

Some Background

DISTRIBUTION OF TAX BURDENS

What is the difference between marginal and average tax rates?

Q. What is the difference between marginal and average tax rates?

A. Average tax rates measure tax burden, while marginal tax rates measure the impact of taxes on incentives to earn, save, invest, or spend.

The average tax rate is the total amount of tax divided by total income. For example, if a household has a total income of \$100,000 and pays taxes of \$15,000, the household's average tax rate is 15 percent. The marginal tax rate is the incremental tax paid on incremental income. If a household were to earn an additional \$10,000 in wages on which they paid \$1,530 of payroll tax and \$1,500 of income tax, the household's marginal tax rate would be 30.3 percent.

Average tax rates are a measure of a household's tax burden; that is, how taxes affect the household's ability to consume today or (through saving) in the future. Marginal rates measure the degree to which taxes affect household (or business) economic incentives such as whether to work more, save more, accept more risk in investment portfolios, or change what they buy. Higher marginal rates reduce incentives to engage in a particular activity (such as work) or (in the case of sales taxes) consume a particular item.

TABLE 1

Effective Federal Tax Rates - All Tax Units, by Expanded Cash Income Percentile, 2019



Expanded Cash Income Percentile ^{2,3}	Tax Units		As a Percentage of Expanded Cash Income					All Federal Tax ⁶
	Number (thousands)	Percent of Total	Individual Income Tax ⁴	Payroll Tax ⁵	Corporate Income Tax	Estate Tax	Excise Tax	
Lowest quintile	45,510	26.1	-5.6	7.2	0.5	0.0	1.1	3.2
Second quintile	38,660	22.1	-1.3	7.6	0.7	0.0	0.8	7.9
Middle quintile	35,420	20.3	3.6	7.8	0.9	0.0	0.7	13.0
Fourth quintile	29,260	16.8	6.9	8.2	1.1	0.0	0.6	16.8
Top quintile	24,600	14.1	15.4	5.7	2.1	0.1	0.5	23.9
All	174,690	100.0	9.9	6.8	1.6	0.1	0.6	18.8
Addendum								
80-90	12,660	7.3	9.4	8.4	1.3	0.0	0.6	19.6
90-95	6,070	3.5	11.8	7.7	1.5	0.1	0.5	21.5
95-99	4,720	2.7	14.9	5.9	1.9	0.1	0.5	23.3
Top 1 percent	1,160	0.7	23.3	2.2	3.3	0.3	0.3	29.4
Top 0.1 percent	120	0.1	24.1	1.1	4.4	0.3	0.2	30.1

Source: Urban-Brookings Tax Policy center Microsimulation Model (version 0319-2).

Notes: (1) Calendar year. Baseline is current law as of 12/24/2019. For more information on TPC's baseline definitions, see: <http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>.

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see: <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2019 dollars): 20% \$25,300; 40% \$50,700; 60% \$91,200; 80% \$163,600; 90% \$239,600; 95% \$339,200; 99% \$818,700; 99.9% \$3,803,800.

(4) After tax credits (including refundable portion of earned income and child tax credits).

(5) Includes both the employee and employer portion of Social Security and Medicare tax.

(6) Excludes customs duties.

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TABLE 2

Effective Marginal Tax Rates on Wages, Salaries and Capital Income By expanded cash income percentile, 2019¹



Expanded Cash Income Percentile ^{2,3}	Tax Units (thousands)	Individual Income Tax ⁴				Individual Income Tax plus Payroll Tax ⁵
		Wages and Salaries	Long-term Capital Gains	Qualified Dividends	Interest Income	Wages and Salaries
Lowest quintile	45,510	1.0	1.4	0.9	1.8	14.9
Second quintile	38,660	13.4	1.5	0.8	5.9	27.1
Middle quintile	35,420	16.4	7.6	8.2	15.2	30.0
Fourth quintile	29,260	17.9	10.6	11.1	19.2	31.3
Top quintile	24,600	27.2	21.8	21.3	32.9	34.6
All	174,690	21.5	20.5	18.8	26.1	31.9
Addendum						
80-90	12,660	22.1	13.7	14.0	22.1	32.9
90-95	6,070	24.2	15.8	15.9	25.0	32.3
95-99	4,720	28.9	19.3	19.0	30.8	34.4
Top 1 percent	1,160	36.0	22.8	23.7	36.8	39.9
Top 0.1 percent	120	35.9	22.6	23.6	36.5	39.7

Source: Urban-Brookings Tax Policy center Microsimulation Model (version 0319-2).

Notes: (1) Calendar year. Baseline is current law as of 12/24/2019. For more information on TPC's baseline definitions, see: <http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm>.

(2) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see: <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2019 dollars): 20% \$25,300; 40% \$50,700; 60% \$91,200; 80% \$163,600; 90% \$239,600; 95% \$339,200; 99% \$818,700; 99.9% \$3,803,800.

(4) We calculate each tax unit's effective marginal individual income tax rate by adding \$1,000 to the income source and dividing the resulting tax change by that \$1,000. We then calculate the averages by weighting by the initial value of the appropriate income source.

(5) We calculate each tax unit's effective marginal individual plus payroll tax rate by adding \$1,000 to wages and salaries. We then divide the resulting change in individual income tax plus the resulting change in the employer and employee portions of payroll taxes for Social Security and Medicare by that \$1,000. We then calculate the averages by weighting by the initial value of wages and salaries. For married couples filing jointly, we assign a portion of the \$1,000 increase to each spouse based on their initial shares of the household's total wages and salaries.

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Data Sources

Urban-Brookings Tax Policy Center. [T20-0036 - Average Effective Federal Tax Rates - All Tax Units, By Expanded Cash Income Level, 2019.](#)

———. [T20-0037 - Average Effective Federal Tax Rates - All Tax Units, By Expanded Cash Income Percentile, 2019.](#)

———. [T20-0064 - Effective Marginal Tax Rates on Wages, Salaries, and Capital Income, By Expanded Cash Income Level, 2019.](#)

———. [T20-0065 - Effective Marginal Tax Rates on Wages, Salaries, and Capital Income, By Expanded Cash Income Percentile, 2019.](#)

Some Background

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Further Reading

Joint Committee on Taxation. 2015. ["Fairness and Tax Policy."](#) JCX-48-15. Washington, DC: Joint Committee on Taxation.

Maag, Elaine, C. Eugene Steuerle, Ritadhi Chakravarti, and Caleb Quakenbush. 2012. ["How Marginal Tax Rates Affect Families at Various Levels of Poverty."](#) *National Tax Journal* 65 (4): 759–82.

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