How Progressive is the U.S. Federal Tax System? A Historical and International Perspective

Thomas Piketty and Emmanuel Saez

ver the last 40 years, the U.S. federal tax system has undergone three striking changes, each of which seems to move the federal tax system in the direction of less progressivity. First, there has been a dramatic decline in top marginal individual income tax rates. In the early 1960s, the statutory individual income tax rate applied to the marginal dollar of the highest incomes was 91 percent. This marginal tax rate on the highest incomes declined to 28 percent by 1988, increased significantly to 39.6 percent in 1993, and fell to 35 percent as of 2003. Second, corporate income taxes as a fraction of gross domestic product have fallen by half, from around 3.5-4.0 percent of GDP in the early 1960s to less than 2 percent of GDP in the early 2000s (for example, Auerbach, 2006). Meanwhile, corporate profits as a share of GDP have not declined over the period, suggesting that capital owners—who are disproportionately of above-average incomes—earn relatively more net of taxes today than in the 1960s. Third, there has been a substantial increase in payroll tax rates financing Social Security retirement benefits and Medicare. The combined employee-employer payroll tax rate on labor income has increased from 6 percent in the early 1960s to over 15 percent in the 1990s and 2000s. Moreover, the Social Security payroll tax applies only up to a cap—equal to \$90,000 of annual earnings in 2005—and is therefore a relatively smaller tax burden as incomes rise above the cap.

However, the conclusion that these three changes have reduced the progressivity of the federal tax system is less obvious than it may at first appear. For example, in the case of the individual income tax, the numerous deductions and

■ Thomas Piketty is Professor of Economics, Paris School of Economics (PSE), Paris, France, and a Research Fellow, Centre for Economic Policy Research, London, United Kingdom. Emmanuel Saez is Professor of Economics, University of California, Berkeley, California, and Research Associate, National Bureau of Economic Research, Cambridge, Massachusetts. Their e-mail addresses are ⟨thomas.piketty@ens.fr⟩ and ⟨saez@econ.berkeley.edu⟩, respectively.

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Table 3a
International and Historical Comparison of Tax Rates

| Income groups | 1970 (US, France, and UK) | | | | | | | | | |
|-------------------|-----------------------------|------------------|------------------------------------|-------------------------------|----------------|----------------------------|-----------------------------|--|--|--|
| | Average tax rates (percent) | | | | | | Shares (percent) | | | |
| | Individual income tax | Payroll taxes | Estate, gift, and wealth tax | Corporate tax (US only) | Total taxes | Pre-tax income share | Post-tax income share | | | |
| A. United States | | | | | | | | | | |
| Full Population | 12.5 | 5.8 | 0.7 | 4.3 | 23.3 | 100.00 | 100.00 | | | |
| P0-90 | 9.9 | 7.2 | 0.0 | 3.2 | 20.2 | 67.61 | 70.54 | | | |
| P90-95 | 13.7 | 4.5 | 0.0 | 3.2 | 21.4 | 10.76 | 11.03 | | | |
| P95-99 | 16.1 | 3.0 | 0.7 | 5.7 | 25.6 | 12.60 | 12.23 | | | |
| P99-99.5 | 20.7 | 1.5 | 3.8 | 10.0 | 36.1 | 2.87 | 2.39 | | | |
| P99.5-99.9 | 25.8 | 0.9 | 5.8 | 12.0 | 44.6 | 3.63 | 2.62 | | | |
| P99.9-99.99 | 31.5 | 0.4 | 12.5 | 14.7 | 59.1 | 1.76 | 0.94 | | | |
| P99.99-100 | 32.2 | 0.1 | 23.4 | 19.0 | 74.6 | 0.76 | 0.25 | | | |
| B. France | | | | | | | | | | |
| Full Population | 5.3 | 20.8 | 0.3 | | 26.4 | 100.00 | 100.00 | | | |
| P0-90 | 2.3 | 24.0 | 0.0 | 26.3 | 69.30 | 69.39 | | | | |
| P90-95 | 6.4 | 17.6 | 0.2 | | 24.2 | 10.65 | 10.97 | | | |
| P95-99 | 10.6 | 14.1 | 0.4 | | 25.1 | 12.51 | 12.74 | | | |
| P99-99.5 | 16.8 | 10.6 | 0.8 | | 28.2 | 2.59 | 2.52 | | | |
| P99.5-99.9 | 21.9 | 7.4 | 1.9 | | 31.2 | 3.09 | 2.88 | | | |
| P99.9-99.99 | 30.2 | 4.2 | 4.2 | 38.6 | 1.37 | 1.14 | | | | |
| P99.99-100 | 40.1 | 1.7 | 6.9 | | 48.8 | 0.50 | 0.35 | | | |
| C. United Kingdom | | | | | | | | | | |
| Full Population | 17.1 | 7.0 | 1.1 | | 25.1 | 100.00 | 100.00 | | | |
| P0-90 | 13.0 | 8.1 | 0.0 | | 21.2 | 71.64 | 75.42 | | | |
| P90-95 | 19.0 | 5.8 | 0.2 | | 25.0 | 10.10 | 10.12 | | | |
| P95-99 | 25.0 | 4.1 | 2.1 | | 31.2 | 11.41 | 10.49 | | | |
| P99-99.5 | 32.3 | 2.4 | 5.5 | | 40.3 | 2.40 | 1.91 | | | |
| P99.5-99.9 | 41.3 | 1.6 | 10.4 | | 53.4 | 2.86 | 1.78 | | | |
| P99.9-99.95 | 52.3 | 1.0 | 16.5 | | 69.8 | 0.57 | 0.23 | | | |
| P99.95-100 | 69.2 | 0.6 | 21.9 | | 91.7 | 1.01 | 0.11 | | | |

Sources: Computations based on income tax return statistics. United Kingdom computations based on Atkinson (2006).

Notes: See Piketty and Saez (2006) for complete details on methodology. Note that top group in the United Kingdom is P99.95–100 (and not P99.99–100 as in the US or France). US numbers are based on 2004 tax law applied to 2000 incomes (adjusted to economic growth). France numbers are based on 2005 tax law applied to 1998 incomes (adjusted to economic growth). UK numbers are based on 2000 tax law applied to 2000 incomes (adjusted to economic growth). UK and French computations exclude the corporate income tax.

percent in the United States and 40 percent in the United Kingdom.¹¹ But the higher top marginal tax rates in France are largely undone by the large base

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¹¹ Estimates for France were computed using 2005 tax law, and did not take into account the new income tax cuts recently announced by the French government (the top marginal rate is scheduled to drop to around 42 percent in 2007).

Table 3b
International and Historical Comparison of Tax Rates

| Income groups | 2004 (US), 2005 (France), 2000 (UK) | | | | | | | | | |
|-------------------|-------------------------------------|------------------|------------------------------------|-------------------------------|----------------|----------------------------|-----------------------------|--|--|--|
| | Average tax rates (percent) | | | | | | Shares (percent) | | | |
| | Individual income tax | Payroll taxes | Estate, gift, and wealth tax | Corporate tax (US only) | Total taxes | Pre-tax income share | Post-tax income share | | | |
| A. United States | | | | | | | | | | |
| Full Population | 11.5 | 9.3 | 0.4 | 2.3 | 23.4 | 100.00 | 100.00 | | | |
| P0-90 | 5.4 | 11.5 | 0.0 | 1.5 | 18.5 | 53.75 | 57.28 | | | |
| P90-95 | 11.6 | 11.5 | 0.0 | 1.8 | 24.9 | 11.29 | 11.07 | | | |
| P95-99 | 16.4 | 8.1 | 0.1 | 2.5 | 27.2 | 15.28 | 14.51 | | | |
| P99-99.5 | 21.4 | 4.6 | 1.6 | 3.7 | 31.3 | 4.11 | 3.69 | | | |
| P99.5-99.9 | 23.8 | 3.0 | 1.9 | 4.3 | 33.0 | 6.63 | 5.80 | | | |
| P99.9-99.99 | 25.1 | 1.6 | 2.4 | 4.9 | 34.1 | 5.46 | 4.69 | | | |
| P99.99-100 | 26.2 | 1.4 | 2.5 | 4.6 | 34.7 | 3.48 | 2.96 | | | |
| B. France | | | | | | | | | | |
| Full Population | 3.8 | 33.3 | 0.7 | | 37.8 | 100.00 | 100.00 | | | |
| P0-90 | 1.8 | 34.8 | 0.1 | | 36.7 | 68.93 | 70.19 | | | |
| P90-95 | 4.5 | 33.7 | 0.6 | | 38.8 | 11.57 | 11.39 | | | |
| P95-99 | 7.0 | 31.4 | 1.4 | | 39.8 | 12.84 | 12.44 | | | |
| P99-99.5 | 11.6 | 26.5 | 2.2 | | 40.3 | 2.36 | 2.27 | | | |
| P99.5-99.9 | 16.4 | 21.4 | 5.1 | | 43.0 | 2.67 | 2.45 | | | |
| P99.9-99.99 | 22.3 | 16.5 | 8.9 | | 47.8 | 1.19 | 1.00 | | | |
| P99.99-100 | 28.8 | 8.5 | 24.2 | | 61.5 | 0.43 | 0.26 | | | |
| C. United Kingdom | | | | | | | | | | |
| Full Population | 15.0 | 8.3 | 0.3 | | 23.7 | 100.00 | 100.00 | | | |
| P0-90 | 9.7 | 7.6 | 0.0 | | 17.3 | 61.22 | 66.34 | | | |
| P90-95 | 15.8 | 13.8 | 0.0 | | 29.6 | 11.72 | 10.81 | | | |
| P95-99 | 21.7 | 11.9 | 1.0 | | 34.6 | 14.79 | 12.66 | | | |
| P99-99.5 | 27.4 | 10.1 | 1.3 | | 38.8 | 3.45 | 2.76 | | | |
| P99.5-99.9 | 30.5 | 8.6 | 1.3 | | 40.5 | 4.81 | 3.76 | | | |
| P99.9-99.95 | 33.2 | 7.6 | 1.4 | | 42.2 | 1.30 | 0.98 | | | |
| P99.95-100 | 34.5 | 6.5 | 1.5 | | 42.5 | 3.42 | 2.58 | | | |

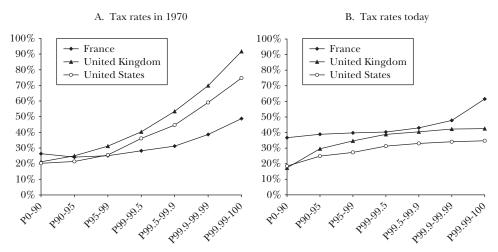
Sources: Computations based on income tax return statistics. United Kingdom computations based on Atkinson (2006).

Notes: See Piketty and Saez (2006) for complete details on methodology. Note that top group in the United Kingdom is P99.95–100 (and not P99.99–100 as in the US or France). US numbers are based on 2004 tax law applied to 2000 incomes (adjusted to economic growth). France numbers are based on 2005 tax law applied to 1998 incomes (adjusted to economic growth). UK numbers are based on 2000 tax law applied to 2000 incomes (adjusted to economic growth). UK and French computations exclude the corporate income tax.

exemptions and tax deductions that have always characterized the French individual income tax system. Also, the share of French taxpayers facing these very high marginal rates is relatively low. The last columns of the recent data show that the share of income received by the top 0.5 or 0.1 percent of the income distribution in France is much smaller than in the United States or the United Kingdom.

In 1970, the progressivity of the tax code taken as a whole was unambiguously

Figure 4
Tax Rates in France, the United Kingdom, and the United States in 1970 and Today



Notes: Figure displays tax rates acorss income groups in the three countries. Tax rates in the US include the 4 federal income taxes. Tax rates in France and the United Kingdom include individual income taxes, payroll taxes, and estate and wealth taxes but exclude corporate income taxes. In the united Kingdom, the two top groups are P99.9–99.95 and P99.95–100 (instead of P99.9–99.99 and P99.99–100).

illustrate several points. First, to assess progressivity of an overall tax system, it is critical to take a broad view of the tax system. Without taking estate and wealth taxation into account, it would not be apparent that tax progressivity has increased somewhat in a country like France between 1970 and 2005, while declining enormously in the United Kingdom and in the United States. Second, these findings suggest that Lindert's (2004) law is either about to change or has already done so; that is, Anglo-Saxon countries with relatively low levels of government spending relative to GDP used to have a more progressive tax system than high-spending welfare states. However, today, a high-spending welfare state like France seems to display both higher average tax rates and higher tax progressivity. This interesting issue deserves further research. In particular, in order to study intra-European tax competition, it would be valuable to extend the analysis to a much broader set of European countries, and to develop more systematic and rigorous methodologies encompassing a broader set of taxes.

Conclusion

This paper has discussed the progressivity of the U.S. federal tax system, its evolution since 1960, and how it compares with other countries. Several important findings emerge.

First, the progressivity of the U.S. federal tax system at the top of the income distribution has declined dramatically since the 1960s. For example, the top 0.01 percent of earners paid over 70 percent of their income in federal taxes in 1960,