Federal Tax Problems and Solution with Two or One Linear Formula

Federal tax systems have multi tax brackets (from 1 to 56) during the past 150 years. The existing tax system has 7 tax brackets, 224 (7×4×8) withholding formulas, and 21-page Withholding Tables for withholding taxes and 28 taxable income ranges, 28 formulas, and 12-page Tax Table for tax returns.

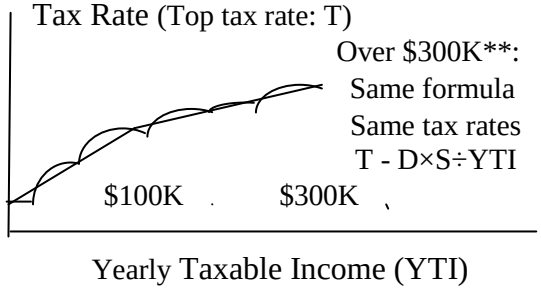
Two simple linear formulas and one existing formula can be used to match/simplify our complex income tax brackets, 224 (7×4×8) withholding formulas, and xx-page tables fairly and efficiently and to save $10 billion (Table 6*). One simple linear formula is used to resolve other tax problems. Here are some examples:

*Research paper: www.academicstar.us/UploadFile/Picture/2023-5/20235518550488.pdf

1. Multi-Bracket Personal Income Tax Systems and Solution

Federal Tax Calculation System:
7 tax brackets (up to 56 tax brackets during 150 years)
224 withholding formulas (7×4×8)
21-page Withholding Tables and 12-page Tax Table

Long-Term Solution: 3 Formulas (Neutral tax revenue)
(2 simple slope formulas and 1 existing formula)



Bill Draft for Personal Individual Income Tax:

For all individuals, income tax shall be computed with one of following formulas:

If the yearly taxable income (YTI) is:	The tax rate and tax are:	2020 Tax rate range:
Not over $100,000×S.....	(YTI÷S÷A + 0.1) × TI	0.1 - 0.181
($100,000 - $300,000)×S ……	(YTI÷S÷C + 0.1385) × TI	0.181 - 0.266
Over $300,000×S.....	(0.37 - (D×S÷YTI)) × TI	0.266 – 0.37

Where: 0.1 (10%) is bottom tax rate and 0.37 (37%) is top tax rate in 2020, which can be reformed.
A = 1,234,568 from 100,000 to divide the 1-st tax rate range difference (0.181-0.1) in 2020.
C = 2,352,941 from 200,000 to divide the 2-nd tax rate range difference (0.266-0.181) in 2020.
D = 31,200 from 300,000 to multiply the 3-rd tax rate range difference (0.37-0.266) in 2020.
F = the number of filing periods (52, 26, 24, 12, 4, 2, 1 or 364 for weekly, bi-weekly, semi-monthly, monthly, quarterly, semi-annual, annual or daily filing periods).
S = status number (2 for Married filing jointly or qualifying widow(er), 1 for Married filing separately, 1 for Single or 1.5 for Head of Household).
Tax rates are 10%-18.1%-26.6%-37% for YTI÷S at 0-$100,000-$300,000 and over $300,000 in 2020.
TI = taxable income.
YTI = yearly taxable income = TI × F.

(** For over $300,000×S, the same tax formula is converted into tax rate and tax format.)

Examples:	Tax rate and tax are:
1. YTI=$77,789 (S=2):	(YTI÷S÷A+0.1)×TI=(77,789÷2÷1,234,568+0.1)×77,789=0.1315×77,789=10,229.61
2. YTI is $320,123 (S=1):	(0.37-31,200×1÷320,123)×320,123=0.27253746×320,123=87,245.51
3. Biweekly TI is $2,992 (S=2):	(2,992×26÷2÷1,234,568+0.1)×2,992=0.1315×2,992=393.46

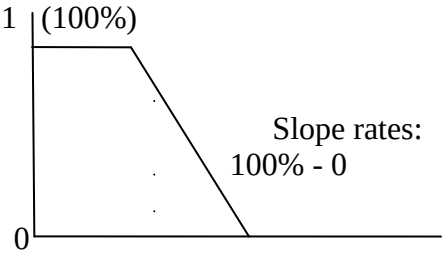
For more information, contact us at johnlee@taxsimplecenter.net or 913-710-0957

2. Child Tax Credit and Credit for Qualifying Dependent (CTC)

Maximum child tax credit is $2,000 or $500 for each qualifying child at 17 or younger with or without SS number. It is depended on adjustable gross income (AGI). When AGI is more than such as $400,000 for Married Filing Jointly (MJ) or $200,000 for all others (2023), there are 20 steps at 5%/step from 100% to 0 with 20 cliffs and jumping to $x,000 (A), which can be simplified by one following simple formula with AGI, total CTC (TCTC), and its rate (100%-0).

(A) www.irs.gov/pub/irs-pdf/f1040s8.pdf

Smooth rate changes between 100% to 0 are suggested. When AGI increases from $200,000×S to increase, the deduction rate is from 1 (100%) to 0 gradually. Status (S) # is 1 or 2.



Solution: One formula

AGI $200K×S +TCTC×20

Bill Draft for Child Tax Credit Simplification:

The child tax credit rate and credit shall be computed with the following formula. For Married Filing Jointly: S=2 or all others filing statuses: S=1.

If the adjustable gross income (AGI) is:	The maximum rate and credit are:	Rate check
Not over $200,000×S	1 (100%)×Total credit	1 (100%)
*$200,000×S - $20,000×S+TCTC×20 ……	((1-(AGI÷S-200,000)÷TCTC÷20)×TCTC	1 - 0
Over $20,000×S+TCTC×20	No deduction and enter 0	0
* or with fixed AGI: ($200,000-$220,000)×S ……	((1-(AGI÷S-200,000)÷20,000)×TCTC	1 - 0

3. Earned Income Credit (EIC) Simplification

Federal EIC Table has 9 pages and 9,568 EIC numbers, which may be simplified with 4 formulas. EIC=EI×EI rate. (S1=6,000 for Married Filing Jointly or S1=0 for all others)

Child#	EI range	Earned income	EI rate formula	Rate	Range check	EIC
0	0 – (21,000+S1)		(1-EI÷(15,000+S1))×0.1		0.1 - 0	
1	0 – (42,000+S1)		(1-EI÷(42,000+S1))×0.4		0.4 - 0	
2	0 – (48,000+S1)		(1-EI÷(48,000+S1))×0.45		0.45 - 0	
3 or more	0 – (52,000+S1)		(1-EI÷(52,000+S1))×0.5		0.5 - 0	

Bill Draft for Earned Income Credit (EIC):

The earned income credit rate and credit shall be computed with the following formula. There are two filing status (S1). For Married Filing Jointly: S1=6,000 or all Others: S1=0.

Child #	If the earned income (EI) is:	The EI credit rate and credit are:
0	Not over $21,000+S1	(1 - EI÷(21,000+S1)) × 0.1 × EI
	Over $21,000+S1	No deduction and enter 0
1	Not over $42,000+S1	(1 - EI÷(42,000+S1)) × 0.4 × EI
	Over $42,000+S1	No deduction and enter 0
2	Not over $48,000+S1	(1 - EI÷(48,000+S1)) × 0.45 × EI
	Over $48,000+S1	No deduction and enter 0
3 or more	Not over $52,000+S1	(1 - EI÷(52,000+S1)) × 0.5 × EI
	Over $52,000+S1	No deduction and enter 0

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4. Social Security Benefit Taxation Simplification

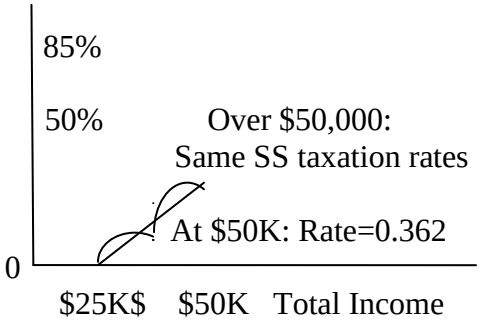
Federal social security benefits may be taxable incomes at the rates of 0% for less than $25,000 single fillers (or $32,000 for MJ), 50% for $25K-$34K single fillers (or $32K-$44K for MJ) or 85% for over $34,000 single fillers (or $44,000 for MJ). There are jump and change speed (too fast or slow) problems.

When the rates change from 0% to 50% and 85%, more smooth rate changes are needed to avoid or reduce existing problems with jump and rapid changes. Its Fiscal Note is suggested.

(At $50,000: Rate=(0+0.5×9K+0.85×16K)÷50K=0.362)

(32,000÷25,000=1.28 and 50,000×1.28=64,000)

Solution: Two Formulas



Bill Draft for Social Security Benefit Taxation:

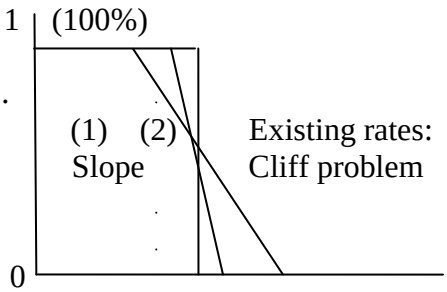
The social security benefit (SSB) taxation shall be computed with the following formula. For Married Filing Jointly: S2=1.28 or all Others: S2=1. 25,000÷0.362= 69,061. 50,000×(0.85-0.362)=24,400.

If the total combined income (TCI) is:	The SS taxation rate and amount are:	Rate check
Not over $25,000×S2	No taxation and enter 0	0
($25,000 - $50,000)×S2	((TCI÷S2-25,000)÷69,061)×SSB	0 – 0.362
Over $50,000×S2	(0.85 – 24,400×S2÷TCI))×SSB	0.362 – 0.85

5. IRA Contribution Simplification

Maximum IRA deductable contribution is $7,000 for age 50 or older or $6,000 for age under 50 with earned income (EI) less than $123,000 for Married Filing Jointly (MJ) or Qualifying Widow(er) or less than $74,000 for all Others (2019). There are two cliff (EI and age) problems.

Smooth rates between 100% to 0 are needed. When EI is raised such as from $70,000×S to $80,000×S, the rates are from 1 (100%) to 0 gradually with one slope method. Status (S) is 1 or 2. Age (45 to 55) may be suggested from $6,000 to $7,000.



Solution: Option or Together (3)

(1) (1 - (EI÷S-70,000)÷10,000)×6,000 (or 7,000)

(2) Age 45-55: ((Age – 45)÷10)×1,000 (maximum: $1,000)

(3) (1-(EI÷S-70,000)÷10,000)×(6,000+((Age-45)÷10)×1,000)

Bill Draft for IRA Contribution

IRA contribution shall be computed with the following formula and depended on wages, salaries, tips, etc and earned income (EI). For Married Filing Jointly (MJ) or Qualifying Widow(er): S=2 or for all Others: S=1. Tax deductable IRA contribution is from the following calculation, actual contribution or EI, which one is smallest.

If the EI S is:	The maximum IRA rate and contribution are:	Rate check:
Not over $70,000×S	6,000+((Age-45)÷10)×1,000	1 (100%)
($70,000 - $80,000)×S	(1-(EI÷S-70,000)÷10,000)×6,000+((Age-45)÷10)×1,000	1 - 0
Over $80,000×S	No deductable contribution and enter 0	0

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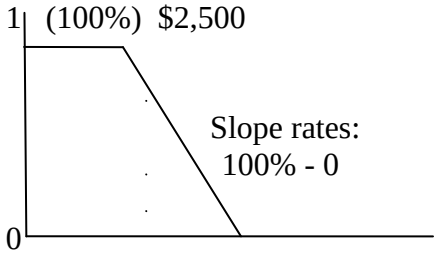
6. Student Loan Interest Deduction Simplification

Maximum student loan interest deduction is $2,500. It depends on your tax status (S) and modified adjustable gross income (MAGI), When MAGI is more than $170,000 for Married Filing Jointly (MJ) or Qualifying Widow(er) or $85,000 for all Others (2019), there is no student loan interest deduction allowed.

Smooth rates between 100% to 0 are needed. When MAGI values are increased from $80,000×S to $90,000×S, the rates are from 1 (100%) to 0 gradually. Status (S) is 1 or 2.



Long-Term Solution: One formula

Bill Draft for Student Loan Interest Deduction:

The student loan interest deduction shall be computed with the following formula. For Married Filing Jointly or Qualifying Widow(er): S=2 or all Others: S=1.

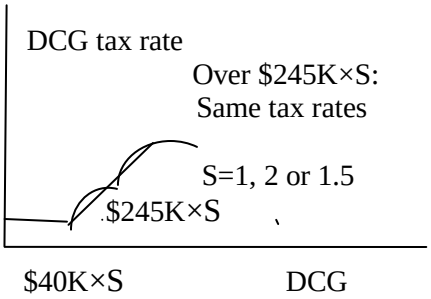
If the adjustable gross income (AGI) is:	The maximum IRA rate and contribution are:	Rate check
Not over $80,000×S	1 (100%)×2,500	1 (100%)
$80,000 - $90,000×S	(1-(MAGI÷S - 80,000)÷10,000)×2,500	1 - 0
Over $90,000×S	No deduction and enter 0	0

7. Qualified Dividends and Capital Grain Tax

Tax rate for qualified dividends and capital gain (DCG) tax rates are at 0%, 15% and 20% when DCG are $39,375-$244,425- for married filing separately and other tax statuses. One slope method may be used to match and simplify these DCG tax rates and taxes.

Qualified dividends and capital gain (DCG) tax rates:

If the DCG is:	Tax rate and tax are:
Not over $40,000×S	0
($40,000 - $245,000)×S	((DCG÷S-40,000)÷1,633,466)×DCG
Over $245,000×S	(0.2-18,252.5×S÷DCG)×DCG
	(At $245K, DCG tax rate is 0.1255 or 12.55%)



8. Tax Simplification

Tax simplification without complex withholding formulas (224 from 7×4×8) and tables (21 pages) with different filing periods is good for businesses, IRS and taxpayers. The three tax rate and tax formulas are used. Businesses use standard deductions, exemptions and tax credits for withholding taxes. Taxpayers use actual adjustments, deductions, exemptions, tax credits, and other taxes for tax returns. Adjustments include income additions and subtractions. Tax credits include non-refundable and refundable tax credits. A general withholding or income tax calculation formula is:

(Incomes ± Adjustments - (Deductions + Exemptions) ÷ F) × Tax rate + Other taxes - Tax credits ÷ F

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