

# Government Finance

Data  
Vocabulary

} Same, not all, in  
Guber 18.  
Also, some material in  
18 we will do later.

Positive Questions:

How do taxes effect individual  
behavior?

How do taxes effect market  
prices? ⇒ "Incidence."

} Some in  
Ch. 19.

Normative Questions:

Fairness and taxation.

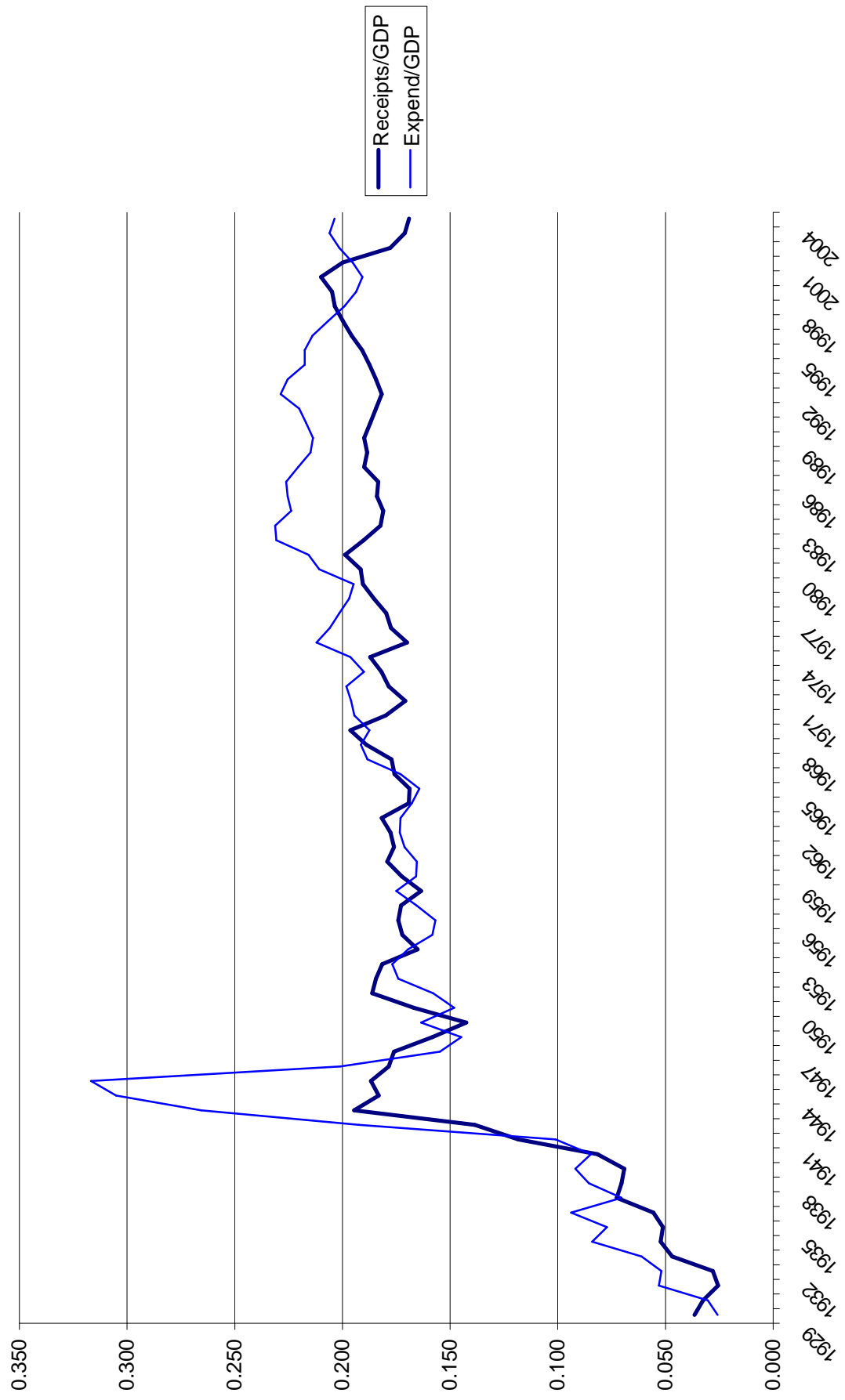
} Same in Ch.  
20

Inefficiency and taxation,  
including "optimal taxation"  
and "properties of different  
taxes."

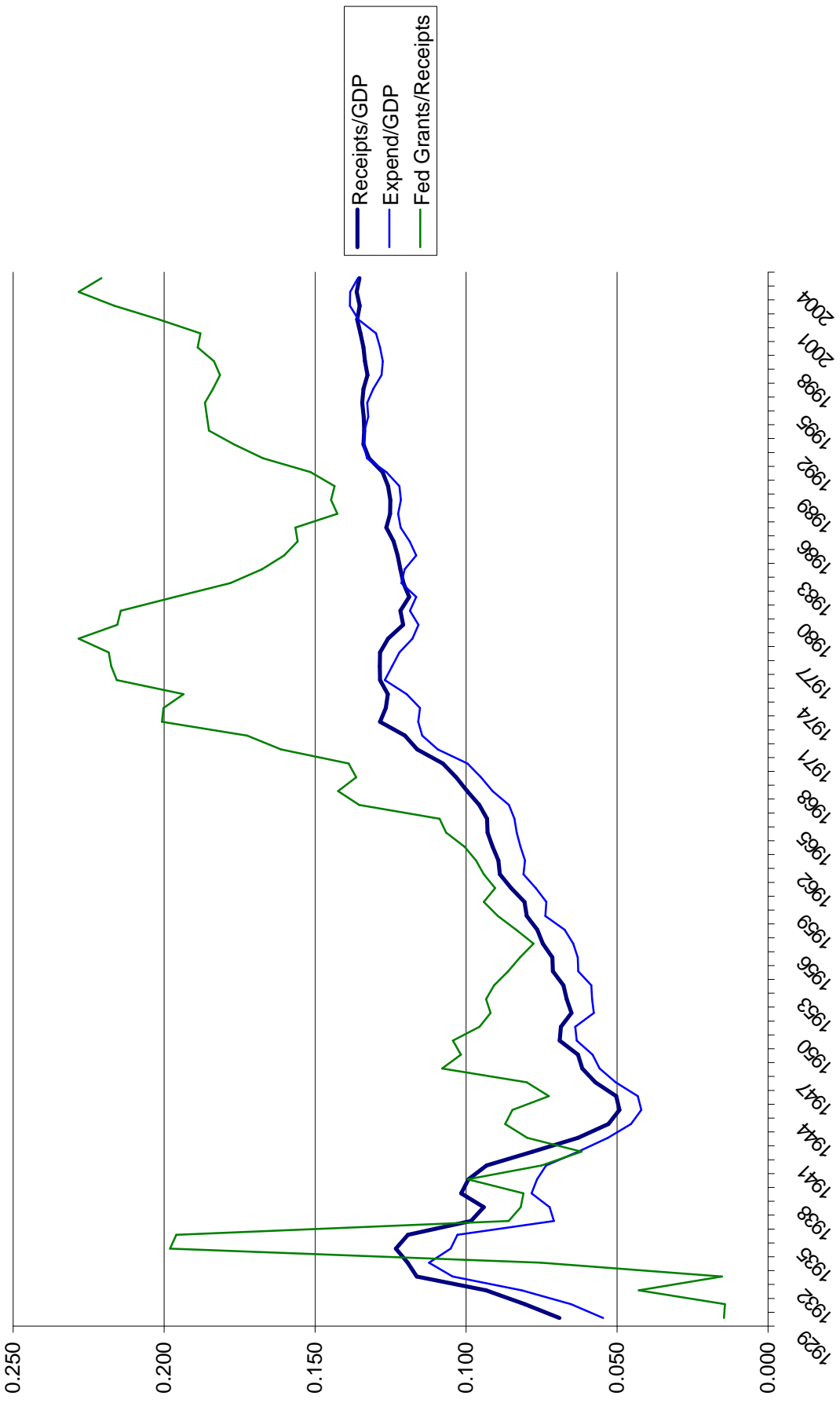
} 18,  
20,  
21,  
⋮

More...

# Federal Government



# State and Local Government



**Table 464. Federal Budget Receipts by Source: 1990 to 2006**

[In billions of dollars (1,032.1 represents \$1,032,100,000,000). For fiscal years ending in year shown; see text, Section 8. Receipts reflect collections. Covers both federal funds and trust funds; see text, this section]

| Source  | 1990           | 1995           | 2000           | 2002           | 2003           | 2004           | 2005           | 2006, est.     |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Total federal receipts . . . . .</b>                   | <b>1,032.1</b> | <b>1,351.9</b> | <b>2,025.5</b> | <b>1,853.4</b> | <b>1,782.5</b> | <b>1,880.3</b> | <b>2,153.9</b> | <b>2,285.5</b> |
| Individual income taxes . . . . .                         | 466.9          | 590.2          | 1,004.5        | 858.3          | 793.7          | 809.0          | 927.2          | 997.6          |
| Corporation income taxes . . . . .                        | 93.5           | 157.0          | 207.3          | 148.0          | 131.8          | 189.4          | 278.3          | 277.1          |
| Social insurance and retirement receipts . . . . .        | 380.0          | 484.5          | 652.9          | 700.8          | 713.0          | 733.4          | 794.1          | 841.1          |
| Excise taxes . . . . .                                    | 35.3           | 57.5           | 68.9           | 67.0           | 67.5           | 69.9           | 73.1           | 73.5           |
| Other . . . . .   | 56.3           | 62.7           | 92.0           | 79.3           | 76.6           | 78.7           | 81.1           | 96.2           |
| <b>Social insurance and retirement receipts . . . . .</b> | <b>380.0</b>   | <b>484.5</b>   | <b>652.9</b>   | <b>700.8</b>   | <b>713.0</b>   | <b>733.4</b>   | <b>794.1</b>   | <b>841.1</b>   |
| Employment and general retirement . . . . .               | 353.9          | 451.0          | 620.5          | 668.5          | 675.0          | 689.4          | 747.7          | 791.8          |
| Old-age and survivors' insurance (off-budget) . . . . .   | 255.0          | 284.1          | 411.7          | 440.5          | 447.8          | 457.1          | 493.6          | 521.4          |
| Disability insurance (off-budget) . . . . .               | 26.6           | 67.0           | 68.9           | 74.8           | 76.0           | 77.6           | 83.8           | 88.5           |
| Hospital insurance . . . . .                              | 68.6           | 96.0           | 135.5          | 149.0          | 147.2          | 150.6          | 166.1          | 177.6          |
| Railroad retirement/pension fund . . . . .                | 2.3            | 2.4            | 2.7            | 2.5            | 2.3            | 2.3            | 2.3            | 2.4            |
| Unemployment insurance trust funds . . . . .              | 21.6           | 28.9           | 27.6           | 27.6           | 33.4           | 39.5           | 42.0           | 44.8           |
| Other retirement . . . . .                                | 4.5            | 4.6            | 4.8            | 4.6            | 4.6            | 4.6            | 4.5            | 4.5            |
| Federal employees' retirement-employee share . . . . .    | 4.4            | 4.5            | 4.7            | 4.5            | 4.6            | 4.5            | 4.4            | 4.4            |
| <b>Excise taxes, total . . . . .</b>                      | <b>35.3</b>    | <b>57.5</b>    | <b>68.9</b>    | <b>67.0</b>    | <b>67.5</b>    | <b>69.9</b>    | <b>73.1</b>    | <b>73.5</b>    |
| Federal funds <sup>1</sup> . . . . .                      | 15.6           | 26.9           | 22.7           | 24.0           | 23.8           | 24.6           | 22.5           | 21.1           |
| Alcohol . . . . .   | 5.7            | 7.2            | 8.1            | 7.8            | 7.9            | 8.1            | 8.1            | 8.1            |
| Tobacco . . . . .   | 4.1            | 5.9            | 7.2            | 8.3            | 7.9            | 7.9            | 7.9            | 7.7            |
| Telephone . . . . .                                       | 3.0            | 3.8            | 5.7            | 5.8            | 5.8            | 6.0            | 6.0            | 6.1            |
| Ozone-depleting chemicals/products . . . . .              | 0.4            | 0.6            | 0.1            | -              | -              | -              | -              | -              |
| Transportation fuels . . . . .                            | -              | 8.5            | 0.8            | 0.8            | 0.9            | 1.4            | -0.8           | -1.9           |
| Trust funds <sup>1</sup> . . . . .                        | 19.8           | 30.5           | 46.2           | 43.0           | 43.7           | 45.3           | 50.5           | 52.4           |
| Highway . . . . .   | 13.9           | 22.6           | 35.0           | 32.6           | 33.7           | 34.7           | 37.9           | 39.1           |
| Airport and airway . . . . .                              | 3.7            | 5.5            | 9.7            | 9.0            | 8.7            | 9.2            | 10.3           | 10.7           |
| Black lung disability . . . . .                           | 0.7            | 0.6            | 0.5            | 0.6            | 0.5            | 0.6            | 0.6            | 0.6            |
| Inland waterway . . . . .                                 | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            |
| Oil spill liability . . . . .                             | 0.1            | 0.2            | 0.2            | -              | -              | -              | -              | 0.1            |
| Aquatic resources . . . . .                               | 0.2            | 0.3            | 0.3            | 0.4            | 0.4            | 0.4            | 0.4            | 0.5            |
| Vaccine injury compensation . . . . .                     | 0.2            | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            | 0.1            | 0.2            |

- Represents zero. <sup>1</sup> Includes other funds, not shown separately.

Source: U.S. Office of Management and Budget, *Budget of the United States Government, Historical Tables*, annual. See Internet site <<http://www.whitehouse.gov/omb/budget/fy2007/>>.

**Table 465. Federal Trust Fund Income, Outlays, and Balances: 2005 to 2007**

[In billions of dollars (10.8 represents \$10,800,000,000). For years ending September 30. Receipts deposited. Outlays on a checks-issued basis less refunds collected. Balances: That which have not been spent. See text, this section, for discussion of the budget concept and trust funds]

| Description   | Income |            |            | Outlays |            |            | Balances <sup>1</sup> |            |            |
|---|--------|------------|------------|---------|------------|------------|-----------------------|------------|------------|
|   | 2005   | 2006, est. | 2007, est. | 2005    | 2006, est. | 2007, est. | 2005                  | 2006, est. | 2007, est. |
| Airport and airway trust fund . . . . .   | 10.8   | 11.2       | 12.0       | 11.2    | 12.3       | 12.2       | 11.3                  | 10.2       | 10.0       |
| Federal civilian employees' retirement funds . . . . .                              | 85.0   | 89.6       | 93.0       | 55.5    | 59.1       | 62.0       | 674.8                 | 705.3      | 736.3      |
| Federal employees' health benefits fund . . . . .                                   | 31.3   | 33.6       | 36.1       | 29.6    | 32.0       | 35.0       | 12.5                  | 14.1       | 15.1       |
| Foreign military sales trust fund . . . . .   | 11.1   | 11.1       | 11.0       | 11.5    | 11.1       | 11.0       | 6.7                   | 6.7        | 6.7        |
| Highway trust fund . . . . .  | 38.0   | 39.3       | 39.9       | 40.0    | 35.7       | 41.6       | 12.5                  | 16.1       | 14.4       |
| Medicare:   |        |            |            |         |            |            |                       |            |            |
| Hospital insurance (HI) trust fund . . . . .  | 198.5  | 209.6      | 222.1      | 185.7   | 189.4      | 206.0      | 277.7                 | 297.9      | 314.0      |
| Supplemental medical insurance trust fund . . . . .                                 | 153.5  | 219.2      | 258.6      | 153.7   | 207.5      | 249.1      | 16.9                  | 28.6       | 38.1       |
| Military retirement fund . . . . .  | 49.5   | 50.1       | 50.8       | 39.0    | 41.2       | 43.4       | 194.7                 | 203.6      | 211.0      |
| Railroad retirement trust funds . . . . .   | 12.7   | 10.5       | 12.7       | 10.2    | 10.9       | 12.7       | 25.6                  | 25.3       | 25.3       |
| Social security: old-age, survivors' and disability insurance trust funds . . . . . | 696.8  | 735.5      | 778.6      | 523.3   | 555.1      | 586.0      | 1,809.0               | 1,989.3    | 2,181.9    |
| Unemployment trust funds . . . . .  | 45.3   | 48.3       | 49.2       | 36.2    | 39.8       | 41.0       | 54.8                  | 63.3       | 71.4       |
| Veterans' life insurance trust funds . . . . .                                      | 1.4    | 1.3        | 1.2        | 1.7     | 1.7        | 1.7        | 12.6                  | 12.2       | 11.7       |
| Other trust funds . . . . .   | 21.7   | 23.0       | 26.3       | 21.3    | 20.8       | 23.6       | 39.4                  | 41.6       | 44.3       |

<sup>1</sup> Balances available on a cash basis (rather than an authorization basis) at the end of the year. Balances are primarily invested in federal debt securities.

Source: U.S. Office of Management and Budget, *Budget of the United States Government, Analytical Perspectives*, annual. See Internet site <<http://www.whitehouse.gov/omb/budget/fy2007/>>.

**Table 425. State and Local Governments—Revenue and Expenditures by Function: 2003**

[In millions of dollars (2,047,337 represents \$2,047,337,000,000) except as indicated. For fiscal year ending in year shown; see text, this section. Local government amounts are estimates subject to sampling variation; see Appendix III and source. Minus sign (-) indicates net loss]

| Item   | Amount (mil. dol.) |                  |                  | Per capita <sup>1</sup> (dol.) |              |              |
|--|--------------------|------------------|------------------|--------------------------------|--------------|--------------|
|  | State and local    | State            | Local            | State and local                | State        | Local        |
| <b>Revenue <sup>2</sup></b>                            | <b>2,047,337</b>   | <b>1,295,659</b> | <b>1,140,633</b> | <b>7,041</b>                   | <b>4,464</b> | <b>3,923</b> |
| Intergovernmental revenue <sup>2</sup>                 | 389,264            | 361,617          | 416,601          | 1,339                          | 1,246        | 1,433        |
| Total revenue from own sources <sup>2</sup>            | 1,658,073          | 934,042          | 724,032          | 5,702                          | 3,218        | 2,490        |
| General revenue from own sources                       | 1,373,948          | 750,732          | 623,216          | 4,725                          | 2,587        | 2,143        |
| Taxes <sup>3</sup>                                     | 938,972            | 548,991          | 389,981          | 3,229                          | 1,892        | 1,341        |
| Property   | 296,683            | 10,471           | 286,213          | 1,020                          | 36           | 984          |
| Individual income                                      | 199,407            | 181,933          | 17,475           | 686                            | 627          | 60           |
| Corporation income                                     | 31,369             | 28,384           | 2,985            | 108                            | 98           | 10           |
| Sales and gross receipts                               | 337,787            | 273,811          | 63,975           | 1,162                          | 943          | 220          |
| General sales  | 229,222            | 184,597          | 44,626           | 788                            | 636          | 153          |
| Selective sales <sup>3</sup>                           | 108,564            | 89,215           | 19,350           | 373                            | 307          | 67           |
| Motor fuel   | 33,379             | 32,269           | 1,110            | 115                            | 111          | 4            |
| Alcoholic beverages                                    | 4,757              | 4,399            | 358              | 16                             | 15           | 1            |
| Tobacco products                                       | 11,807             | 11,482           | 325              | 41                             | 40           | 1            |
| Public utilities                                       | 21,015             | 10,557           | 10,458           | 72                             | 36           | 36           |
| Motor vehicle and operators' licenses                  | 19,098             | 17,727           | 1,372            | 66                             | 61           | 5            |
| Death and gift   | 6,715              | 6,685            | 30               | 23                             | 23           | -            |
| Charges and miscellaneous <sup>3</sup>                 | 434,976            | 201,741          | 233,235          | 1,496                          | 695          | 802          |
| Current charges <sup>3</sup>                           | 269,560            | 106,357          | 163,204          | 927                            | 366          | 561          |
| Education  | 78,522             | 60,215           | 18,307           | 270                            | 207          | 63           |
| School lunch sales                                     | 6,074              | 19               | 6,055            | 21                             | -            | 21           |
| Higher education                                       | 66,831             | 59,392           | 7,440            | 230                            | 205          | 26           |
| Natural resources                                      | 3,018              | 2,160            | 857              | 10                             | 7            | 3            |
| Hospitals  | 68,927             | 24,131           | 44,796           | 237                            | 83           | 154          |
| Sewerage   | 28,237             | 27               | 28,210           | 97                             | -            | 97           |
| Solid waste management                                 | 11,559             | 416              | 11,143           | 40                             | 4            | 38           |
| Parks and recreation                                   | 7,342              | 1,202            | 6,140            | 25                             | 4            | 21           |
| Housing and community development                      | 4,589              | 565              | 4,024            | 16                             | 2            | 14           |
| Airports   | 12,759             | 871              | 11,888           | 44                             | 3            | 41           |
| Sea and inland port facilities                         | 2,930              | 809              | 2,121            | 10                             | 3            | 7            |
| Highways   | 8,503              | 5,351            | 3,152            | 29                             | 18           | 11           |
| Interest earnings                                      | 58,317             | 29,730           | 28,587           | 201                            | 102          | 98           |
| Special assessments                                    | 5,808              | 3,068            | 5,502            | 20                             | 1            | 19           |
| Sale of property                                       | 1,773              | 608              | 1,165            | 6                              | 2            | 4            |
| Utility and liquor store revenue                       | 108,388            | 17,036           | 91,352           | 373                            | 59           | 314          |
| Insurance trust revenue                                | 175,737            | 166,274          | 9,463            | 604                            | 573          | 33           |
| <b>Expenditure <sup>2</sup></b>                        | <b>2,164,176</b>   | <b>1,359,048</b> | <b>1,194,932</b> | <b>7,442</b>                   | <b>4,683</b> | <b>4,109</b> |
| Intergovernmental expenditure <sup>2</sup>             | 4,404              | 382,197          | 12,011           | 15                             | 1,317        | 41           |
| Direct expenditure <sup>2</sup>                        | 2,159,772          | 976,852          | 1,182,920        | 7,427                          | 3,366        | 4,068        |
| General expenditure <sup>3</sup>                       | 1,817,513          | 781,772          | 1,035,741        | 6,250                          | 2,694        | 3,562        |
| Education  | 621,335            | 170,685          | 450,650          | 2,137                          | 588          | 1,550        |
| Elementary and secondary education                     | 428,503            | 4,691            | 423,812          | 1,474                          | 16           | 1,457        |
| Higher education                                       | 164,187            | 137,349          | 26,838           | 565                            | 473          | 92           |
| Public welfare   | 306,463            | 265,105          | 41,358           | 1,054                          | 913          | 142          |
| Hospitals  | 93,175             | 38,023           | 55,152           | 320                            | 131          | 190          |
| Health   | 61,703             | 30,351           | 31,353           | 212                            | 105          | 108          |
| Highways   | 117,696            | 72,455           | 45,241           | 405                            | 250          | 156          |
| Police protection                                      | 67,361             | 9,860            | 57,501           | 232                            | 34           | 198          |
| Fire protection  | 27,854             | -                | 27,854           | 96                             | -            | 96           |
| Corrections  | 55,471             | 36,938           | 18,533           | 191                            | 127          | 64           |
| Natural resources                                      | 22,808             | 17,110           | 5,699            | 78                             | 59           | 20           |
| Sewerage   | 32,540             | 1,003            | 31,537           | 112                            | 3            | 108          |
| Solid waste management                                 | 19,183             | 2,693            | 16,491           | 66                             | 9            | 57           |
| Housing and community development                      | 35,275             | 4,608            | 30,668           | 121                            | 16           | 105          |
| Governmental administration                            | 98,658             | 42,846           | 55,813           | 339                            | 148          | 192          |
| Parks and recreation                                   | 31,765             | 4,636            | 27,129           | 109                            | 16           | 93           |
| Interest on general debt                               | 77,277             | 31,295           | 45,982           | 266                            | 108          | 158          |
| Utility  | 144,594            | 22,405           | 122,189          | 497                            | 77           | 420          |
| Liquor store expenditure                               | 4,402              | 3,697            | 706              | 15                             | 13           | 2            |
| Insurance trust expenditure                            | 193,263            | 168,979          | 24,285           | 665                            | 582          | 84           |
| By character and object:                               |                    |                  |                  |                                |              |              |
| Current operation                                      | 1,579,290          | 656,989          | 922,301          | 5,431                          | 2,264        | 3,172        |
| Capital outlay   | 263,198            | 91,943           | 171,255          | 905                            | 317          | 589          |
| Construction   | 203,035            | 72,374           | 130,661          | 698                            | 249          | 449          |
| Equipment, land, and existing structures               | 60,162             | 19,568           | 40,594           | 207                            | 67           | 140          |
| Assistance and subsidies                               | 35,080             | 25,901           | 9,179            | 121                            | 89           | 32           |
| Interest on debt (general and utility)                 | 88,940             | 33,040           | 55,900           | 306                            | 114          | 192          |
| Insurance benefits and repayments                      | 193,263            | 168,979          | 24,285           | 665                            | 582          | 84           |
| <b>Expenditure for salaries and wages <sup>4</sup></b> | <b>647,211</b>     | <b>183,386</b>   | <b>463,826</b>   | <b>2,226</b>                   | <b>632</b>   | <b>1,595</b> |

- Represents or rounds to zero. <sup>1</sup> Based on estimated resident population as of July 1. <sup>2</sup> Aggregates exclude duplicative transactions between levels of government; see source. <sup>3</sup> Includes amounts not shown separately. <sup>4</sup> Included in items shown above.

Source: U.S. Census Bureau, "Federal, State, and Local Governments, Finance, State and Local Government Finances," 2002-03; see also <<http://www.census.gov/govs/www/estimate03.html>> (accessed 21 June 2005).

**GOVERNMENT SECTOR, 2004**

|                | <b>Total general government revenue</b><br>% of GDP | <b>Total general government expenditure</b><br>% of GDP | <b>General government final consumption expenditure</b><br>% of GDP | <b>Social security transfers</b><br>% of GDP | <b>Net saving of general government</b><br>% of GDP | <b>Net lending of general government</b><br>% of GDP |                |
|----------------|---|---|---|--|---|--|----------------|
| Australia      | 36.6 <sup>a</sup>                                   | 36.2 <sup>a</sup>                                       | 17.9 <sup>a</sup>   | 9.2 <sup>a</sup>                             | 1.0 <sup>a</sup>                                    | 0.4 <sup>a</sup>                                     | Australia      |
| Austria        | 49.3  | 50.6  | 18.0  | 19.2   | 0.9   | - 1.3  | Austria        |
| Belgium        | 49.3  | 49.3  | 22.6  | 16.0   | - 0.3   | 0.0  | Belgium        |
| Canada         | 41.7 <sup>a</sup>                                   | 41.1 <sup>a</sup>                                       | 19.7 <sup>a</sup>   | 10.4 <sup>a</sup>                            | 1.2 <sup>a</sup>                                    | 0.6 <sup>a</sup>                                     | Canada         |
| Czech Republic | 41.5  | 44.6  | 22.9  | 11.8   | - 0.8   | - 3.0  | Czech Republic |
| Denmark        | 58.9  | 56.3  | 26.7  | 16.9   | 2.2   | 2.6  | Denmark        |
| Finland        | 52.5  | 50.7  | 22.4  | 16.8   | 2.2   | 1.9  | Finland        |
| France         | 49.8  | 53.4  | 23.9  | 17.7   | - 2.6   | - 3.6  | France         |
| Germany        | 43.2  | 46.8  | 18.4  | 19.2   | - 2.8   | - 3.6  | Germany        |
| Greece         | 46.0  | 52.0  | 17.1  | 18.7   | - 1.5   | - 6.0  | Greece         |
| Hungary        | 44.6  | 48.9  | 22.6  | 14.2   | - 4.2   | - 4.3  | Hungary        |
| Iceland        | 48.1  | 47.6  | 26.6  | 9.2  | 3.8   | 0.4  | Iceland        |
| Ireland        | 35.6  | 34.2  | 16.0  | 9.2  | 3.6   | 1.3  | Ireland        |
| Italy          | 45.4  | 48.5  | 19.2  | 17.3   | - 1.4   | - 3.1  | Italy          |
| Japan          | 30.3 <sup>b</sup>                                   | 38.2 <sup>b</sup>                                       | 17.7 <sup>b</sup>   | 10.9 <sup>b</sup>                            | - 4.8 <sup>b</sup>                                  | - 7.9 <sup>b</sup>                                   | Japan          |

|                     |                   |                   |                   |                   |                    |                    |                     |
|---------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|---------------------|
| Korea               | 31.3 <sup>a</sup> | 30.9 <sup>a</sup> | 13.5              | 2.3               | 9.0                | 0.4 <sup>a</sup>   | Korea               |
| Luxembourg          | 44.8              | 45.9              | 18.2              | 15.7              | 3.4                | - 1.1              | Luxembourg          |
| Mexico              | ..                | ..                | 12.1 <sup>b</sup> | 1.6 <sup>b</sup>  | 0.4 <sup>b</sup>   | - 1.9 <sup>b</sup> | Mexico              |
| Netherlands         | 46.2              | 48.6              | 25.0              | 12.3              | - 1.3              | - 2.3              | Netherlands         |
| New Zealand         | 41.2 <sup>b</sup> | 37.0 <sup>b</sup> | 17.5 <sup>b</sup> | 10.5 <sup>b</sup> | 5.6 <sup>b</sup>   | 4.2 <sup>b</sup>   | New Zealand         |
| Norway              | 57.9              | 46.4              | 22.0              | 15.0              | 12.5               | 11.5               | Norway              |
| Poland              | 40.2              | 45.0              | 17.6 <sup>a</sup> | 15.3              | - 1.7 <sup>a</sup> | - 4.8              | Poland              |
| Portugal            | 45.4              | 48.4              | 21.4              | 14.9              | - 4.2              | - 3.0              | Portugal            |
| Slovak Republic     | 45.7              | 49.0              | 20.3              | 10.4              | - 3.4              | - 3.3              | Slovak Republic     |
| Spain               | 38.4              | 38.6              | 17.4              | 11.7              | 2.9                | - 0.3              | Spain               |
| Sweden              | 58.3              | 57.3              | 27.7              | 18.0              | 1.6                | 1.0                | Sweden              |
| Switzerland         | 35.6 <sup>b</sup> | 35.5 <sup>b</sup> | 11.8 <sup>b</sup> | 11.3 <sup>b</sup> | 0.7 <sup>b</sup>   | 0.2 <sup>b</sup>   | Switzerland         |
| Turkey <sup>1</sup> | ..                | ..                | 13.2              | ..                | ..                 | ..                 | Turkey <sup>1</sup> |
| United Kingdom      | 40.8              | 43.9              | 21.2              | 13.4              | - 1.9              | - 3.1              | United Kingdom      |
| United States       | 31.9 <sup>a</sup> | 36.5 <sup>a</sup> | 15.6 <sup>a</sup> | 12.0 <sup>a</sup> | - 3.4 <sup>a</sup> | - 4.6 <sup>a</sup> | United States       |

Notes:

.. not available

1. According to the 1968 System of National Accounts (SNA)

a. 2003

b. 2002

StatLink: <http://dx.doi.org/10.1787/444141640346>

|                | Total tax receipts<br>% of GDP | Tax structures<br>as % of total tax receipts |                         |                               |           |                                   |             | Highest rates of<br>income taxes <sup>1</sup> |                              | Disposable income <sup>2</sup> of<br>average production<br>worker<br>as % of gross pay <sup>3</sup> |   |                |
|----------------|--------------------------------|--|-------------------------|-------------------------------|-----------|-----------------------------------|-------------|---|------------------------------|---|---|----------------|
|                |                                | Personal<br>income tax                       | Corporate<br>income tax | Social security contributions |           | Taxes on<br>goods and<br>services | Other taxes | Personal<br>income tax<br>%                   | Corporate<br>income tax<br>% | Single person   | Married with<br>two children <sup>4</sup> |                |
|                |                                |  |                         | Employees                     | Employers |                                   |             |   |                              |   |   |                |
| Australia      | 31.5                           | 38.5   | 16.8                    | 0.0                           | 0.0       | 30.3                              | 14.4        | 48.5  | 30.0                         | 76.0  | 84.4                                      | Australia      |
| Austria        | 44.0                           | 22.8   | 5.1                     | 13.7                          | 15.8      | 28.2                              | 14.4        | 42.9  | 34.0                         | 71.4  | 91.1                                      | Austria        |
| Belgium        | 46.4                           | 31.7   | 7.6                     | 9.9                           | 19.0      | 24.6                              | 7.1         | 47.4  | 40.2                         | 58.8  | 79.0                                      | Belgium        |
| Canada         | 33.9                           | 35.0   | 10.1                    | 6.2                           | 8.5       | 26.3                              | 13.9        | 46.4  | 38.6                         | 75.6  | 85.7                                      | Canada         |
| Czech Republic | 39.3                           | 12.8   | 11.8                    | 10.0                          | 28.3      | 29.7                              | 7.3         | 28.0  | 31.0                         | 77.1  | 101.9                                     | Czech Republic |
| Denmark        | 48.9                           | 53.2   | 5.8                     | 2.7                           | 0.7       | 33.1                              | 4.5         | 54.4  | 30.0                         | 57.7  | 70.3                                      | Denmark        |
| Finland        | 45.9                           | 31.2   | 9.3                     | 4.7                           | 20.0      | 30.2                              | 4.6         | 51.8  | 29.0                         | 68.5  | 77.2                                      | Finland        |
| France         | 44.0                           | 17.3   | 6.6                     | 9.3                           | 25.3      | 25.4                              | 16.2        | 40.0  | 35.4                         | 73.2  | 85.4                                      | France         |
| Germany        | 36.0                           | 25.1   | 2.9                     | 17.6                          | 19.8      | 29.2                              | 5.5         | 51.2  | 38.9                         | 59.0  | 81.7                                      | Germany        |
| Greece         | 35.9                           | 14.0   | 10.4                    | 12.7                          | 15.5      | 37.3                              | 10.1        | 33.6  | 35.0                         | 83.7  | 83.2                                      | Greece         |
| Hungary        | 38.3                           | 20.3   | 6.2                     | 6.2                           | 23.8      | 37.4                              | 6.1         | 56.0  | 18.0                         | 70.6  | 91.5                                      | Hungary        |
| Iceland        | 38.1                           | 38.6   | 3.0                     | 0.3                           | 7.9       | 40.3                              | 10.0        | 44.0  | 18.0                         | 74.9  | 95.3                                      | Iceland        |
| Ireland        | 28.4                           | 26.2   | 13.1                    | 4.5                           | 9.6       | 39.5                              | 7.1         | 42.0  | 16.0                         | 83.6  | 100.7                                     | Ireland        |
| Italy          | 42.6                           | 25.5   | 7.6                     | 5.6                           | 20.4      | 26.9                              | 14.0        | 41.4  | 36.0                         | 71.7  | 85.1                                      | Italy          |
| Japan          | 25.8                           | 18.4   | 12.2                    | 16.3                          | 17.6      | 20.1                              | 15.4        | 47.2  | 40.9                         | 80.7  | 84.9                                      | Japan          |
| Korea          | 24.4                           | 12.8   | 12.8                    | 11.1                          | 7.7       | 38.8                              | 16.8        | 36.7  | 29.7                         | 91.1  | 91.7                                      | Korea          |
| Luxembourg     | 41.8                           | 16.2   | 20.5                    | 11.3                          | 12.4      | 27.9                              | 11.6        | 33.9  | 30.4                         | 77.9  | 103.0                                     | Luxembourg     |

|                           |      |                   |      |                   |      |      |      |      |      |      |      |                           |
|---------------------------|------|-------------------|------|-------------------|------|------|------|------|------|------|------|---------------------------|
| Mexico                    | 18.1 | 28.9 <sup>a</sup> | ..   | 17.9 <sup>b</sup> | ..   | 49.0 | 3.5  | 35.0 | 35.0 | 96.3 | 96.3 | Mexico                    |
| Netherlands               | 39.2 | 18.3              | 8.8  | 16.6              | 11.7 | 30.8 | 13.8 | 52.0 | 34.5 | 71.4 | 82.9 | Netherlands               |
| New Zealand               | 34.9 | 42.3              | 12.1 | 0.0               | 0.0  | 35.2 | 10.4 | 39.0 | 33.0 | 79.9 | 81.2 | New Zealand               |
| Norway                    | 43.5 | 24.8              | 18.9 | 7.7               | 13.7 | 31.2 | 3.7  | 47.5 | 28.0 | 71.2 | 82.0 | Norway                    |
| Poland                    | 32.6 | 22.9              | 6.3  | 29.0 <sup>b</sup> | ..   | 36.9 | 4.9  | 26.2 | 28.0 | 68.9 | 70.8 | Poland                    |
| Portugal                  | 33.9 | 27.6 <sup>a</sup> | ..   | 27.1 <sup>b</sup> | ..   | 41.1 | 4.2  | 35.6 | 33.0 | 83.5 | 94.6 | Portugal                  |
| Slovak Republic           | 33.1 | 10.2              | 8.2  | 8.5               | 25.0 | 34.1 | 14.0 | 33.1 | 25.0 | 81.3 | 99.1 | Slovak Republic           |
| Spain                     | 35.6 | 19.4              | 9.1  | 5.6               | 24.9 | 28.6 | 12.4 | 48.0 | 35.0 | 80.7 | 89.5 | Spain                     |
| Sweden                    | 50.2 | 30.4              | 4.8  | 5.8               | 24.3 | 26.4 | 8.3  | 55.5 | 28.0 | 69.6 | 79.2 | Sweden                    |
| Switzerland               | 30.3 | 34.4              | 8.8  | 12.0              | 11.8 | 22.6 | 10.4 | 34.0 | 24.4 | 78.6 | 91.4 | Switzerland               |
| Turkey                    | 31.1 | 17.6              | 7.1  | 6.8               | 9.1  | 46.8 | 12.5 | 40.6 | 33.0 | 69.9 | 69.9 | Turkey                    |
| United Kingdom            | 35.8 | 29.8              | 8.1  | 6.8               | 9.6  | 32.7 | 13.0 | 40.0 | 30.0 | 76.8 | 90.1 | United Kingdom            |
| United States             | 26.4 | 37.7              | 6.7  | 11.7              | 13.0 | 17.6 | 13.2 | 45.2 | 39.3 | 75.7 | 88.5 | United States             |
| EU average <sup>5</sup>   | 40.6 | 25.8              | 8.6  | 9.1               | 16.3 | 30.8 | 9.4  | 44.6 | 32.4 | 72.5 | 86.2 | EU average <sup>5</sup>   |
| OECD average <sup>5</sup> | 36.3 | 26.0              | 9.3  | 8.3               | 14.6 | 31.9 | 9.8  | 42.6 | 31.2 | 75.2 | 86.9 | OECD average <sup>5</sup> |

Notes:

1. International comparisons should also take into account differences among countries in the length of tax brackets, the amount of tax relief and rates of social security contributions. The highest rate of income tax includes temporary special surcharges. All rates include rates of state and local income taxes as reported in the OECD Tax Database
2. Gross earnings minus personal income tax and employees' social security contributions plus family benefits
3. This percentage is influenced both by the overall tax level and the relative weight of personal income taxes and employees' social security contributions in national tax mixes

4. One-earner family. Takes account of family allowances and/or tax reliefs
5. Unweighted
- a. Includes personal and corporate incomes not available separately.
- b. Includes employees and employers social security contributions not available separately
- .. not available

StatLink: <http://dx.doi.org/10.1787/634788846751>

Sources: *Revenue Statistics, 1965–2003*, OECD, Paris, 2004;  
*Taxing Wages, 2003–2004*, OECD, Paris, 2004;  
*OECD Tax Database*;  
Centre for Tax Policy and Administration, DAF.

## Data and Vocabulary

(Part II of course reader,  
\$6.00 cash.)

Data -- derived using attachments.

## Vocabulary

Indirect / Direct

Unit / "Ad valorem"

Conventional definition, indirect taxes  
are taxes on goods & services,  
direct taxes are taxes on income.

Better basis for distinction,  
tax paid at point of sale vs.  
tax paid independently of sale.

Tax paid at point of sale must,  
as a practical matter, use only  
basic information: price & quantity  
of goods being bought.

-- sales tax, excise tax.

Single rate, <sup>proportional</sup> won't depend on other  
things you bought ("separable").

Tax paid independently of  
sale can be much more  
complicated / sophisticated.

-- Income tax

\* Not proportional -- multiple  
rates.

\* Not separable.

Tax rate depends in part on how you spend money, for example, not just on income per se. (tax deductions).

\* Depends on personal characteristics:

- married?
- kids?
- head of household?
- blind, very sick, ...

Unit Tax: Depends on just # of units bought.

- Federal gasoline tax, for example.

["Tax" can mean "tax rate" or "tax payment." Figure it out from the context.]

Ad valorem tax: Depends on

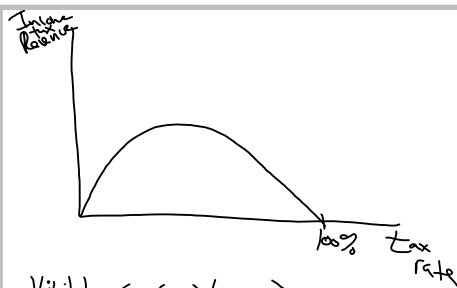
Units bought and price.

- Sales tax, for example.

Taxes are almost always on "economic bases," meaning the size of the base (in equilibrium) depends on the tax rate.

$$\text{Revenue} = t \cdot B(t)$$

depends on rate.



Visible  $(= (1-t) \cdot \text{Income})$   
 Visible Return  $= t \cdot \text{Income}$

Income (t)  
 Work effort, US  
 investments

Lump sum tax: not on an economic base. On an "exogenous" (or fixed) base.

- Endowment base.
- Head tax (per-capita payment). If no emigration, base is independent of the tax.
- Genetic characteristics.
- Eye color, height at adulthood, physical characteristics.

More realistic the head tax, the less "reasonable" or "fair" in some sense.  
 So, more of a theoretical tool.

### Tax Structure

\* Average tax rate:  $\frac{\text{tax paid}}{\text{tax base}}$

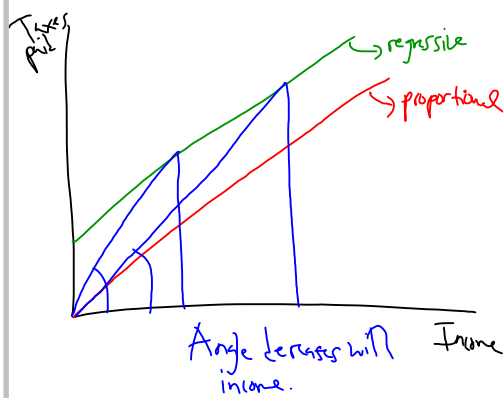
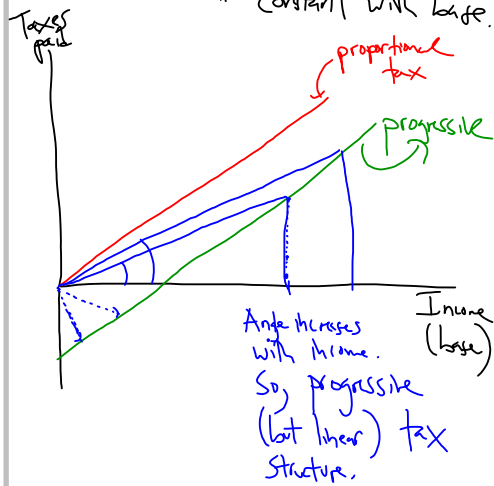
For example,  $\frac{\text{tax payment}}{\text{"income"}}$

\* Marginal tax rate:  $\frac{\text{change in tax paid}}{\text{change in tax base}}$

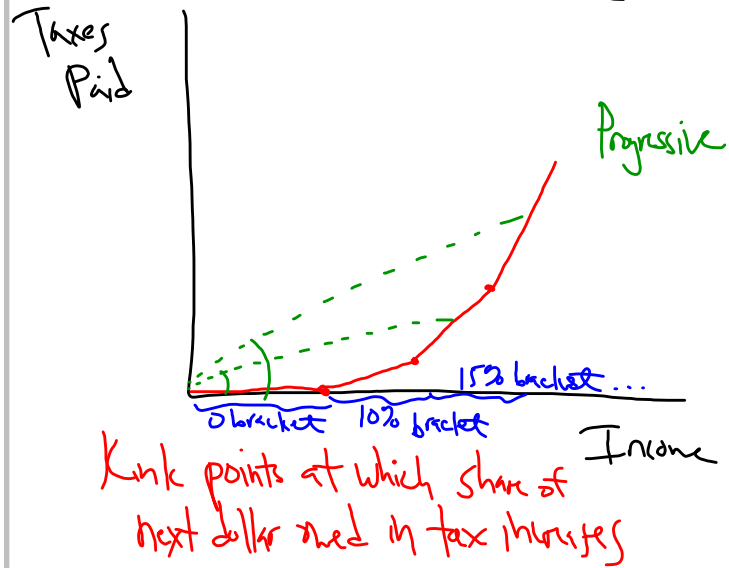
A tax structure is progressive if the average tax rate increases with the base.

" " regressive if avg. tax rate decreases with the base.

" " proportional " constant with base.



# Bracket/Rate Structure



Equivalently, in terms of after tax income:

