## Corporate Tax Simplification and Cost Reduction

http://taxsimplecenter.net

## Existing and LG Tax Systems for Corporations

When an existing tax system with 4 or more tax brackets, they are complex, Also the 5 or more formulas will be converted to 32 ( $4 * 8$ filing periods on yearly, semi-yearly, quarterly, monthly, semi-monthly, bi-weekly, weekly or daily basis). They can be matched and simplified with the LG tax system with 2 brackets.

It is simple to use 2 or 3 tax brackets or formulas to simplify existing tax systems with neutral or minor tax revenue change. Existing tax rates are based on marginal flat tax rates for certain taxable income ranges with different tax rate speeds, which are unsmooth, unreasonable and unfair. When one linear tax rate simplification is used, its tax rates are smooth, reasonable and fair. Then taxes are collected reasonably and fairly.

## 1. Existing and LG Tax Systems for KS Corporations

Existing corporate tax rates are $4 \%$ at $0-\$ 50,000$ and $7 \%$ for above $\$ 50,000$ with 2 tax brackets. At $\$ 120,000$ (easy to divide 12 into monthly $\$ 10,000 /$ month), tax rate is $5.75 \%$. When tax rates change smoothly, tax rates are reasonable. When the 8 filling periods are used, its 2 formulas are increased to $16(2 * 8)$ formulas.

Table 1 shows smooth and reasonable tax rates. Their differences between existing and LG tax systems are shown in Figure 1. More taxes (maybe million \$) will be collected reasonably and fairly, which may reduce from $4 \%-7 \%$ to $3.5 \%-7 \%$ to have neutral tax revenue change and encourage more people to start businesses at starting tax rate at $3.5 \%$ (Modified Table 1M and Modified Figure 2M). 3.5\% is less than MO corporate tax rate $6.25 \%$ or $4 \%$ and IA bottom tax rate at $5.5 \%$. Two options may be $3.5 \%-7 \%$ or $3 \%-6.5 \%$.

Table 1 LG tax rate system for KS corporations

| Taxable income <br> $(\mathrm{TI}) * \mathrm{~F}$ | Yearly taxable <br> income (YTI) | TI | LG tax rate and tax formula | Tax rate <br> check | Tax <br> rate | Tax <br> TI*rate |
| :---: | :---: | :---: | :--- | :---: | :---: | :---: |
|  | $0-120,000$ |  | $(0.04+\mathrm{TI} * \mathrm{~F} / 6,857,143) \mathrm{TI}$ | $0.04-0.0575$ |  |  |
|  | 120,000 |  | $(0.07-1,500 / \mathrm{TI} / \mathrm{F}) \mathrm{TI}$ | $0.0575-0.07$ |  |  |

TI is taxable income, $\mathrm{TI} * \mathrm{~F}$ is yearly taxable income ( YTI ), F is filing period (1, 2, 4, 12, 24, 26, 52 or 365 on yearly, semi-yearly, quarterly, monthly, semi-monthly, bi-weekly, weekly or daily basis). TI*F is yearly taxable income (YTI).

$$
\text { Total tax }=\operatorname{Sum}((0.04+\text { YTIa/6,857,143) TI })+\operatorname{Sum}((0.07-1,500 / \mathrm{YTIb}) \mathrm{TI})
$$

Figure 1 Tax Rates from Withholding Schedule and LG Tax Rate Systems


For next tax reforms, tax rate ranges are adjusted to meet a tax goal. $0-\$ 120,000$ and over $\$ 120,000$ are fixed. Tax rate formulas are determined by the fixed TI and tax rate ranges.

Withholding/Income Tax=(Incomes - Costs - (Deductions + Exemptions $) \div \mathrm{F}) \times$ Tax rate - Tax credits $\div \mathrm{F}$
Modified Table 1 (Modification) LG tax rate system for KS corporations

| Taxable income <br> $(\mathrm{TI}) * \mathrm{~F}$ | Yearly taxable <br> income | TI | Tax rate and <br> tax formula | Tax rate <br> check | Tax <br> rate | Tax <br> TI $*$ rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0-120,000$ |  | $(\mathrm{TI} * \mathrm{~F} / \mathrm{C}+\mathrm{B}) \mathrm{TI}$ | $0.035-0.0575$ |  |  |
|  | 120,000 |  | $(\mathrm{~T}-\mathrm{D} / \mathrm{TI} / \mathrm{F}) \mathrm{TI}$ | $0.0575-0.07$ |  |  |

Option \#1: $\mathrm{C}=120,000 /(0.0575-\mathrm{B})=5,333,333$ with bottom tax rate (B) 0.035 and $\mathrm{D}=120,000 *(\mathrm{~T}-0.0575)=1,500$ with top tax rate (T) 0.07.

$$
\text { Total tax }=\operatorname{Sum}((0.035+\text { YTIa/5,333,333) TI })+\operatorname{Sum}((0.07-1,500 / \mathrm{YTIb}) \mathrm{TI})
$$

Modified Figure 1M Tax Rates from Withholding Schedule and LG Tax Rate Systems


Option \#2: $\mathrm{C}=120,000 /(0.05-\mathrm{B})=6,000,000$ with bottom tax rate (B) 0.03 and $\mathrm{D}=120,000 *(\mathrm{~T}-0.05)=1,800$ with top tax rate (T) 0.065 .

## 2. Existing and LG tax systems for Alaska corporations

Alaska has the most complex tax system in all US state corporate tax systems, having 10 tax brackets. Its tax rates for corporations are graduated from $1 \%$ to $9.4 \%$ in increments of $\$ 10,000$ of taxable income. The top rate $9.4 \%$ applies to taxable income of $\$ 90,000$ and over, which is shown in Table 2. When the 8 filling periods are used, its 10 formulas are increased to $80(10 * 8)$ formulas.

When the two LG tax rate formulas are used to match the tax rates from taxable income ranges from 0 to $\$ 100,000$ (easier than $\$ 90,000$ ) from Table 2, with the 10 tax brackets, the amount of brackets are matched and reduced to 2 , reasonably and simply.

When the LG Tax System is used, Alaska corporation tax may be simplified (from Table 2 to Table 3), with 2 tax brackets and tax rate range checks. The tax rate differences between the existing and proposed LG Alaska corporate tax systems, which are shown in their figure, are very compatible, with a $0-0.001$ difference. The original 10 tax brackets have been reduced to 2 with $80 \%$ reduction, which provides an easy tool for tax calculation, analysis, modification and modification

Table 2 Existing Alaska Corporate Tax Rates (10 tax brackets)

| Taxable Income (TI) |  | Tax Computation |
| :---: | :---: | :---: |
| At Least | But Less Than |  |
| -0- | 10,000 | $0.01 \times$ TI |
| 10,000 | 20,000 | $100+0.02 \times$ (TI-10,000) |
| 20,000 | 30,000 | $300+0.03 \times($ TI-20,000 $)$ |
| 30,000 | 40,000 | 600+0.04× (TI-30,000) |
| 40,000 | 50,000 | $1,000+0.05 \times($ TI-40,000) |
| 50,000 | 60,000 | 1,500+0.06× (TI-50,000) |
| 60,000 | 70,000 | 2,100+0.07× (TI-60,000) |
| 70,000 | 80,000 | $2,800+0.08 \times($ TI-70,000) |
| 80,000 | 90,000 | $3,600+0.09 \times$ (TI-80,000) |
| 90,000 or | More | $4,500+0.094 \times$ (TI-90,000) |

Table 3 LG Tax System for Alaska Corporations (2 brackets)

| $\mathrm{TI} * \mathrm{~F}$ | Yearly Taxable Income <br> Over Not over | Tax rate formula | Tax rate | Range check |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Tax |  |  |
| $0 \quad 100,000$ | $0.01+\mathrm{TI} * \mathrm{~F} / 2,252,252$ |  | $0.01-0.0544$ |  |
|  | $0.094-3,960 / \mathrm{TI} * \mathrm{~F}$ |  | $0.0544-0.094$ |  |

$$
\text { Total tax }=\operatorname{Sum}((0.01+\text { YTIa/2,252,252) TI })+\operatorname{Sum}((0.094-3,960 / \mathrm{YTIb}) \mathrm{TI})
$$

Figure 2 Tax rate differences between the existing AK tax system and the LG tax system (almost no difference)


Filing period factor (F) is $52,26,24,12,4,2$ or 1 , which is based on weekly (W), bi-weekly ( 2 W ), semimonthly (SM), monthly (M), quarterly (Q), semi-yearly (SM) or yearly (Y). TI*F is yearly taxable income (YTI).

## Tax analysis and projection

The following equation (1) is for the calculation of total tax with the LG tax system (Table 3). When the existing tax computations from Table 2 are used to calculate total tax, it is complex, utilizing a very long equation (2).

Total tax $\mathbf{1}=\operatorname{Sum}((0.01+\mathrm{YTIa} / 2,252,252) \mathrm{TI})+\operatorname{Sum}((0.094-3,960 / \mathrm{YTIb}) \mathrm{TI})$. $\qquad$

Total Tax $2=0.01 \sum \mathrm{TI} 1+\sum(100+0.02(\mathrm{TI} 2-10,000))+\sum(300+0.03(\mathrm{TI} 3-20,000))+\sum(600+0.04(\mathrm{TI} 4-30,000))$ $+\sum(1,000+0.05(\mathrm{TI} 5-40,000))+\sum(1,500+0.06(\mathrm{TI6}-50,000))+\sum(2,100+0.07(\mathrm{TI} 7-60,000))+\sum(2,800+0.08$ (TI8$70,000))+\sum(3,600+0.09(\mathrm{TI} 9-80,000))+\sum(4,500+0.094(\mathrm{TI} 10-90,000))$

## 3. Existing and LG Tax Systems for IA Corporations

Iowa corporate income tax rates are reformed beginning 2021 or 2023, which are shown in the following Table. www.legis.iowa.gov/docs/publications/FN/963408.pdf https://tax.iowa.gov/iowa-corporate-income-tax-rate-changes-2023

Table 4 - Corporate Income Tax Rates

| Lower Limit | Upper Limit | Prior Rates | 2021 Rates | 2023 Rates | Tax (2021) |
| :--- | :---: | :---: | :---: | :---: | :--- |
| 0 | 25,000 | $6.0 \%$ | $5.5 \%$ | $5.5 \%$ | $0.055^{*}$ YTI |
| 25,001 | $100,000 \$$ | $8.0 \%$ | $5.5 \%$ | $5.5 \%$ | $0.055^{*}$ TI |
| 100,001 | $250,000 \$$ | $10.0 \%$ | $9.0 \%$ | $8.4 \%$ | $0.09 *$ (TI-100,000)+5,500 |
| 250,001 and Over | $12.0 \%$ | $9.8 \%$ | $8.4 \%$ | $0.098^{*}$ (TI-250,000)+19,000 |  |

At $\$ 240,000$, which is simple to divide 12 ( $\$ 20,000 /$ month), its tax rate is 0.07542 ( $7.542 \%$ ) from ( $0.09 *$ (YTI$100,000)+5,500) / \mathrm{YTI}$ for 2021 . Then Table 4 is simplified and matched by Table 5. TI is taxable income, TI*F is yearly taxable income (YTI), F is filing period ( $1,2,4,12,24,26,52$ or 365 on yearly, semi-yearly, quarterly, monthly, semi-monthly, bi-weekly, weekly or daily basis). When the 8 filling periods are used, its 4 formulas are increased to $32(4 * 8)$ formulas. For 2023, bottom tax rate may be reduced from $5.5 \%$ to $5 \%$ with neutral tax revenue change (Table 6). At $\$ 240,000$, its tax rate is 0.072 ( $7.2 \%$ ) from ( $0.084(240,000-100,000)+5,500) / \mathrm{YTI}$.

Table 5 Corporate income tax rates for 2021

| TI * F | Yearly <br> Taxable income | TI | LG tax rate formula | Tax rate <br> Check | Tax <br> Rate | Tax <br> TI*rate |
| :---: | :---: | :---: | :---: | :--- | :--- | :---: |
|  | $0-240,000$ |  | $(\mathrm{TI} * / \mathrm{C}+0.055) \mathrm{TI}$ | $0.055-0.07542$ |  |  |
|  | 240,000 |  | $(0.098-\mathrm{D} / \mathrm{TI} / \mathrm{F}) \mathrm{TI}$ | $0.07542-0.098$ |  |  |

$\mathrm{C}=240,000 /(0.07542-0.055)=11,753,183$ and $\mathrm{D}=240,000 *(0.098-0.07542)=5,419$
Total tax $=\operatorname{Sum}((0.055+$ YTIa/ $11,753,183) \mathrm{TI})+\operatorname{Sum}((0.098-5,419 / \mathrm{YTIb}) \mathrm{TI})$
Withholding/Income Tax=(Incomes - Costs - (Deductions + Exemptions) $\div \mathrm{F}) \times$ Tax rate - Tax credits $\div \mathrm{F}$
Table 6 Corporate income tax rates for 2023

| TI * F | Yearly <br> Taxable income | TI | LG tax rate formula | Tax rate <br> Check | Tax <br> Rate | Tax <br> TI*rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0-240,000$ |  | $(\mathrm{TI*F} / \mathrm{C}+\mathrm{B}) \mathrm{TI}$ | $0.05-0.072$ |  |  |
|  | 240,000 |  | $(\mathrm{~T}-\mathrm{D} / \mathrm{TI} / \mathrm{F}) \mathrm{TI}$ | $0.072-0.084$ |  |  |

$\mathrm{C}=240,000 /(0.072-\mathrm{B})=10,909,091$ with bottom tax rate (B) 0.05 and $\mathrm{D}=240,000 *(\mathrm{~T}-0.072)=2,880$ with top tax rate (T) 0.084.

Figure 3 shows no or some differences between the two methods. When less tax brackets in Table 4 are used, tax rates are unsmooth and unreasonable. Existing tax rates are based on flat tax rates during certain taxable income ranges. Table 5 shows smooth, reasonable, simple, and fair tax rates, which are higher than those flat tax rates for some taxable incomes, which means slightly more taxes to be collected reasonably and fairly.

Figure 3 Comparison of Tax Rates between Tables 4 and 5 (2021)


## 4. Existing and LG tax systems for Arkansas corporations

Existing Arkansas corporate tax rates are graduated rates applied to the Arkansas Net Taxable Income (NTI), which are shown in Table 7. The tax computations are complex when taxable incomes are not over $\$ 25,000$. Their tax rates range from $1 \%$ to $6.5 \%$ with 6 brackets. Existing Arkansas tax system is relatively complex in US state corporate tax systems. When the 8 filling periods are used, its 6 formulas are increased to $48(6 * 8)$ formulas.

Table 7 Existing Arkansas Tax System for Corporations ( 6 tax brackets)

| Taxable Income (TI) |  | Tax Computation |
| :---: | :---: | :---: |
| Over | Not over | $0.01 \times \mathrm{TI}$ |
| 0 | 3,000 | $0.01 \times 3,000+0.02 \times(\mathrm{TI}-3,000)$ |
| 3,000 | 6,000 | $0.01 \times 3,000+0.02 \times 3,000+0.03 \times(\mathrm{TI}-6,000)$ |
| 6,000 | 11,000 | $0.01 \times 3,000+0.02 \times 3,000+0.03 \times 5,000+0.05 \times(\mathrm{T}-11,000)$ |
| 11,000 | 25,000 | $940+0.06 \times(\mathrm{TI}-25,000)$ |
| 25,000 | 100,000 | $5,440+0.065 \times(\mathrm{TI}-100,000)$ |
| 100,000 |  |  |

The existing Corporation Income Tax Table ( 2 pages) for taxable incomes from $\$ 100$ to $\$ 25,000$ is provided. When the LG tax system is used, the above 6 tax brackets are reduced to 3, which is shown in Table 8. A tax rate range check is used as a tool to check tax rate and tax calculations. The lesser amount of tax brackets provides an easy tool for tax calculation, analysis and projection reasonably and simply. When a LG tax rate formula is used to match the tax rates from taxable income ranges from 0 to $\$ 25,000$, a linear relationship of $y=a+b x$ is found. 905,797 is the slope for $\mathrm{y}=\mathrm{a}+\mathrm{x} / \mathrm{b}$, is derived from $25000 /(0.0376-0.01)=905,797$. The value 0.0376 is from the original tax computation in tax rate format $\left[30+60+150+0.05^{*}(25,000-11,000)\right] / 25,000$ $=0.0376$.

Table 8 LG Tax System for Arkansas corporations ( 3 tax brackets)

| $\mathrm{TI} * \mathrm{~F}$ | $\mathrm{TI} * \mathrm{~F}$ range |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Over | Not over | TI | Tax rate formula | Tax rate | Range check |
| Tax |  |  |  |  |  |
| 0 | 25,000 |  | $\mathrm{TI} * \mathrm{~F} / 905,797+0.01$ |  |  |
| 25,000 | 100,000 |  | $0.06-560 / \mathrm{TI} * \mathrm{~F}$ |  | $0.01-0.0376$ |
| 100,000 |  | $0.065-1,060 / \mathrm{TI} * \mathrm{~F}$ |  | $0.0376-0.0544$ |  |
|  |  |  |  | $0.0544-0.065$ |  |

Filing period factor (F) is $52,26,24,12,4,2$ or 1 based on weekly (W), bi-weekly (2W), semi-monthly (SM), monthly $(\mathrm{M})$, quarterly $(\mathrm{Q})$, semi-yearly $(\mathrm{SM})$ or yearly $(\mathrm{Y})$ is used for employers to calculate tax withholding. $\mathrm{TI} * \mathrm{~F}$ is yearly taxable income (YTI).

Figure 4 Comparison of Existing Arkansas and LG Tax Systems (\$100 - \$20 million)


For YTI over $\$ 25,000$, the tax computation is converted into tax rate:

$$
\text { Tax }=940+0.06(\mathrm{TI}-25,000)=0.06 \mathrm{TI}-560 \text { or Tax rate }=0.06-560 / \mathrm{TI}
$$

For TI over $\$ 100,000$, the tax computation is converted into tax rate:
Tax $=5,440+0.065($ TI- 100,000$)=0.065 \mathrm{TI}-1,060$ or Tax rate $=0.065-1,060 / \mathrm{TI}$
The tax rate differences between the existing Arkansas and LG tax systems are almost the same for TI from $\$ 100$ to $\$ 20,000,000$, which are very compatible and shown with the following figure. Taxable income data may be used to calculate total tax and projection directly. Total tax is a function of TI.

$$
\text { Total Tax }=0.01 \sum \mathrm{TIt}+\sum(\mathrm{TI} 2) \mathrm{t} / 905,797+0.06 \sum \mathrm{TIu}-560 \mathrm{u}+0.065 \sum \mathrm{TIv}-1,060 \mathrm{v}
$$

Here $t, u$, and $v$ are corporation numbers during the three taxable income ranges. The total tax equation may be used for total tax calculation, projection and analysis. During a recession, booming economy or special situation, LG tax rates may be modified or reformed simply.

Table 8 ( 3 tax rate ranges) can be further simplified to Table 9 (2 tax rate ranges). Taxable income range is divided at $\$ 60,000 /$ year (or $\$ 5,000 /$ month).

Table 9 LG Tax System for Arkansas corporations (2 tax brackets)

| TI*FYearly Taxable income <br> Over Not over | TI | Tax rate formula | Tax rate | Range check | Tax |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $0 \quad 60,000$ |  | (TI*F/C + B) TI |  |  | $0.01-0.0507$ |
| 60,000 |  | (T $-\mathrm{D} / \mathrm{TI} * \mathrm{~F}$ ) TI |  | $0.0507-0.065$ |  |

$\mathrm{C}=60,000 /(0.0507-\mathrm{B})=1,474,201$ with bottom tax rate (B) 0.01 and $\mathrm{D}=60,000^{*}(\mathrm{~T}-0.0507)=858$ with top tax rate (T) 0.065 .

$$
\text { Total tax }=\operatorname{Sum}((0.01+\text { YTIa/1,474,201.5) TI })+\operatorname{Sum}((0.065-858 / Y T I b) \mathrm{TI})
$$

Withholding/Income Tax $=($ Incomes - Costs $-($ Deductions + Exemptions $) \div \mathrm{F}) \times$ Tax rate - Tax credits $\div \mathrm{F}$

## 5. Existing and LG Tax Systems for NE Corporations

Existing corporate tax rates are $5.58 \%$ at $0-\$ 100,000$ and $7.81 \%$ for above $\$ 100,000$ with 2 tax brackets. At $\$ 240,000$ (easy to divide 12), tax rate is $6.88 \%$. When tax rates change smoothly, tax rates change reasonably. Table 10 shows smooth and reasonable tax rates. Their differences between existing and LG tax systems are shown in Figure 2. More taxes (maybe million \$) will be collected reasonably and fairly. TI*F is yearly taxable income (YTI). When the 8 filling periods are used, its 2 formulas are increased to $16(2 * 8)$ formulas.

Table 10 LG tax rate system for NE government and corporations

| Taxable income <br> $(\mathrm{TI}) * \mathrm{~F}$ | Yearly taxable <br> income | TI | LG tax rate formula | Tax rate <br> check | Tax <br> rate | Tax <br> TI*rate |
| :---: | :---: | :---: | :--- | :--- | :---: | :---: |
|  | $0-240,000$ |  | $0.0558+\mathrm{TI} * \mathrm{~F} / 18,461,538.5$ | $0.0558-0.0688$ |  |  |
|  | 240,000 |  | $0.0781-2,232 / \mathrm{TI} / \mathrm{F}$ | $0.0688-0.0781$ |  |  |

$$
\text { Total tax }=\operatorname{Sum}((0.0558+\text { YTIa } / 18,461,538.5) \mathrm{TI})+\operatorname{Sum}((0.0781-2,232 / \mathrm{YTIb}) \mathrm{TI})
$$

Withholding/Income Tax=(Incomes - Costs - (Deductions + Exemptions) $\div \mathrm{F}) \times$ Tax rate - Tax credits $\div \mathrm{F}$

## Figure 5 Tax Rates from NE Withholding Schedule and LG Tax Rate Systems



For next tax reform, tax rate ranges are adjusted to meet a tax goal. $0-\$ 240,000$ and over $\$ 240,000$ are fixed. Tax rate formulas are determined by the fixed TI and tax rate ranges.

The existing tax rate ranges may be modified from $5.58 \%-7.81 \%$ to $5 \%-7.81 \%$ (or $5.5 \%-7.8 \%$ ) to have neutral or less tax revenue change and encourage more people to start businesses at starting tax rate at $5 \%$ or $5.5 \%$ (Modified Table 10 and Modified Figure 11).

Table 11 Modification LG tax rate system for NE corporations

| Taxable income <br> $(\mathrm{TI}) * \mathrm{~F}$ | Yearly taxable <br> income | TI | Tax and <br> tax rate formula | Tax rate <br> check | Tax <br> rate | Tax <br> TI $*$ rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0-240,000$ |  | $(\mathrm{TI} * / \mathrm{C}+\mathrm{B}) \mathrm{TI}$ | $0.05-0.0688$ |  |  |
|  | 240,000 |  | $(\mathrm{~T}-\mathrm{D} / \mathrm{TI} / \mathrm{F}) \mathrm{TI}$ | $0.0688-0.0781$ |  |  |

$\mathrm{C}=240,000 /(0.0688-\mathrm{B})=12,765,957$ with bottom tax rate (B) 0.05 and $\mathrm{D}=240,000 *(\mathrm{~T}-0.0688)=2,232$ with top tax rate (T) 0.0781.

Modified Figure 5 Tax Rates from NE Withholding Schedule and LG Tax Rate Systems


If you have questions and comments, contact us at johnlee @taxsimplecenter.net or 913-710-0957.

