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The 2017 Tax Cuts and Jobs Act in USA: An Economic Perspective

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Abstract
This paper investigates the efficacy of the 2017 Tax Cuts and Jobs Act (TCJA) policy implemented by the Trump administration from an economic perspective. In essence, this study adopts the difference-in-difference method with respect to two income groups, namely, middle income and wealthy income groups to identify their relative elasticities; coupled with regression analysis to derive the regression estimates of the taxable elasticities. The results of the relative elasticities from the difference-in-difference method suggest that tax rates and the net-of-tax share are directly related in line with the progressive tax system or the normal range on the Laffer curve; rather than the prohibitive range on the Laffer curve as advocated by the supply-side tax-cutters. In effect, the extraordinary tax cut received by the high-income group relative to the middle-income group would not necessarily generate higher revenues as proclaimed by the tax cut advocates and the Trump administration; a behavioral response, since the peak of the marginal tax rate from the normal range on the Laffer curve where tax revenue will begin to decline and trigger an economic effect in the prohibitive range on the Laffer curve is not ascertainable. In addition, the results of the OLS and 2SLS regression estimates produced negative taxable elasticity estimates, respectively; and are not significantly different from zero. Thus, implying that the relationship between a change in income and the net-of-tax share is ineffective from a policy standpoint; therefore, the expected trickle-down effects of the high-income tax cuts as advocated by the TCJA are unlikely to provide the touted spillover benefits.

Keywords: Trump administration, tax cut, Laffer curve, elasticity, revenue, equity

JEL Classification: E6, H2, H3, H5

1. Introduction

The viability of any economy depends on attaining a number of key goals, including efficiency, price stability, economic growth, full employment, and equity – fairness or economic justice. From the perspective of the just concluded Donald J. Trump administration in the U.S., economic justice could be achieved through a strategy of supply-side economics via tax cuts, particularly for the high-income groups. Thus, in 2017, President Trump proposed a "tax cuts and jobs act" legislation which was passed narrowly in congress and enacted into law in 2018.

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At the core of this act, is the reduction of the corporate tax rate from about 35% to a flat 21%, among other cuts in tax rates. Essentially, this significant reduction in tax rates was touted as a policy to increase job growth and wage rates via an expansionary fiscal policy, while enhancing the general welfare of the people, especially the middle-income and lower income groups.

In this context, this paper examines the economic effects of the 2017 Tax Cuts and Jobs Act (TCJA) – a trickle-down approach to resource allocation with consequences in form of spillovers or externalities – costs and/or benefits for which no compensations are made. To further examine the impact of this policy, we are employing the difference-in-difference method with respect to two classifications of taxpayers, namely, the middle class and the wealthy class to identify their relative elasticities; together with deriving the regression estimates of the taxable elasticity. Also, to assess the full effects of the TCJA, it is imperative that we draw some lessons from similar policies in the past that were anchored on the Laffer Curve proposition, such as the George W. Bush tax cuts of 2001 and 2003, as well as the Ronald W. Reagan tax cuts of 1981 and 1986 – in order to provide some insights on the socioeconomic implications of the Trump tax cuts.

The rest of this paper is organized as follows. Section two is a brief review of the literature, section three examines the theoretical and conceptual framework in light of the Laffer curve and the burden or incidence of tax cuts, section four reviews the data and stylized facts, section five captures the methodology and model specifications, section six presents the results and analysis, while section seven concludes, followed by references.

2. Brief Literature Review

The review of the literature is essential to explore the various studies relating to the subject matter along the theories and methodologies involving tax cuts and growth, supply-side economics, and the Laffer curve, among others. As such, given the dominant role played by the supply-side advocates in crafting the proposal that led to the 2017 Tax Act, Clark (2018) noted that the economic foundation for supply-side tax reductions was based on a policy mix framework developed by Robert Mundell in 1962. Nevertheless, he posited that tax cuts in the United States have not produced the stimulus effects due to absence of currency weakness or inflationary tendencies.

Arguably, the most prominent advocate of the supply-side theorists since the 1970s is Arthur Laffer. Anchored on the supply-side economics theory, the Laffer curve postulates that lower tax rates increase government revenues and hence, economic growth. According to Amadeo (2018), Laffer explained it in two ways – arithmetic effect and economic effect. The arithmetic effect proposes that every dollar in tax cuts is similar to one less dollar in government revenue, while economic effect in contrast states that lower tax rates increase the money available to taxpayers who then spend it. Amadeo further pointed out that Arthur Laffer in his defense asserted that "The Laffer Curve itself does not say whether a tax cut will raise or lower revenues." Rather, if taxes are low, further cuts would reduce revenues and stifle growth. Although Pressman (1986-87) noted the skepticism of the Keynesians on the grounds that legislative tax cuts would create large budget deficits, more inflation, and windfalls for the very wealthy; nonetheless, he pointed out that advocates of tax cuts like Gilder (1981), Evans (1983), and Wanniski (1983) proposed that more work, saving, investment, and greater productivity would result – "Large tax cuts geared toward the wealthy were thus justified by claiming that the government would recoup tax-cut monies." In other words, in line with the Laffer curve, more work and greater productivity yield higher incomes for individuals and additional tax revenues for the government.

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To buttress this assertion, in a revised version of a study conducted by Fullerton (1982) using a general equilibrium model on the possibility of an inverse relationship between tax rates and government revenues, Ballard et al (1985) similarly concluded that the U.S. economy could be operating in the prohibitive range of the Laffer curve for taxes on labor. Conversely, estimates of aggregate labor supply elasticities and an overall marginal tax rate are both low enough to imply that across-the-board cuts in labor tax rates would not generate more revenues. To further investigate the supply-side policy assertions of the plausibility of the economy being in the prohibitive range, Canto, Joines, and Laffer (1978) postulated that the U.S. tax rates in the period examined were in the prohibitive range of the Laffer curve, implying that a decrease in tax rates would increase tax revenues. Accordingly, Blinder (1981) employed alternative values of the critical labor supply and demand elasticities to signal whether or not the economy was in this prohibitive range – he concluded however, that the revenue maximizing tax rate is very likely to be so high as to be deemed pointless for any broad-based tax to be in the prohibitive range. In addition, Feldstein (1995), using Treasury Department panel of more than four thousand taxpayers to estimate the sensitivity of taxable income to changes in tax rates on the basis of a comparison of the tax returns of the same individual taxpayers before and after the 1986 tax returns. He concluded that the elasticity of taxable income with respect to the marginal net-of-tax rate is at least one and could be substantially higher; suggesting that the tax rate in the prohibitive range is more likely to be elastic, hence, a reduction in tax rate for high income earners would lead to rise in government revenues.

In contrast, using evidence from seven analyses of six different tax changes since 1922 to the 1980s to examine the evidence in support of the high-income Laffer curve and the New Tax Responsiveness (NTR) literature, Goolsbee (1999) utilized the NTR methodology of the 1980s and concluded that the elasticities of taxable income calculated for other tax changes seem to be mostly closer to zero than otherwise – implying that tax cuts in form of reduced marginal tax rates are directly or positively related to tax revenues and not the other way round as supply-siders would want us to believe. Additionally, Sanz-Sanz (2016) computation of revenue-maximizing tax rates in personal income taxes in the presence of consumption taxes contradicts the traditional Laffer analysis, which neglects the effects of marginal tax rates on consumption, while overestimating the magnitude of revenue-maximizing tax rates.

Moreover, Leiserson (2018) after assessing the economic effects of the Trump tax cuts and jobs act, concluded that corporate tax cuts are primarily benefitting shareholders. Thus, the counterfactual is that wage rates would need to rise by one percent above the level prior to the enactment of the act to shift the benefits of the corporate tax cuts from shareholders to workers. Also, he asserted that research from similar past policies concludes that only a small portion of the corporate tax cuts will be shifted from shareholders to workers, notwithstanding the effects of the increasing federal budget deficits because most of the benefits will go to high income earners.

3. Conceptual Framework and Theoretical Underpinnings

Conceptually, the underlying tenet of the Trump tax reform act is based on the theory of the supply-side economist Arthur Laffer – that is, the relationship between tax rates and government revenues. From the illustration below as shown in Figure 1, the Laffer curve assumes that no revenue is generated at both extremes of 0% tax rate and at 100% tax rate. In contrast, there is an optimal point at which the government would maximize revenue at tax rate T*. Essentially, from the point of origin, a rise in tax rate would increase government revenue up to point T*. Beyond point T*, a rise in tax rate would decrease government revenue because of the disincentive

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associated with high taxes and low disposable income. Therefore, a 100% tax rate would generate zero revenue similar to a 0% tax rate.

Accordingly, between 0% tax rate and T*, the government is operating within the normal range and between T* and 100% tax rate, the government is operating within the prohibitive range.

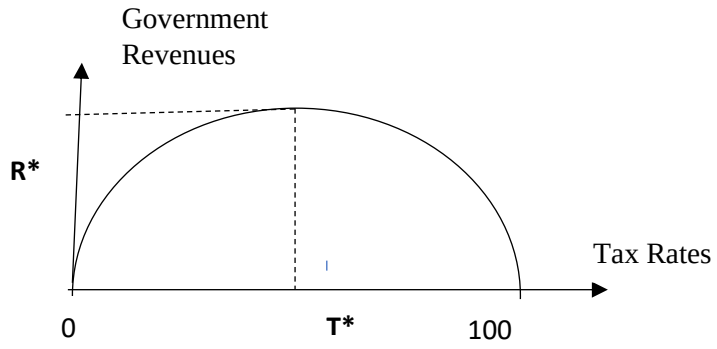

Figure 1: The Laffer Curve

In line with Fullerton (1982), Laffer (1978) together with other "supply-side" advocates plot total tax revenue as a function of a specific tax rate, drawing an upward-sloping segment as the "normal range" and a downward-sloping segment as the "prohibitive range." In other words, tax rates and revenues are directly related on the normal range, whereas, tax rates and revenues are inversely related on the prohibitive range. Therefore, implying that no rational government would knowingly raise tax rates on the prohibitive range since tax rates on the prohibitive range are due to high tax rates, high elasticity parameters or both. Moreover, the labor tax rate which maximizes total revenue will depend on the predicted labor supply elasticity.

Theoretically, Ballard et al (1985) posited a simple model of homogenous labor **L** taxed at the proportional rate **t**, with labor demand as a function of total of tax wage **w,** and labor supply as a function of net of tax wage **w(1-t)**, transposed in constant elasticity forms such that:

$$L_d = Aw^{Ed}, \qquad {}_{Ed} < 0; \tag{1}$$

$$L_s = B[w(1-t)]^{Es}, \qquad {}_{Es} > 0. \tag{2}$$

Where, tax revenue **R** is equal to **twL**, thus differentiating algebraically, one obtains

$$\partial R/\partial t = wL[1 + \partial L/\partial t * t/L + \partial w/\partial t * t/w\ ]\ . \tag{3}$$

Assume equation (3) equal to zero; solving for **w, L**, and the revenue-maximizing tax rate **t**, therefore $\mathbf{L_s = L_d}$ and equations (1) and (2) are utilized to express **w,** as a function of **t**.

After obtaining w, it is plugged into equation (1), and then **L** is expressed as a function **t.** Thus, differentiating expressions **w** and **L** and substituting into equation (3), and solving for **t** provides:

$$t = \frac{Ed - Es}{Ed(1+Es)} \tag{4}$$

Moreover, if $\mathbf{_{Ed} > -1}$, then demand is inelastic. As such, higher tax rates would generate higher revenues. Conversely, if $\mathbf{_{Ed} < -1}$, then demand is elastic and lower tax rates would generate higher

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revenues making the relationship between tax rate **t** and the elasticity supply factor estimate E_s inversely related. In essence, when demand is inelastic, a rise in tax rate would increase revenues. Implying that the government is operating in the "normal area" of the Laffer curve producing an "arithmetic effect." However, when demand is elastic, a low tax rate would increase revenues since the government would be operating in the "prohibitive area" of the Laffer curve producing an "economic effect."

4. Data and Stylized Facts

Data from the U.S. Internal Revenue Service (IRS), Statistics of Income (SOI) Bulletin are crucial in shedding some light on the views by the Supply-side proponents as shown in Table 1 – this table shows two different individual income tax brackets: $40,000 to $50,000 and $1.5 million to $2 million as portrayed in the size of the adjusted gross income column to capture a prototypical household in the form of middle-income taxpayers, and the wealthy taxpayers as represented by the millionaire group, respectively. The AGI (adjusted gross income) and income tax amounts are in thousands of dollars per the number of tax returns as stated in the last two columns. Also, the effective tax rate which is income tax divided by adjusted gross income is derived for the year 2016 (filed in 2017); and the year 2017 (filed in 2018, after the tax cuts and jobs act took effect) as indicated by a rise from 7.26 in 2016 to 7.33 in 2017 for the middle-income group; and a fall from 28.63 in 2016 to 28.05 in 2017 for the wealthy after the tax cuts and jobs act (TCJA) was enacted. Implying, that the effective tax rate has risen for the middle-class group and fallen for the wealthy group to the delight of the supply-side or tax cut advocates, while contradicting the progressive tax system – wherein tax rates and incomes are directly or positively related as Table 2 and Table 3 illustrate. Accordingly, suggesting that middle-income earners paid more taxes in relative terms than wealthy income earners.

Table 1: Taxes, Effective Tax Rates, and Returns for two selected Income Groups

AGI Size	AGI 2017	Income Tax 2017	AGI 2016	Income Tax 2016	Effective Tax Rate 2017	Effective Tax Rate 2016	Number of Tax Returns 2017	Number of Tax Returns 2016
$40K – 50K	533,337	39,629	522,264	38,446	7.33	7.26	11,915,599	11,664,739
$1.5m – 2m	155,813	44,446	133,632	38,973	28.05	28.63	90,527	77,783

Sources: U.S. Internal Revenue Service, Statistics of Income, Individual Income Tax Returns, Washington, D.C.: U.S. Government Printing Office, 2020; Statistics of Income Bulletin, Spring. Note: AGI = Adjusted Gross Income. AGI and Income Tax amounts are in thousands of dollars.

Table 2: Tax Brackets for Single Filers (Before and After TCJA)

Tax Rate	2017	Tax Rate	2018
10%	$0 - $9325	10%	$0 - $9525
15%	$9,326-$37,950	12%	$9,526-$38,700
25%	$37,951-$91,900	22%	$38,701-$82,500
28%	$91,901-$191,650	24%	$82,501-$157,500
33%	$191,651-$416,700	32%	$157,501-$200,000
35%	$416,701-$418,400	35%	$200,001 -$500,000
39,9%	$418,401 or more	37%	$500,001 or more
Standard deduction	$6,350	Standard deduction	$12,000
Personal Exemption	$4,050	Personal Exemption	Eliminated

Source: Business Insider (2018), "2018 Tax Bracket: How Trump's Tax Plan will affect you."
TCJA = Tax Cuts and Jobs Act

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Table 3: Tax Brackets for Married Taxpayers filing jointly (Before and After TCJA)

Tax Rate	2017	Tax Rate	2018
10%	$0 - $18,650	10%	$0 - $19,050
15%	$18,651-$75,900	12%	$19,051-$77,400
25%	$75,901-$153,100	22%	$77,401-$165,00
28%	$153,101-$233,350	24%	$165,001-$315,000
33%	$233,351-$416,700	32%	$315,001-$400,000
35%	$416,701-$470,700	35%	$400,001-$600,000
39.6%	$470,701 or more	37%	$600,000 or more
Standard deduction	$12,700	Standard deduction	$24,000
Personal Exemption	$8,100	Personal Exemption	Eliminated

Source: Business Insider (2018), "2018 Tax Bracket: How Trump's Tax Plan will affect you."

In addition, data for tax returns and total income by size of AGI for 2016 and 2017 depicted in Table 4 are provided by the IRS, and published in the SOI Bulletin. These data capture the number of returns and the total income reported for several income groups. For example, from $20,000 to $25,000, from $50,000 to $75,000, from $100,000 to $200,000, from $500,000 to $1,000,000, and so forth. In the same vein, Table 5 presents the AGI, taxes paid, and net-of-tax share for the years 2016 and 2017. The net-of-tax share is derived from the difference between the AGI and taxes paid.

Table 4: Tax Returns and Total Income by Size of Adjusted Gross Income, 2016 and 2017

Size of AGI (in thousands)	2016 Tax Returns in Thousands	2017 Tax Returns in Thousands	2016 Income from all Returns in Thousands	2017 Income from all Returns in Thousands
20 – 25	9,847	9,983	221,007	224,218
25 – 30	8,888	8,824	243,939	242,450
30 – 40	15,088	15,209	525,140	529,629
40 – 50	11,664	11,915	522,264	533,337
50 – 75	20,224	20,958	1,241,757	1,286,848
75 – 100	12,974	13,508	1,125,717	1,170,354
100 – 200	18,858	19,951	2,552,480	2,707,840
200 – 500	5,582	6,215	1,588,349	1,770,815
500 – 1000	893	1,010	599,623	679,941
1000 – 1500	192	226	232,559	268,740
1500 – 2000	77	90	133,632	155,813
2000 – 5000	111	129	329,910	386,043
5000 – 10000	26	31	181,670	216,163
10000 or more	16	20	482,067	632,163

Source: Internal Revenue Service, Statistics of Income, Winter 2020
AGI is Adjusted Gross Income

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Table 5: Adjusted Gross Income, Taxes Paid, and Net of tax Share, 2016 & 2017

AGI (000s)	2017 AGI (000s)	2016 AGI (000s)	2017 Taxes Paid (000s)	2016 Taxes paid (000s)	2017 Net of Tax Share (000s)	2016 Net of tax Share (000s)
20 – 25	224,218	221,007	6,314	6,122	217,904	214,885
25 – 30	242,450	243,939	9,105	8,984	233,345	234,991
30 – 40	529,629	525140	26,166	25,681	503,463	499,459
40 – 50	533,337	522,264	33,590	32,485	499,747	489,779
50 – 75	1,286,848	1,241,757	105,652	101,543	1,181,196	1,140,214
75-100	1,170,354	1,125,717	112,966	108,311	1,057,388	1017406
100-200	2,707,840	2,552,480	340,992	321,564	2,366,848	2,230,916
200-500	1,770,815	1,588,349	339962	308249	1,430,853	1,280,100
500-1000	679,941	599,623	172,977	154,657	506,964	444,966
1000-1500	268,740	232,559	74,270	65,170	194,470	167,389
1500-2000	155,813	133,632	44,168	38,630	111,645	95,002
2000-5000	386,043	329,910	110,730	95,555	275,313	234,355
5000-10000	216,163	181,670	61,274	51,950	154,889	129,720
10000 or more	632,163	482,067	161,613	121,355	470,550	360,712

Source: Internal Revenue Service, Statistics of Income, Winter 2020
AGI is Adjusted Gross Income

5. Methodology and Model Specifications

A review of Feldstein (1995) and Goolsbee (1999) difference-in-difference method was conducted in order to examine the elasticity of taxable income with respect to tax rate in light of the Laffer curve; which highlights some of the shortcomings of this approach as well. For example, Goolsbee observed that although the debate is mainly about estimating the behavioral response to taxation (or the elasticity of reported income with respect to the net-of-tax share), the main objective as he noted is: "where the top of the Laffer curve is – at what marginal tax rate does tax revenue start to decline? In some sense, this is the elasticity of tax revenue with respect to tax rates." However, since the tax system consists of a schedule of marginal rates, the conventional Laffer curve does not necessarily reflect the progressive tax system.

In any event, deadweight loss, notwithstanding, Goolsbee's New Tax Responsiveness (NTR) Natural Experiment Approach is adopted herein as an alternative to examining the elasticity of taxable income with respect to tax rate – given data on reported incomes and tax rates, a difference-in-differences calculation to provide a consistent estimate of the true elasticity of taxable income – which postulates that the reported taxable income, Y, for an individual or group of identical individuals A (indexed by time,t) is a function of the net-of-tax share with a constant elasticity:

$$\ln(Y_t^A) = \alpha_A + \beta \ln(1 - \tau_t^A) + \delta_t + \eta_t^A, \quad (5)$$

where α is a fixed effect for the group, β is the elasticity of taxable income, τ is the marginal tax rate for group A given time t, δ is a year effect indexed by time, and η is a random term that is normally distributed. Differencing this equation over time produces:

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$$\ln(Y_t^A) - \ln(Y^A_{t-1}) = \beta[\ln(1 - \tau_t^A) + \beta\ln(1 - \tau_t^A{}_{-1})] + \delta_t - \delta_{t-1} + \varepsilon^A \quad (6)$$

In contrast, the control group B which is similar to group A, with the exception of different marginal tax rate – that is, they both have the same annual effects and elasticity of taxable income. Thus, the differenced equation for group B is specified as:

$$\ln(Y_t^B) - \ln(Y^B_{t-1}) = \beta[\ln(1 - \tau_t^B) + \beta\ln(1 - \tau_t^B{}_{-1})] + \delta_t - \delta_{t-1} + \varepsilon^{B\,(7)} \quad (7)$$

Applying the difference of the two differenced equations produces:

$$\Delta\ln(Y_t^A) - \ln(Y_t^B) = \beta[\ln(1 - \tau_t^A) - \Delta\ln(1 - \tau_t^B)] + \grave{\varepsilon}. \quad (8)$$

Assuming data on reported incomes and tax rates, a difference-in-differences calculation will provide a consistent estimate of the true elasticity of taxable income such as:

$$\hat{\beta} = \frac{\Delta\ln(Y_t^A) - \Delta\ln(Y_t^B)}{\Delta\ln(1 - \tau_t^A) - \Delta\ln(1 - \tau_t^B)} \quad (9)$$

which is, the estimate of the elasticity – the difference in changes in the logarithm of income for the two groups divided by the difference in the change in the logarithm of the net-of-tax shares for the two groups. Note the expected value of the estimated elasticity of the taxable income as:

$$E[\hat{\beta}] = \beta + \frac{\Delta\ln(Y_t^A) - \Delta\ln(Y_t^B)}{\Delta\ln(1 - \tau_t^A) - \Delta\ln(1 - \tau_t^B)} \ . \quad (10)$$

6. Results and Analysis

As Goolsbee postulated, the objective of the NTR approach is to compare the percentage change in income for each group with the percentage change in the net-of-tax share for the group. Thus, the elasticities are derived based on two methods: a) separating the income distribution into three groups and calculating a relative elasticity; and b) estimating the elasticity of the taxable income for the 2017 tax change via regression estimates, using the ordinary least squares (OLS) and the two-stage least squares (2SLS) techniques.

First, from the adjusted gross income, taxes paid, and net-of-tax share, 2016 and 2017 in Table 5; the four groups utilized are those in income categories from $40,000 to $50,000; $100,000 to $200,000; $500,000 to $1,000,000; and over $10,000,000 – namely, groups 1, 2, 3, and 4, respectively. Their relative elasticities are illustrated in Table 6, where the estimate of the elasticity is the difference in changes in the logarithm of the net-of-tax shares for the two groups. For example, a relative comparison of group 1 versus group 3, the difference-in-differences elasticity is derived as (0.003 – 0.000)/(0.130 – 0.020) which is equal to 0.027. Subsequently, comparing groups 2 and 4, 1 and 2, 3 and 4 yielded relative elasticities of 0.198, 0.179, and 0.331, respectively. The results are in line with the progressive tax system, implying that tax rates with respect to the net-of-tax share are directly related. In other words, as tax rates increase, revenues would rise. Also, since the relative elasticities seem to have a positive effect (in the inelastic range, where they are less than one); therefore, a rise in the net-of-tax share would increase tax revenue for all income brackets producing an arithmetic effect as implied in the normal range of the Laffer curve – with a caveat that this finding is based on the behavioral response to taxation and not based on the Laffer curve. Essentially, the peak of the marginal tax rate on the Laffer curve where tax revenue will begin to decline is not ascertainable, given that marginal rates are exclusively associated with a progressive tax system.

Second, Table 7 shows the results of the OLS and 2SLS regressions of the change in log of income on the change in log of net-of-tax share as captured in the last two columns of Table 6. Moreover, all fourteen income categories in Tables 4 and 5 are utilized to estimate the elasticity of taxable income. Despite the low R^2 which could be attributed to the small number of observations relative to a large sample, the Durbin-Watson (D-W) statistics of 2.25 shows that no error terms are correlated. Furthermore, a 2SLS is applied

since the two-difference equation is differenced in equation (8); considering that α is a fixed effect for group A and ὲ is the difference in the error terms of group A and group B. In any case, since the taxable elasticity is not significantly different from zero (-0.020 or -0.021) for OLS or 2SLS estimate; suggesting that the relationship between a change of income and the net-of-tax share is closer to zero than otherwise as Goolsbee (1999) posited, and in contrast to Feldstein (1995) conclusion that the taxable elasticity of taxable income with respect to the marginal net-of-tax rate is at least one, and hence, a reduction in tax rate for high income earners would generate high government revenues.

Table 6: Computed Relative Elasticities of Taxable Income for the 2016 and 2017 Tax Change

Income Group	Income Range[a]	2016 Mean[a]	2017 Mean[a]	Δlog of income	Δlog of NTS
1	40-50	45	45	0.000	0.020
2	100-200	135	136	0.007	0.059
3	500-1000	671	673	0.003	0.130
4	10,000+	30,129	31,608	0.048	0.266

Comparison	**Elasticity**[b]
1 vs 3	0.027
2 vs 4	0.198
1 vs 2	0.179
3 vs 4	0.331

Source: Author's calculations utilizing data from IRS, SOI, various issues (2016, 2017).
NTS = Net-of-tax share; Δ = Change in
a = In thousands of current dollars
b = Difference-in-differences elasticity

Table 7: Regression Estimates of the Elasticity of Taxable Income for the 2017 Tax Change

	OLS	2SLS (Instrument rank =3)
Constant term	0.001	0.001
ΔLog of NTS	-0.020	-0.021
No. of income categories	14	14
R^2	0.050	0.050
D-W Statistics	2.250	2.250

OLS = Ordinary Least Squares, 2SLS = Two-Stage Least Squares, NTS = Net-of-Tax Share

7. Conclusion

This paper examines the policy advocated by the supply-siders or tax cut advocates; whose advocacy is based mainly on the prohibitive range of the Laffer Curve – which proposes that reduction in tax cuts for high income earners would generate higher revenues, increased job growth and wage rates, and thus reduce government spending on programs such as unemployment benefits, food stamps, Medicaid, Medicare, and other social welfare programs. As a result, we examined the

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Trump 2017 Tax Cuts and Jobs Act from an economic perspective, while utilizing data from both the 2016 and 2017 tax filers provided by the IRS Statistics of Income Bulletin. Furthermore, we applied the NTR (New Tax Responsiveness) approach by comparing the percentage change in income for each income group with the percentage change in the net-of-tax share for the group via the difference-in-difference method, as well as regression analysis. First, the results of the relative elasticities derived from the difference-in-difference method indicate that tax rates with respect to the net-of-tax share are directly related. However, since the peak of the marginal tax rate on the Laffer curve where tax revenue will begin to decline is not ascertainable, given that marginal rates are exclusively associated with a progressive tax system; the essence of the underlying tax cut policy as advocated by supply-siders inevitably becomes unattainable. Second, the results from the regression analyses suggest that a rise in the change of income will lead to a decline in the net-of-tax share. However, since the taxable elasticity of the regression estimate from both OLS and 2SLS is not significantly different from zero, the result thus contradicts the notion espoused by the supply-siders or tax cut advocates that reduction in tax rates especially for high-income earners would generate higher revenues, ceteris paribus.

Moreover, considering the fact that the U.S. economy was at or near full employment before the enactment of the 2017 tax cut, it is imperative that policymakers realize that tax cuts will not pay for themselves by producing the required job growth since the productive capacity in the U.S. economy during the time the legislation was enacted into law has been at or near full utilization during the period of interest (just before the Covid-19 pandemic). Therefore, the supply-side advocates are wrong to suggest that disproportionate tax cuts in favor of high-income brackets would trickle down via positive externalities or spillover benefits in the forms of job growth, higher income, higher consumption, and higher tax base to benefit the entire society.

Lessons learned from the aforementioned similar past policies like the Bush and Reagan tax cuts would suggest that tax cuts do not pay for themselves as supply-side advocates tend to portray, given the escalating deficits during the periods of both administrations. A major takeaway is the persistent effect of the ballooning federal budget deficits and their negative effects or spillover costs on social welfare spending.

Finally, although most taxpayers kept more of their money after the implementation of the tax cuts, the deficits are likely to increase significantly in line with the Congressional Budget Office (CBO) estimates: that wage rates are likely to remain relatively the same, income inequality is likely to exacerbate, and the redistributive effects are most likely to benefit the wealthy more than the middle and low-income classes. In effect, the positive externalities of the Trump tax cuts would not necessarily accrue to middle-income and low-income workers that are less likely to invest in the financial markets; rather, the results are more in favor of negative externalities in terms of widening economic inequities, especially in income, education and healthcare.

References

Amadeo K. 2018. Why Tax Cuts No Longer Work, *The Balance*, March.

Ballard C. et al. 1985. The Relationship Between Tax Rates and Government Revenue. *NBER Working Papers,* University of Chicago Press.

Blinder A. 1981. Thoughts on the Laffer Curve. *Economic Research,* Federal Reserve Bank of St. Louis, May, 81-92.

Business Insider 2018. 2018 Tax Bracket: How Trump's Tax Plan Will Affect You.

Canto V, Joines D, and Laffer A. 1978. An Income Expenditure Version of the Wedge Model, *Mimeo,* University of Southern California, Los Angeles.

 ISSN 1927-033X

Clark J. 2018. Supply-Side Economics and the 2017 Tax Act. *Studies in Applied Economics*, *SAE*, No. 98, January.

Cole L. 2018. Here's How Your Tax Bracket Will Change in 2018, *Business Insider*.

Evans M. 1983. *The Truth About Supply-Side Economics*, New York: Basic Books.

Feldstein M. 1995. The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act. *Journal of Political Economy* 103:3, 551-572.

Fullerton D. 1982. On the Possibility of an Inverse Relationship Between Tax Rates and Government Revenues. *Journal of Public Economics* 19:1, 3-22.

Gilder G. 1981. *Wealth and Poverty*, New York: Basic Books.

Goolsbee A. 1999. Evidence on the High-Income Laffer Curve from Six Decades of Tax Reform. *Brookings Papers on Economic Activity* 2:1999, 1-64.

Laffer A. 1978. An Equilibrium Rational Macroeconomic Framework, *Mimeo*, University of Southern California, Los Angeles.

Leiserson G. 2018. Assessing the Economic Effects of the Tax Cuts and Jobs Act, *Washington Center for Equitable Growth*, April.

Pressman S. 1986-87. A Tale of Two Taxpayers: The Effects of the Economic Recovery and Tax Act of 1981. *Journal of Post Keynesian Economics* 9:2, 226-236.

Sanz-Sanz J. 2016. Revenue-Maximizing Tax Rates in Personal Income Taxation in the Presence of Consumption Taxes: A Note. *Applied Economics Letters* 23, 571-575.

SOI (*Statistics of Income Bulletin*), Internal Revenue Service (IRS), Winter 2017-2020.

Wannisky J. 1983. *The Way the World Works*, New York: Simon and Schuster.

 ISSN 1927-033X