

U.S. Zero-Deficit Linear Income Tax Schedules

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Abstract

Using 2023 stratified gross income tables from both the U.S. Census Bureau and the U.S. Internal Revenue Service, combined with a \$4 trillion revenue requirement based on U.S. Treasury data, we demonstrate four alternative zero-deficit linear individual income tax schedules with varying progressivity. Based on the IRS table, these schedules vary from a non-progressive 25.9% flat tax with no reduction in income inequality to a highly progressive version with a 60% marginal tax rate, a \$33,191 universal basic income subsidy, and a 46% reduction in Gini income inequality. We conclude that a highly graduated tax schedule is not necessary to achieve a fairer distribution of post-tax income. A simple linear tax schedule will do the job while completely eliminating the federal deficit and setting the U.S. on a sustainable fiscal path.

Keywords

Deficit Elimination, Linear Income Tax, Income Inequality, Gini Index

1. Introduction

In Agnew (2021), we estimated a progressive linear income tax schedule with a 50% marginal tax rate and a \$31,248 universal basic income (UBI) subsidy using stratified 2017 gross income data from the U.S. Census Bureau with additional reference to U.S. Internal Revenue Service data for the total revenue requirement. Here we update our estimation to 2023 using tables from both of these agencies to cover not only actual current revenue but also the entire federal deficit with the individual (or personal) income tax (IIT). In this context, we demonstrate various zero-deficit linear income tax schedules ranging from a flat tax to progressive schedules with marginal tax rates of 40%, 50%, and 60%.

Linear income tax schedules were analyzed in detail over fifty years ago by Mirrlees (1971) and Sheshinski (1972). More recently, review articles by Mankiw et al. (2009) and Diamond & Saez (2011) discuss linear schedules in the context of

optimal taxation. Moreover, the comprehensive monograph by [Saez & Zucman \(2019\)](#) makes the case for progressive taxation.

[Aumann & Kurz \(1977\)](#) and [Agnew \(2022\)](#) show that linear schedules arise naturally as Shapley values in income-sharing cooperative game models. We also argue below that nothing more complicated is required to target a particular post-tax Gini income inequality index. A linear income tax schedule, with UBI subsidy, can be as progressive as you like, up to and including a commune where everyone gets the same post-tax income.

In the next section, we use data from the U.S. Treasury and the U.S. Bureau of Economic Analysis to target a 2023 requirement of \$4 trillion to cover both current IIT revenue plus the entire federal deficit, with all other federal inflows and outflows remaining the same. In Section 3, we develop the formula for a simple zero-deficit linear tax function with a single marginal tax rate. In Section 4, we lay out the methodology developed in [Farris \(2010\)](#) and [Agnew \(2021\)](#) for estimating both pre-tax and post-tax Gini indexes for linear tax functions. There, we also show that no further complexity is required to attain a target post-tax Gini. In Section 5, we estimate results for zero-deficit linear tax schedules with varying progressivity from the stratified U.S. Census gross income table. In Section 6, we repeat the process with the stratified U.S. IRS gross income table, with the addition of actual IRS tax results for comparison, which show that the current complicated tax framework underperforms in terms of both progressivity and revenue generation. Section 7 contains our conclusions.

2. U.S. Federal Deficit

In this section we reference U.S. federal government receipts and deficits for calendar years 2019-2025. This time span covers both Democratic and Republican administrations as well as the dramatic pandemic deficit spike in 2020-2021. Since then, the deficit has receded but it is still around 6% of GDP. Our focus is on individual income tax (IIT) receipts and how much they would have to increase to eliminate the deficit, i.e., the entire deficit, not just the primary deficit before interest payments on federal debt, assuming all other federal receipts and outlays remain the same.

The individual income tax (i.e., non-corporate income tax) is the single largest revenue contributor to the U.S. Treasury. Individuals here are personal tax-payers, not distinct persons. This tax is also called the personal income tax, but we will use the U.S. Treasury terminology. We focus on this tax because there is room for significant revenue increase within the constraint of total gross (pre-tax) personal income in the U.S. economy and also because IRS collection and disbursement machinery already exists. We are simply talking about potential IIT tax schedule revision within existing IRS structure. Our specific focus will be on the year 2023 because stratified gross income tables are available from both the U.S. Census Bureau and the U.S. Internal Revenue Service (IRS), allowing us to estimate impacts of alternative zero-deficit linear tax schedules on net (post-tax) Gini

income inequality reduction.

U.S. Treasury data is organized by fiscal year (October to September) so it is necessary to calendarize by rearranging monthly IIT receipts from monthly Treasury statements to a calendar year basis. Moreover, it is necessary to reference their updated monthly deficit spreadsheet which incorporates revisions. For 2023, **Table 1** shows IIT tax receipts of \$2197 billion (7.9% of GDP) and a deficit of \$1784 billion (6.4% of GDP). Hence, a zero-deficit IIT schedule would have to yield \$3981 billion (14.3% of GDP).

Table 1. U.S. Treasury individual income tax receipts & federal deficit (Calendarized \$ Billion).

	2019	2020	2021	2022	2023	2024	2025
Gross Domestic Product	\$21,540	\$21,375	\$23,726	\$26,055	\$27,812	\$29,298	\$30,762
Individual Income Tax Receipts	\$1730	\$1571	\$2233	\$2601	\$2197	\$2419	\$2744
% of GDP	8.0%	7.3%	9.4%	10.0%	7.9%	8.3%	8.9%
Federal Deficit	\$1022	\$3348	\$2580	\$1419	\$1784	\$2018	\$1667
% of GDP	4.7%	15.7%	10.9%	5.4%	6.4%	6.9%	5.4%
Zero-Deficit IIT Receipts	\$2752	\$4919	\$4813	\$4021	\$3981	\$4437	\$4411
% of GDP	12.8%	23.0%	20.3%	15.4%	14.3%	15.1%	14.3%

Data source: <https://fiscaldata.treasury.gov/datasets/monthly-treasury-statement/> and <https://www.bea.gov/itable> (1.1.5).

Table 2 contains the same data from the U.S. Bureau of Economic Analysis for the purpose of corroboration. The components vary somewhat, due to BEA timing conventions on recording tax receipts, but the combined total for 2023 is very close at \$3996 billion (14.4% of GDP). For our purposes in later sections, we will use a round number of \$4 trillion as the required zero-deficit IIT intake for 2023. Note that the equivalent dollar number for 2025 would be higher, but it would be the same percent of GDP.

Table 2. U.S. Bureau of Economic Analysis IIT receipts & federal deficit (\$ Billion).

	2019	2020	2021	2022	2023	2024	2025
Gross Domestic Product	\$21,540	\$21,375	\$23,726	\$26,055	\$27,812	\$29,298	\$30,762
Individual Income Tax Receipts	\$1701	\$1741	\$2128	\$2605	\$2279	\$2403	\$2598
% of GDP	7.9%	8.1%	9.0%	10.0%	8.2%	8.2%	8.4%
Federal Deficit	\$1044	\$2948	\$2855	\$1029	\$1717	\$1874	\$1821
% of GDP	4.8%	13.8%	12.0%	3.9%	6.2%	6.4%	5.9%
Zero-Deficit IIT Receipts	\$2745	\$4689	\$4983	\$3634	\$3996	\$4277	\$4419
% of GDP	12.7%	21.9%	21.0%	13.9%	14.4%	14.6%	14.4%

Data source: <https://www.bea.gov/itable> (table 3.2. & table 1.1.5).

3. Linear Income Tax

A linear individual income tax function is $t(x) = rx - s$ where x is gross (pre-tax) income dollars, $r \in (0,1)$ is a single *marginal* tax rate that applies to every taxpayer and every category of income, $s \geq 0$ is a dollar subsidy (Universal Basic Income or UBI) that every taxpayer gets, and $t(x)$ is income tax dollars due. It follows that $x - t(x) = (1-r)x + s$ is net (post-tax) income.

If $s > 0$, tax $t(x)$ is negative for gross income $x < s/r$. This is not some sort of income deduction or specialized credit. This represents an actual payment to low-income individuals. Also, if $s > 0$, average percentage tax rate $t(x)/x = r - s/x$ increases progressively with gross income x , approximating r for very large incomes. If $s = 0$, there is no subsidy and everyone pays the same rate, a so-called “flat” tax. We will see zero-deficit examples of both flat and progressive linear tax schedules in later sections.

It is worth noting that linear tax schedules arise naturally from Shapley value in two different cooperative game theory models. [Aumann & Kurz \(1977\)](#) framed taxation in an organized economy as a power game among individuals with varying gross money incomes, one where a minority of high-income individuals could threaten to withhold their productive endowments to prevent an egalitarian outcome. Shapley value for this game yielded a linear tax schedule with a subsidy and a single marginal tax rate greater than or equal to 50%.

[Agnew \(2022\)](#) modeled a different game among individuals with varying gross money incomes, one where only taxpayer coalitions above a certain threshold size could be credited with their combined gross incomes. Similarly, Shapley value for this game yielded a linear tax function with a subsidy and a single marginal tax rate depending on the accreditation threshold. This formulation included a caveat, however. The gross income imputation across individual taxpayers is in the game core while the Shapley value imputation generally is not, leading to instability of the Shapley imputation and constant pressure from high-gross-income individuals to lower their taxes and increase their net incomes.

So far we have omitted the cost of government in the context of taxation, but of course that is the key issue when it comes to eliminating the federal deficit. Suppose that we have a population of N individual taxpayers and let x_j denote the gross income of individual j . Then, $T = \sum_{j=1}^N x_j$ is total gross income and $\bar{x} = T/N$ is average gross income. Let C denote the dollar cost of government to be covered and $c = C/T \in (0,1)$ the government cost ratio. For zero deficit, we must have dollar outlays equal to dollar receipts, i.e., for a linear tax function with parameters r and s we must have $C = \sum_{j=1}^N t(x_j) = \sum_{j=1}^N (rx_j - s) = rT - sN$ or $c = C/T = r - s/\bar{x}$, which implies that $s = (r - c)\bar{x}$. Hence our zero-deficit linear tax function is:

$$t(x) = rx - (r - c)\bar{x} \quad (1)$$

This is the structure that we will use for estimation in the following sections;

Agnew (2021) used this structure but he didn't include the deficit in C . Here we include the dollar cost of government, with the deficit, to be covered by the individual income tax, all other federal outlays and receipts remaining the same. We also discard the existing income tax machinery. There are no special tax rates for investment income. There are no deductions, standard or itemized. There are no specialized tax credits. There is no need for a separate Alternative Minimum Tax (AMT) schedule. Gross income flows through a single linear tax function. In reality, of course, there would have to be adjustments for unemployable dependents like children. We are keeping it simple for demonstration purposes.

Finally, we will measure income inequality by the Gini index, which is discussed in Farris (2010) and Agnew (2021). We will show that significant Gini inequality reduction is possible while eliminating the federal deficit, in fact that any post-tax Gini index is attainable with a zero-deficit linear tax function.

4. Stratified Gross Income Tables

There is no way to access even anonymized income and tax data at the individual level. What we can readily access are separate stratified gross income tables from the U.S. Census Bureau and the U.S. Internal Revenue Service (IRS). These tables contain bracketed gross income strata and average gross income for each stratum. The income brackets are quite different between these two sources, broader and less detailed for the IRS version, but total gross income is about the same. Census is organized by households while IRS is organized by filed tax returns. The IRS table is perhaps more relevant because there can obviously be multiple tax filings within a household, but we find it useful to present both data sources, particularly in terms of corroboration. IRS additionally provides data on taxes paid under the current system, which of course involves a sizable deficit. Both tables allow convenient, approximate spreadsheet estimation for zero-deficit linear tax schedules. In particular, Farris (2010) showed, using Census data, how to utilize any stratified gross income table for Gini approximation.

Using Farris' notation for n household strata arranged from lowest to highest average gross income:

h_i = Number of Households in Stratum i .

$N = \sum_{i=1}^n h_i$ = Total Number of Households.

$p_j = \sum_{i=1}^j h_i / N$ = Cumulative Household Proportion through Stratum j .

x_i = Average U.S. Dollar Annual Pre-Tax Money Income per Household in Stratum i .

$T = \sum_{i=1}^n x_i h_i$ = Total Household Dollar Gross Income.

$\bar{x} = T/N$ Overall Average Dollar Gross Income.

From these ingredients, Farris noted that the pre-tax Lorenz curve

$L_0(p_j) = \sum_{i=1}^j x_i h_i / T$ through stratum j and then he derived the following interpolation formula for the pre-tax Gini index using straightforward mathematics.

$$G_0 \equiv \left(\frac{1}{T} \sum_{j=1}^n x_j (p_j + p_{j-1}) h_j \right) - 1 \quad (2)$$

where $p_0 = 0$. Agnew (2021) showed that the post-tax Gini index is:

$$G_1 = \left(\frac{1-r}{1-c} \right) G_0 \quad (3)$$

for the linear income tax function in (1) and hence that the associated percentage Gini gross-to-net income inequality reduction is:

$$1 - \frac{G_1}{G_0} = \frac{r-c}{1-c} \quad (4)$$

where the government cost ratio $c = C/T$ now reflects the cost covered by the individual income tax, including the deficit, i.e., $C = \$4$ trillion in 2023.

Note from (3) that any post-tax Gini G_1 is attainable by varying r . When $r = c$, $G_1 = G_0$, we have flat tax $t(x) = cx$ in (1), and there is zero Gini inequality reduction. When $r < c$, $G_1 > G_0$, the tax schedule is regressive, and it is of little interest. When $r > c$, $G_1 < G_0$ and the tax schedule is progressive. In the limit, when $r = 1 = 100\%$, $G_1 = 0$, which represents perfect mathematical equity but also an effective commune with $t(x) = x - (1-c)\bar{x}$ in (1) and the same post-tax income $x - t(x) = (1-c)\bar{x}$ for everybody. We are of course not recommending anything like a commune. The point we are making is that any degree of progressivity is attainable with a linear income tax function. If our objective is targeted Gini $G_1 < G_0$, then we simply invert (3) to get $r = 1 - \frac{G_1}{G_0}(1-c)$; there is no need for anything more complicated to attain “fair shares.” In Agnew (2021), we allowed for a more general nonlinear (or graduated) tax function in the abstract, but we saw no point in pursuing the matter further.

5. Estimation Using 2023 U.S. Census Table

For Census, the download URL is

<https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-hinc/hinc-06.html>, then select 2023 and download the Excel file Income Distribution to \$250,000 or more for Households: 2023 (hinc06.xlsx). This table includes 42 annual household gross income strata, ranging from “Under \$5000” to “\$250,000 and Over.” We utilize the All Races columns for spreadsheet calculations. We also ignore the total row as the count differs from the summed strata counts. These calculations carry over from Agnew (2021) except that we are now specifically focused on deficit elimination. Once again, we are including Census data for illustration and comparison purposes.

From the 2023 Census table, we have $N = 132,214$ thousand households and total gross income of $T = \$15,142,566,844$ thousand so average gross income is $\bar{x}$

= \$114,531 per household. From Section 2 we require $C = \$4$ trillion to eliminate the federal deficit with IIT. Thus $c = C/T \cong 0.2642 = 26.42\%$.

The result in **Table 3** follows directly from Equations (1) to (4) with varying marginal tax rates r and we see that significant Gini income inequality reduction is possible for zero-deficit individual income tax schedules when r is progressively larger than c . Incidentally, the 2023 Census income summary (<https://www2.census.gov/library/publications/2024/demo/p60-282.pdf>) shows 0.485 as the 2023 gross income Gini index, slightly higher than our 0.477 estimate, but of course they had access to more disaggregated income data than the generally available stratified table.

Table 3. Zero-deficit IIT estimation using 2023 U.S. Census table.

	Marginal Tax Rate			
	Flat 26.42%	40%	50%	60%
UBI Subsidy	\$0	\$15,558	\$27,011	\$38,464
Zero-Tax Threshold	\$0	\$38,896	\$54,023	\$64,107
Pre-Tax Gini Index	0.477	0.477	0.477	0.477
Post-Tax Gini Index	0.477	0.389	0.324	0.259
Gini Reduction	0%	18.5%	32.1%	45.6%

As in [Agnew \(2021\)](#), we also portray these results in a Lorenz chart where the Gini index for each tax scenario is equal to twice the area between its Lorenz curve and the 45-degree equity line and where the flat tax curve is coincident with the gross income curve (**Figure 1**).

The next two charts portray the comparative zero-deficit tax schedules in dollar and percentage terms across gross incomes from \$0 to \$400,000, again from Equation (1). **Figure 2** dollar tax curves are straight lines with marginal rate slopes and nonpositive intercepts reflecting UBI subsidies; these lines all coincide at average gross income $\bar{x}$ as it is clear from (1) that $t(\bar{x}) = r\bar{x} - (r - c)\bar{x} = c\bar{x}$ for any r . **Figure 3** percentage tax curves plot $t(x)/x$ to portray average tax rates experienced by taxpayers. The flat tax curve is a horizontal line while other progressive curves are negative on the low end, again reflecting UBI subsidies, and increasing with concave curvatures toward corresponding marginal rates for very large gross incomes.

Two issues arise when viewing these charts. First involves the federal deficit itself and what obligation taxpayers have to eliminate it. Our view is that the current U.S. deficit and associated federal debt are out of control (<https://siepr.stanford.edu/publications/policy-brief/us-budget-math-looking-dangerous>) and moreover that the individual income tax is the most direct vehicle to cap the debt. The second issue involves the fair distribution of tax burden. Some would argue that the flat tax is fair because everyone pays at the same rate. Others,

like Saez & Zuchman (2019), would argue that steeper tax curves are necessary to reduce Gini income inequality that has steadily increased over the past forty years. Our view is that a progressive linear tax schedule can simultaneously eliminate the deficit and significantly reduce Gini income inequality. The remaining issue is the degree of progressivity reflected in the marginal tax rate.

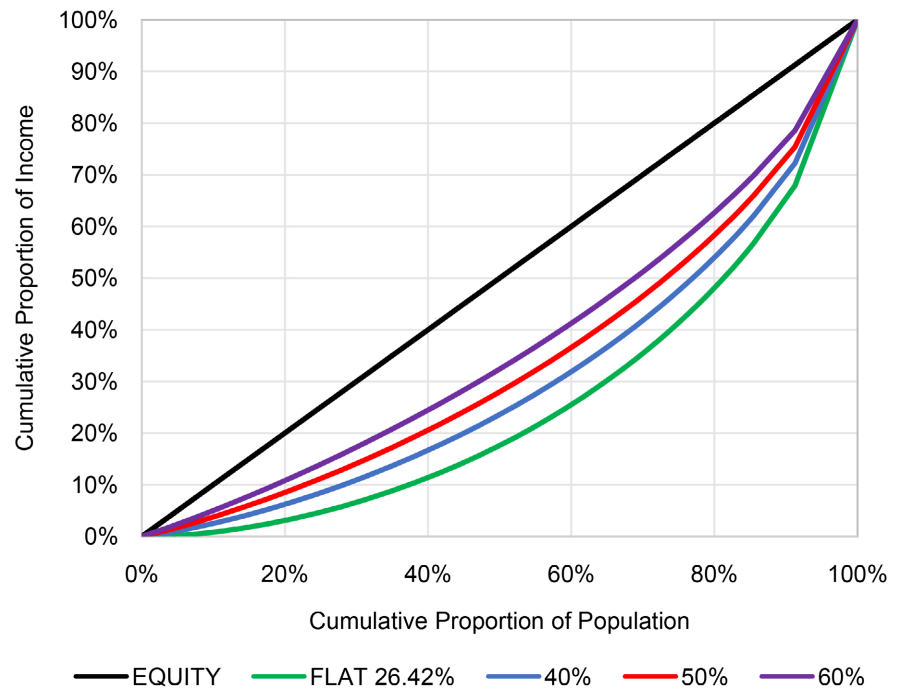


Figure 1. 2023 zero-deficit IIT Lorenz curves by marginal tax rate from Census table.

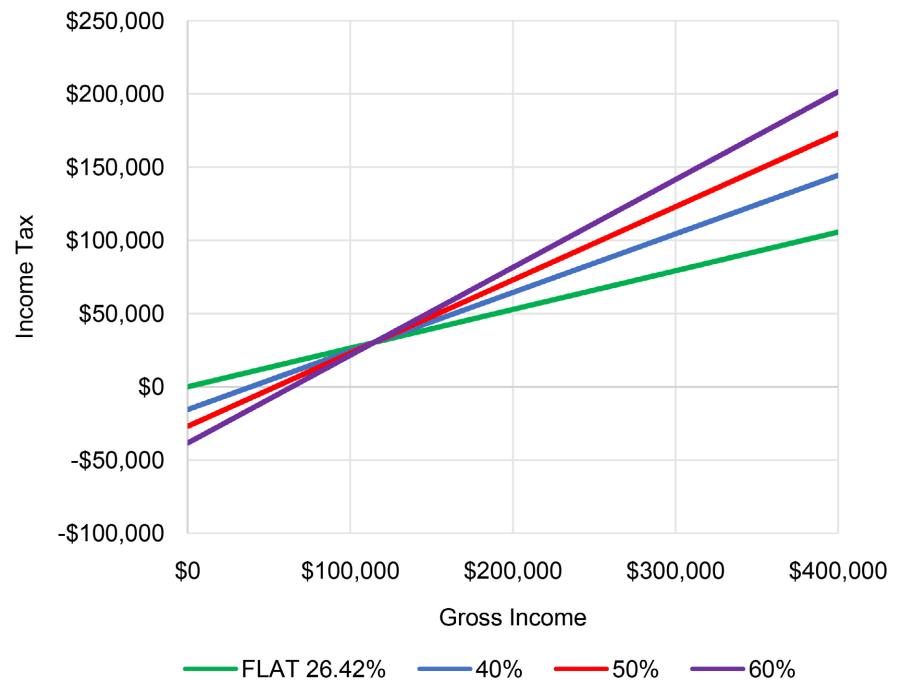


Figure 2. 2023 zero-deficit IIT dollar tax curves by marginal tax rate from Census table.

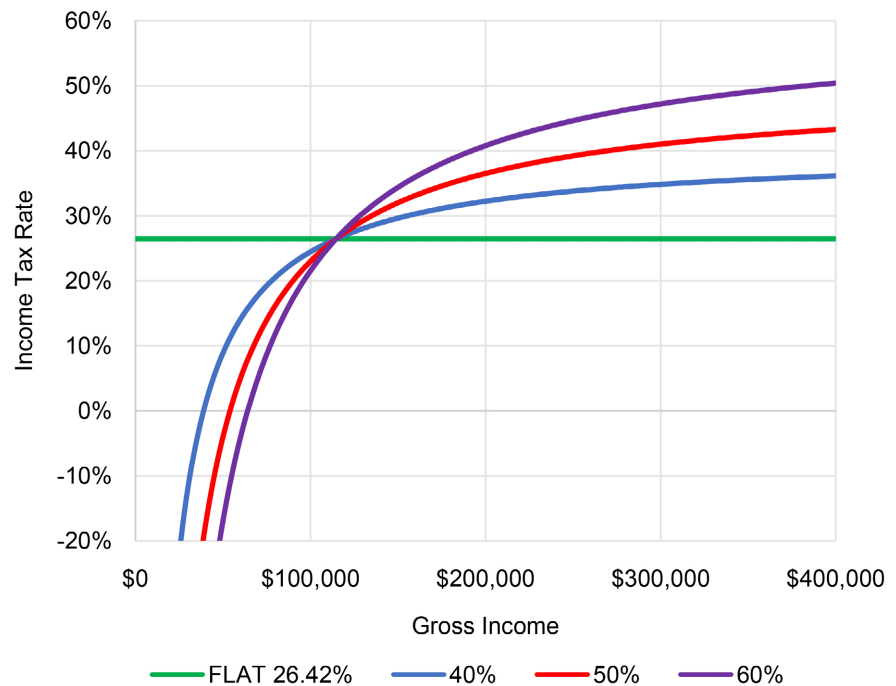


Figure 3. 2023 zero-deficit IIT average tax rate curves by marginal tax rate from Census table.

6. Estimation Using 2023 U.S. IRS Table

For IRS, the download URL is

<https://www.irs.gov/statistics/soi-tax-stats-individual-statistical-tables-by-size-of-adjusted-gross-income>, then select 2023 table 1.1 to obtain Excel file 23in11si.xls. This table, organized by filed tax returns rather than households, includes 18 annual adjusted gross income (AGI) strata, ranging more broadly from “\$1 under \$5000” to “\$10,000,000 or more.” There is also a “No adjusted gross income” stratum which we ignore. It apparently consists primarily of businesses, especially passive real estate investors, who have large income deductions, like depreciation, which are not available to ordinary taxpayers; there is also evidently a relatively small contingent of taxpayers subject to the Alternative Minimum Tax. In any event, there is no apparent way to meld this stratum into the 18 ordered AGI strata; it is truly an apples and oranges situation and it is the one peculiarity of the IRS table.

From the 2023 IRS table, we have $N = 158,421,962$ filed returns and total adjusted gross income of $T = \$15,430,207,254,209$ so average AGI per return is $\bar{x} = \$97,399$. There are more filed returns than households in Section 5, averaging about 1.2 returns per household. Total IRS gross income is about 2% higher than the Census total, but it is obviously in the same ballpark, which is reassuring. Again from Section 2 we require $C = \$4$ trillion to eliminate the federal deficit with IIT. Thus $c = C/T \cong 0.2592 = 25.92\%$.

Except for the significantly larger pre-tax Gini index, reflecting a broader income range in the stratified IRS table, the results in **Table 4** are very similar to

those in **Table 3**, especially if you adjust for the households-returns difference. Once again we portray these results in a Lorenz chart where the Gini index for each tax scenario is equal to twice the area between its Lorenz curve and the 45-degree equity line and where the flat tax curve is coincident with the gross income curve. **Figure 4** curves are more convex than those in **Figure 1**, again because of the broader gross income coverage in the IRS table. We have also added the Lorenz curve corresponding to actual IRS post-tax incomes, which only reduces the Gini index from 0.590 to 0.556 (5.8%) and of course involves a sizable deficit.

Table 4. Zero-deficit IIT estimation using 2023 U.S. IRS table.

	Marginal Tax Rate			
	Flat 25.92%	40%	50%	60%
UBI Subsidy	\$0	\$13,711	\$23,451	\$33,191
Zero-Tax Threshold	\$0	\$34,277	\$46,901	\$55,318
Pre-Tax Gini Index	0.590	0.590	0.590	0.590
Post-Tax Gini Index	0.590	0.478	0.398	0.318
Gini Reduction	0%	19.0%	32.5%	46.0%

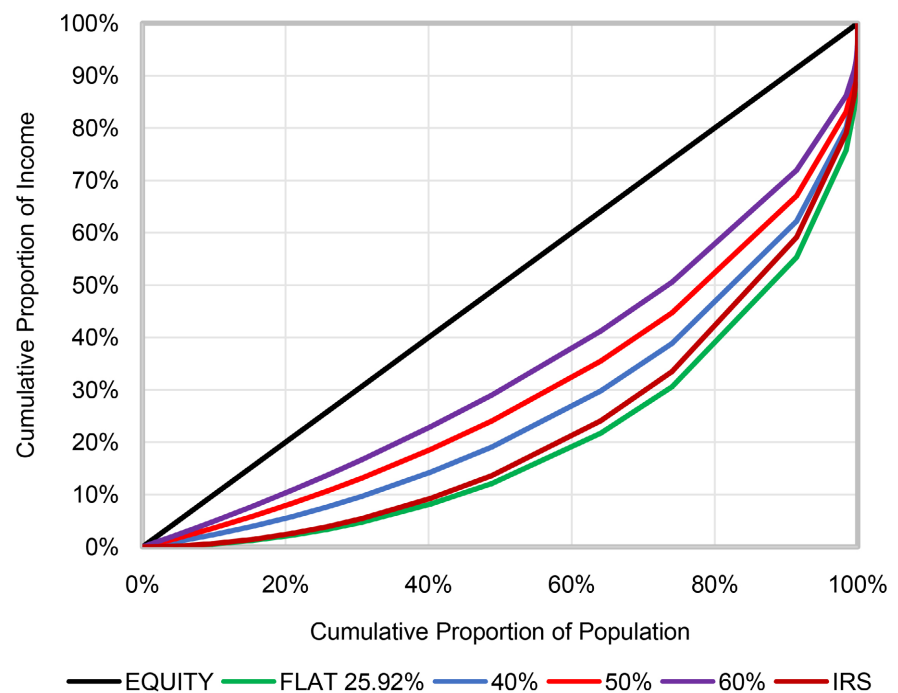


Figure 4. 2023 zero-deficit IIT Lorenz curves by marginal tax rate from IRS table + IRS actual.

We skip the analogs of **Figure 2** and **Figure 3** because they would look much the same. Instead, we tabulate the tax rates for average incomes for all these zero-deficit linear tax schedules (plus IRS actual) across all the strata in the IRS table.

This provides a broad-based look in keeping with the IRS strata and emphasizes that zero deficit requires significant tax rates across most strata, not just the very highest ones.

Table 5 shows that a zero-deficit linear tax schedule has to collect substantial amounts where the money is, i.e., above an AGI of \$100,000. It also shows that the non-zero-deficit IRS schedule is woefully deficient in this respect, even though it is mildly progressive up to the last stratum, where it simply regresses.

Table 5. 2023 stratum breakdown of IRS zero-deficit linear tax schedules + IRS actual.

AGI Stratum	% of Returns	Average AGI	% of AGI	Zero-Deficit Marginal Tax Rate				IRS
				Flat 25.92%	40%	50%	60%	
\$1 under \$5000	4.64%	\$2372	0.11%	25.92%	-538.0%	-938.6%	-1339.3%	0.1%
\$5000 under \$10,000	5.10%	\$7545	0.39%	25.92%	-141.7%	-260.8%	-379.9%	0.1%
\$10,000 under \$15,000	5.67%	\$12,503	0.73%	25.92%	-69.7%	-137.6%	-205.5%	0.1%
\$15,000 under \$20,000	5.49%	\$17,447	0.98%	25.92%	-38.6%	-84.4%	-130.2%	0.9%
\$20,000 under \$25,000	5.00%	\$22,458	1.15%	25.92%	-21.1%	-54.4%	-87.8%	1.8%
\$25,000 under \$30,000	4.79%	\$27,511	1.35%	25.92%	-9.8%	-35.2%	-60.6%	2.7%
\$30,000 under \$40,000	9.60%	\$34,962	3.45%	25.92%	0.8%	-17.1%	-34.9%	3.7%
\$40,000 under \$50,000	8.53%	\$44,844	3.93%	25.92%	9.4%	-2.3%	-14.0%	4.9%
\$50,000 under \$75,000	15.24%	\$61,548	9.63%	25.92%	17.7%	11.9%	6.1%	6.5%
\$75,000 under \$100,000	9.96%	\$86,629	8.86%	25.92%	24.2%	22.9%	21.7%	8.4%
\$100,000 under \$200,000	17.42%	\$138,330	24.75%	25.92%	30.1%	33.0%	36.0%	10.7%
\$200,000 under \$500,000	6.92%	\$287,872	20.44%	25.92%	35.2%	41.9%	48.5%	16.3%
\$500,000 under \$1,000,000	1.12%	\$671,417	7.74%	25.92%	38.0%	46.5%	55.1%	22.9%
\$1,000,000 under \$1,500,000	0.23%	\$1,202,551	2.88%	25.92%	38.9%	48.0%	57.2%	26.1%
\$1,500,000 under \$2,000,000	0.09%	\$1,717,044	1.64%	25.92%	39.2%	48.6%	58.1%	27.3%
\$2,000,000 under \$5,000,000	0.13%	\$2,965,389	3.91%	25.92%	39.5%	49.2%	58.9%	28.0%
\$5,000,000 under \$10,000,000	0.03%	\$6,827,469	2.18%	25.92%	39.8%	49.7%	59.5%	28.0%
\$10,000,000 or more	0.02%	\$29,882,856	5.88%	25.92%	40.0%	49.9%	59.9%	25.7%

7. Conclusion

We have demonstrated that simple linear U.S. individual income tax schedules can eliminate the federal deficit. Moreover, Gini income inequality can be significantly reduced via a relatively high marginal tax rate which yields a UBI subsidy on the low end of the gross income scale and much larger revenue on the high end. Reformed taxation would also have the side benefit of simplifying our current

complex but inadequate framework. This kind of zero-deficit transformation will eventually be necessary to avoid a debt-driven financial meltdown. Regardless of one's views on federal government policies and programs, our current tax system is clearly faltering.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Agnew, R. A. (2021). Income Inequality and Taxation. *Mathematics Magazine*, 94, 257-266. <https://doi.org/10.1080/0025570x.2021.1957393>
- Agnew, R. A. (2022). Shapley Value and Income Taxation. *Theoretical Economics Letters*, 12, 1048-1052. <https://doi.org/10.4236/tel.2022.124057>
- Aumann, R. J., & Kurz, M. (1977). Power and Taxes. *Econometrica*, 45, 1137-1161. <https://doi.org/10.2307/1914063>
- Diamond, P., & Saez, E. (2011). The Case for a Progressive Tax: From Basic Research to Policy Recommendations. *Journal of Economic Perspectives*, 25, 165-190. <https://doi.org/10.1257/jep.25.4.165>
- Farris, F. A. (2010). The Gini Index and Measures of Inequality. *The American Mathematical Monthly*, 117, 851-864. <https://doi.org/10.4169/000298910x523344>
- Mankiw, N. G., Weinzierl, M., & Yagan, D. (2009). Optimal Taxation in Theory and Practice. *Journal of Economic Perspectives*, 23, 147-174. <https://doi.org/10.1257/jep.23.4.147>
- Mirrlees, J. A. (1971). An Exploration in the Theory of Optimum Income Taxation. *The Review of Economic Studies*, 38, 175-208. <https://doi.org/10.2307/2296779>
- Saez, E., & Zucman, G. (2019). *The Triumph of Injustice: How the Rich Dodge Taxes and How to Make Them Pay*. W.W. Norton & Company.
- Sheshinski, E. (1972). The Optimal Linear Income-Tax. *The Review of Economic Studies*, 39, 297-302. <https://doi.org/10.2307/2296360>