 (M ay 1, 1995), pp. 1,849-1,856.

Goodman, Leonard. "C onforming Federal and State Individual IncomeTaxation." StateTax Notes, Vol. 8, No. 25 (June 19, 1995), pp. 2,471-2,482.

H ellerstein, Jerome and Walter H ellerstein. StateTaxation II: Sales and U se, Personal Income and D eath and Gift Taxes. Warren Gorham Lamont, 1992.

Joint Committee on Internal Revenue Taxation. General Explanation of the State and Local Fiscal Assistance Act and the Federal-StateTax Collection Act of 1972. U.S. Government Printing Office, February 12, 1973, JCS-73.

Kies, K enneth J. "Written Testimony of the Staff of the Joint C ommittee on Taxation Regarding H .R. 3244, the D istrict of C olumbia Economic Recovery Act." July 31, 1996, JCX-45-96.

Nechyba, Thomas and Robert P. Strauss. "C ommunity Choice and Local Public Services: A Discrete C hoice Approach." N ational Bureau of Economic Research Working Paper 5966, 1997.

N oto, N onna A. "District of C olumbia Reorganization: Clinton Administration Proposal for the IRS to C ollect D.C. IncomeTaxes." Congressional Research Service Report, M arch 20, 1997, 97-343 E.

0 'Cleireacain, C arol. The Orphaned Capital: Adopting the Right Revenues for the District of Columbia. Washington, D.C.: The Brookings Institution, 1997.

Schenk, Deborah H. "Simplification for Individual Taxpayers: Problems and Proposals." Tax Law Review. Vol. 45, No. 1 (Fall 1989), pp. 121-175.

Sunley, Emil and Gail Wilensky. "T he Personal IncomeTax" in Technical Aspects of the District'sTax System. H ouse of Representatives, 95th C ongress, 2nd Session. Studies and Papers Prepared for the D istrict of Columbia Tax Revision Commission. D ecember 1, 1978. Serial No. S-11.
U.S. C ensus Bureau. Statistical Abstract of the U nited States for 1996. U.S. Government Printing Office and CD-RO M , O ctober 1996.
U.S. C ensus Bureau, G overnments D ivision. State and Local G overnment Finances. http://www.census.gov.com/ ftp/pub/govs/estimate/94stlus.txt. 1997.

## Endnotes

${ }^{1} \mathrm{H}$ ellerstein and H ellerstein (1992), II, p. 20-2 and p. 20-3.
${ }^{2}$ M ississippi, O klahoma, M assachusetts, Virginia, D elaware, M issouri, N ew York, and North Dakota by 1920; N orth C arolina, South C arolina, New H ampshire, Arkansas, Georgia, and O regon by 1930.
${ }^{3}$ Idaho, Tennessee (on capital income), Utah, Vermont, Alabama, Arizona, K ansas, M innesota, M ontana, New M exico, Iowa, Louisiana, C alifornia, Kentucky, Colorado, and M aryland.
${ }^{4}$ West Virginia, Indiana, Michigan, N ebraska, C onnecticut (just capital income until 1991 when broadened to labor income), Illinois, M aine, O hio, Pennsylvania, Rhode Island, and N ew Jersey; ACIR (1993), Table 14.
${ }^{5}$ See K asarda, Appold, Sweeney and Sieff (1997) for a pessimistic appraisal of the likelihood that central cities can encourage such a turn-around in migration patterns, and the confirmation, using Current Population Survey data, that this is not happening despite occasional optimistic media reports.
${ }^{6}$ U .S. Census Bureau (1997).
7 U .S. C ensus Bureau (1996), Table 472; U.S. Census Bureau (1997).
${ }^{8} 1975$ figures due to Sunley and Wilensky (1978).
${ }^{9}$ This tension is not unique to the District. M any states with large central cities constantly must deal with political fights in their state capitols over how much assistance to provide for the dominant municipality and its school district vis-a-vis neighboring suburbs and rural areas. In New York, the friction is between N ew York City, its suburbs, and upstate N ew York. In Pennsylvania, it is between Philadelphia, its suburbs, and the rest of the state. In M ichigan, it is between D etroit, its suburbs and the rest of the state, and so forth.
${ }^{10}$ U.S. Census Bureau, Journey to Work.
${ }^{11}$ Alabama, Arkansas, M ississippi, N ew Jersey, and Pennsylvania.
${ }^{12}$ Federation of Tax Administrators, FTP site, January, 1997.
${ }^{13}$ Sunley and Wilensky (1978).
${ }^{14} \mathrm{CCH}$, District of C olumbia StateTax Reporter, 9425.
${ }^{15} \mathrm{H}$ ellerstein and H ellerstein (1992), II, p. 20-03.
${ }^{16} \mathrm{~A}$ person for M aryland personal income tax purposes is a resident if $s / h e: 1$ ) is domiciled in M aryland on the last day of the taxable year; or 2) for more than 6 months of the taxable year, maintained a place of abode in this state, whether domiciled in this state or not. M aryland goes on to define a resident to include, for the part of the taxable year that an individual resides in $M$ aryland, an individual who: 1) moves to $M$ aryland with the intent to be domiciled in $M$ aryland; or 2) is domiciled in $M$ aryland and moves outside $M$ aryland before the last day of the taxable year with the bona fide intention to remain permanently outside of $M$ aryland. If an individual again resides in $M$ aryland within 6 months after having moved outside $M$ aryland, there is a rebuttable presumption that the individual did not have a bona fide intention to remain permanently outside M aryland.
Virginia defines a resident as follows:
"Resident" for purposes of taxation, except as to Chapter 3 (Sec. 58.1-300 et seq.) of this title or as otherwise specifically provided, includes every person domiciled in the Commonwealth on the first day of any tax year, and every other person who has had his place of abode in the C ommonwealth for the longer portion of the twelve months next preceding January 1 in each year, unless on or before that day he has changed his place of abode to a place outside the Commonwealth with the bona fide intention of continuing actually to abide permanently outside the Commonwealth.

The fact that a person who has so changed his place of abode, within six months from so doing, again abides within the Commonwealth shall be prima facie evidence that he did not intend permanently to have his actual place of abode outside the C ommonwealth. Such person so changing his actual place of abode and not intending permanently to continue it outside the Commonwealth and not having listed his property for taxation as a resident of the Commonwealth for the purpose of having his personal property listed for taxation in the C ommonwealth, shall be deemed to have resided on the day when such property should have been listed, at his last place of abode in the C ommonwealth. The fact that a person whose place of abode during the greater portion of such twelve months has been in the C ommonwealth does not claim or exercise the right to vote at public elections in the C ommonwealth shall not, of itself, constitute him a nonresident of the C ommonwealth within the meaning of this term.

Virginia also provides for pro-rata tax liability by part-year residents in Sec. 58.1-303. ${ }^{17} 0$ ther characteristics of nonresident income which qualify as exempt service income are: 1) any trade or business that by law, customs, or ethics cannot be incorporated, 2) any trade, business, or profession that can be incorporated only under
the District of Columbia Professional Corporation Act of 1971, or 3) a trade or business engaged in by a blind person. ${ }^{18} \mathrm{H}$ ellerstein and H ellerstein (1992), pp. 20-73.
${ }^{19}$ Virginia SupremeC ourt, No. 961290 , April 18, 1997. TheU .S. SupremeC ourt chose not to hear an appeal of it. (U.S. Supreme Court D ocket No. 97-412, N ovember 10, 1997.)
20 Figurel-3, column 10, "total" row.
${ }^{21}$ Federal tax filers in the D istrict were defined to be any taxpayer with a D istrict of Columbia mailing address. Federal tax information was obtained by the D.C. O ffice of Tax and Revenue through its Exchange Agreement with the IRS, and provided to the author under an IRS-approved confidentiality agreement.
${ }^{22}$ D eductions for IRAs, uncompensated moving expenses, self-employed health insurance deduction, contributions to Keogh and self-employed pension plans, and deduction for alimony paid.
${ }^{23}$ The aggregate figure is somewhat different than the sum of the individual figures since negative incomes across taxpayers are not allowed to reduce the sum of District AGI.
${ }^{24}$ Given that the IRS file is a transaction file rather than a file of filed tax returns, the correspondence suggests good reporting by D istrict taxpayers.
${ }^{25}$ Given a 2,000 -hour year, this would mean working at $\$ 6.13 /$ hour or slightly above the minimum wage. CCH , District of Columbia StateTax Reporter, I 16-765, p. 1,692.
${ }^{26}$ T he D istrict individual income tax does not contain any refundable features beyond the property tax credit.
27 If " $t$ " is the D.C. effective tax rate, and "tfed" is the effective federal income tax rate, then deductibility means that the D.C. effective tax rate ist $x$ ( 1 -tfed). Since tfed rises with income, the D.C. offset tax rate will be lower than otherwise. Were the D.C. rate fixed at one tax rate, the offset effective tax rate would actually decline with income and thus be regressive overall.
${ }^{28} \mathrm{~N}$ ote thalt the effective tax rates in Figure I-8 include itemizers, so the comparison is not completely distinct.
${ }^{29} \mathrm{~A}$ C omparison of Tax Rates and Burdens in theWashington M eropolitan Area.
${ }^{30}$ The author wishes to thank the Division for providing this unpublished data to this project.
${ }^{31}$ Examination of movers who were only part-year residents does not alter this conclusion.
${ }^{32}$ N echyba and Strauss (1997), Table 6.
${ }^{33}$ Cullen and Levitt (1996).
${ }^{34}$ The relationship between 1980 C ensus tracts and zip codes was obtained from the University of M issouri M ABLE FTP site which maintains such data for the entire United States.
${ }^{35}$ Joint C ommittee on Taxation (1973).
${ }^{36} \mathrm{~W}$ hile the D istrict tax law references the federal return the taxpayer is filing for District tax purposes, it never defines thefederal return to be the actual signed return filed by the taxpayer in compliance with the filing requirements of the Internal RevenueC ode, nor does it state that the tax year should be the same. TheD istrict taxpayer is obligated on the form (and in District tax statutes) to utilize the same form of deduction, either standard or itemized, as used for federal tax purposes, and in the case of $M$ arried Combined Filing Separately and $M$ arried Filing Separately, both classifications of District taxpayers must use the same form of deduction. W hile there may be a presumption that District taxpayers report from their bona fide federal tax return of the same year, it is not transparently stated. M oreover, if one reviews the D istrict tax return, D.C. form D-40, it is evident that it does not reference specific line numbers of the (bona fide) federal return from which the taxpayer is to transfer the information. W hether or not taxpayers faithfully report from their bona fide federal return can not be determined from current District tax administration databases, because only the first page of the D.C. form D-40 is put into machine readable form. Thus, supporting schedules are not avai lable to cross-check with federal income tax data sources.
${ }^{37}$ O 'Cleireacain (1997), p. 101.
${ }^{38} \mathrm{lbid}$.
${ }^{39}$ In the case of adding back income taxes, use of this rather than the simulated proposal for add-back is inaccurate; however, the data available do not break out this particular figure.
${ }^{40} 0$ 'Cleireacain (1997), p. 106.
${ }^{41}$ I thus do not find persuasive the argument sometimes made that suburban resi-
dents have a responsibility to finance poverty programs in a nearby central city beyond the program each state legislature finances through state taxation of all state residents. Otherwise, one would create additional local incentives for local forum shopping. In my view, income redistribution should be financed by a government whose geographic reach is sufficiently large that most will not move to avoid taxes to finance income redistribution.
${ }^{42}$ Table 500 of the Statistical Abstract of the U.S., 1996 reports that the District made direct expenditures of $\$ 496$ million for highways, fire protection, and police protection in 1993.
${ }^{43} 0$ 'Cleireacain (1997), p. 108.

