JOINT ECONOMIC COMMITTEE
CHAIRMAN ERIK PAULSEN (R-MN)

REPUBLICAN STAFF STUDY

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A Year After Tax Reform Became Law, Are We There Yet?

How Workers and the Economy Benefit from the Tax Cuts and Jobs Act

Will the *Tax Cuts and Jobs Act* (TCJA) foster long-term sustainable growth or was it merely a "sugar rush" to the economy that will dissipate quickly? Will economic gains translate into higher wages for workers or will the benefits be concentrated among a privileged few?

These were key questions explored by the Joint Economic Committee (JEC) at a September 2018 hearing titled "The Positive Economic Growth Effects of the Tax Cuts and Jobs Act."[1] Finding the answers requires a look at how tax policy in general and TCJA in particular affect the building blocks of the economy, as well as early evidence and long-term projections of the law's success.

Key Points:

- ***Tax policy can improve incentives to work and invest by lowering taxes on labor and capital. TCJA did both.***
- ***More business investment increases workers' productivity, which leads to long-term wage and economic growth.***
- ***Nearly all well-known economic models find TCJA to be pro-growth.***
- ***While workers and the economy are already benefiting from TCJA, the law was designed to strengthen the economy over the long term, so the best may be yet to come.***

HOW TAX POLICY AFFECTS ECONOMIC GROWTH

To operate at full potential, an economy needs its working-age population in the workforce (labor supply); businesses willing and able to equip workers with high-quality facilities, equipment, technology and know-how (capital investment); and all of these employed in ways that empower workers to produce more per hour (labor productivity). Tax policy can affect each of these factors either positively or negatively.

The Joint Committee on Taxation (JCT) has noted that lower tax rates paid by individuals allow them to keep more of the money they earn, thus increasing their incentive to work. Similarly, lower tax rates paid by businesses decrease the cost of capital, which encourages companies to invest more in their business and workers by purchasing equipment, upgrading technology or facilities, or providing skills training, all of which make employees more productive.[2] Higher productivity generally leads to higher wages for workers.[3] Higher wages, in

[1] JEC hearing on "The Positive Economic Growth Effects of the Tax Cuts and Jobs Act," September 6, 2018. https://www.jec.senate.gov/public/index.cfm/hearings-calendar?ID=FABDB6

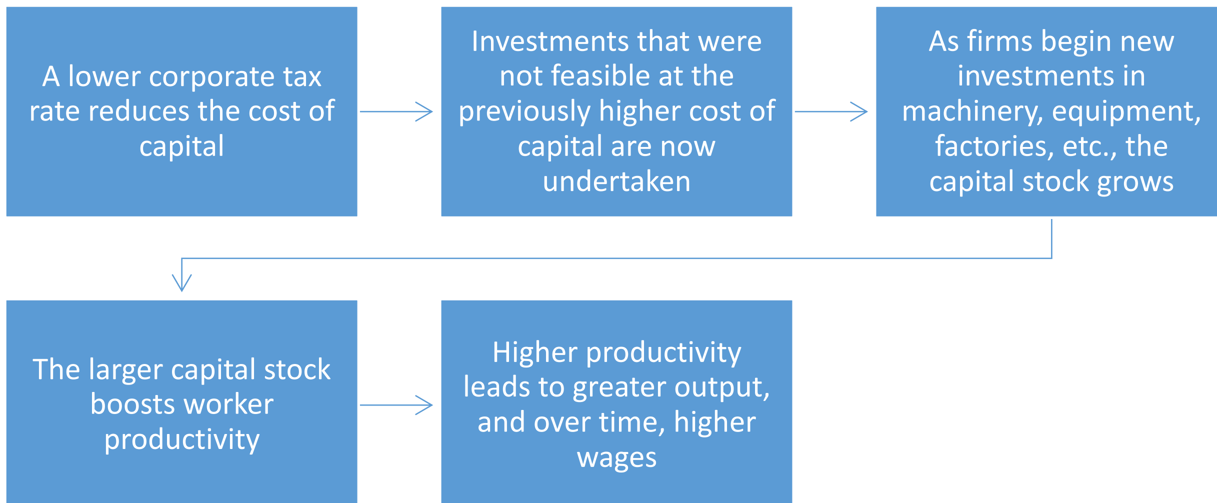
[2] "Economic Growth and Tax Policy," Joint Committee on Taxation, p. 2-3, February 20, 2015. https://www.jct.gov/publications.html?func=startdown&id=4736

[3] Mankiw, Greg, "How are wages and productivity related?" Greg Mankiw's Blog, August 29, 2006. http://gregmankiw.blogspot.com/2006/08/how-are-wages-and-productivity-related.html

turn, may entice more potential workers into the workforce, creating a virtuous cycle of greater prosperity, opportunity, and growth.

Scott Hodge, President of the Tax Foundation, provided a useful graphic in his testimony at the JEC hearing that shows the relationship between lower business taxes and worker pay:[4]

Figure 1



Source: Tax Foundation

Tax policy can also hinder economic growth. High marginal tax rates on individuals discourage them from working and increasing their earnings. High tax rates on businesses raise the cost of capital, making it less feasible for companies to invest in their business and workers. Additionally, tax rules for equipment purchases that require businesses to deduct the purchase price over many years under complicated depreciation schedules—rather than allowing an immediate tax deduction for the cost, known as expensing—discourages companies from making the kind of investments that raise productivity, wages, and economic growth.

As Mr. Hodge explained in his testimony:

> *Delaying deductions means the present value of the write-offs (adjusted for inflation and the time value of money) is worth less than the original cost, sometimes worth much less. Delayed deductions increase the cost of making an investment, which results in less capital formation, lower productivity and wages, and less output.*[5]

In addition, tax policy can have a direct impact on the location of investments. If the domestic tax climate makes it less profitable to invest in the United States, businesses have a powerful incentive to invest in and even relocate to other countries with more favorable tax systems. This diverts both capital and workforce opportunities from the United States, further lowering our nation's growth potential.

Mr. Hodge described how high corporate taxes can damage growth due to the mobility of capital:

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[4] Testimony of Scott Hodge, JEC hearing, September 6, 2018, p. 3. https://www.jec.senate.gov/public/_cache/files/86eb6c11-4bd6-4530-9c6e-335ae534d766/180906hodge.pdf

[5] Hodge testimony, p. 7.

Evidence shows that of the different types of taxes, the corporate income tax is the most harmful for economic growth. One key reason that capital is so sensitive to taxation is because capital is highly mobile. For example, it is relatively easy for a company to move its operations or choose to locate its next investment in a lower-tax jurisdiction, but it is more difficult for a worker to move his or her family to get a lower tax bill. Capital is, therefore, more responsive to tax changes; lowering the corporate income tax rate reduces the amount of economic harm it causes.[6]

Mr. Hodge also explained why workers bear a substantial burden of corporate taxes by earning lower wages:

A common misunderstanding is that corporations bear the cost of the corporate income tax. However, a growing body of economic literature indicates that the true burden of the corporate income is split between workers through lower wages and owners of the corporation. As capital moves away in response to high statutory corporate income tax rates, productivity and wages for the relatively immobile workers fall. Empirical studies show that labor bears about half of the burden of the corporate income tax.[7]

In summary, a tax code that helps make America a more attractive place to work, invest and start or grow a business is a key ingredient for stronger economic and wage growth.

HOW ECONOMY-WIDE EFFECTS OF TAX POLICY ARE MODELED

Most economists who model major tax changes agree on the general direction a particular tax policy will send the building blocks of the economy in the short run—in other words, whether a change will be pro-growth or anti-growth, and even whether one change is more or less pro-growth than another. However, they differ on the degree to which the change will influence the economy, and on whether other factors will temper or even reverse the growth effects over time.

Several organizations have developed macroeconomic tax models that attempt to predict future economic outcomes, each with different assumptions and each with various strengths and weaknesses. Some assume that the United States has a closed economy, while others assume an open one where capital flows easily across international borders. The models differ on factors such as the degree to which individual or business taxpayers will respond to changes, whether the Federal Reserve will act aggressively to temper growth with interest rate hikes, or whether higher interest costs for servicing federal debt will "crowd out" private investment. As such, each model can result in very different predictions about a law's precise impact on long-term growth in GDP, employment, capital investment, and wages, as well as how much additional federal revenue might be generated from extra growth in the economy.

JCT, the official tax scorekeeper of Congress, uses three different models that it blends together to develop a single growth projection.

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[6] Hodge testimony, p. 2.

[7] *Ibid.*

The Taxes and Growth model developed by the Tax Foundation focuses on how tax changes influence the supply of workers and capital. The model places a greater emphasis on capital effects because—as outlined earlier—capital is highly mobile and more responsive to tax policy changes, and capital investment drives the productivity gains that lead to long-term wage and economic growth.

The models that project low growth effects from TCJA rely on Keynesian assumptions that aggregate demand drives economic activity rather than the strength of the supply of economic building blocks such as labor and capital. These assumption predict a short-term spurt in growth from the demand side of the economy as consumers and businesses spend more due to the extra dollars they have from tax relief, but that over time other factors such as accelerated inflation or the crowding out of private investment can act to offset the additional spending. In addition, these models tend to downplay the mobility of capital across borders, which limits the formation of capital even when there are strong incentives to invest.

Mr. Hodge was skeptical of models that show a crowd-out of private investment:

> *There is $20 trillion a year worth of savings globally every year, and a little bit of deficit in the United States is not going to crowd out and raise interest rates on a global basis.*[8]

He also cautioned against raising taxes in order to reduce the deficit, citing a recent International Monetary Fund (IMF) study:

> *[The IMF study] looked across the globe at all of the different countries that have cut their deficits at one time or another through tax or spending policies, and which ones did the most harm and which ones did the most good. [The study] found that cutting spending was the most beneficial for both reducing the deficit and for economic growth; whereas raising taxes did the most harm for economic growth, which ended up being counterproductive for trying to reduce the deficit.*[9]

In summary, economic modeling is not an exact science, and no model can predict economic outcomes with absolute certainty. The first thing to remember is that nearly every model finds TCJA to be pro-growth. But most importantly, the takeaway is that TCJA was not designed to be a short-term Keynesian stimulus. It was designed to improve the long-term incentives to save and invest so that more Americans will be employed and have access to the tools that will enable them to be more productive, leading to long-term growth in their wages and the economy as a whole.

[8] Hodge response to questions of JEC members at the hearing.

[9] Hodge response to questions of JEC members at the hearing. For information on the IMF study, see https://www.imf.org/external/pubs/ft/fandd/2018/03/alesina.htm.

PRO-GROWTH PROVISIONS IN TCJA

Lower individual rates and other tax relief

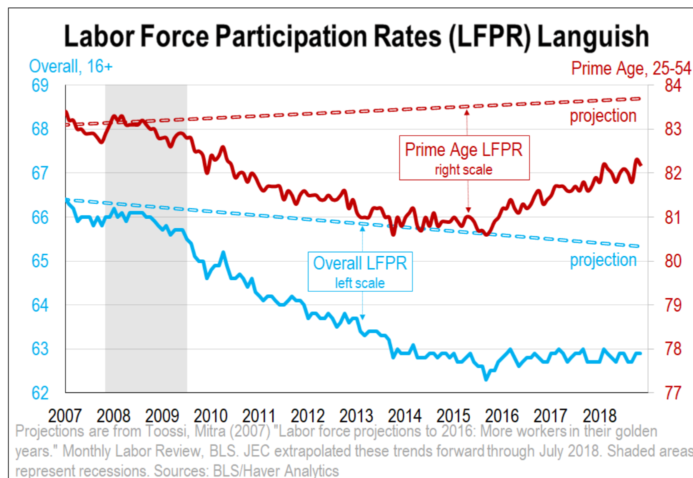
TCJA lowered individual tax rates; applied the lower rates to broader swaths of income; nearly doubled the standard deduction (essentially creating an expanded 0 percent tax bracket); and doubled the child credit to $2,000 per child, while making more of the credit refundable for low-income Americans without tax liability.

In its macroeconomic analysis of TCJA, JCT described how these tax provisions combine to encourage potential workers on the sidelines to join the workforce:

> *The significant reduction in marginal tax rates on labor (resulting primarily from the additional tax rate bracket, lower statutory rates for most brackets, and the increase in the child credit) provide strong incentives for an increase in labor supply.*[10]

By allowing Americans to keep more of what they earn, TCJA increases incentives to work. This is especially important because workforce participation languished during the Obama-era portion of the recovery, and though improving it still remains below what the Congressional Budget Office (CBO) had projected before the recession, even for workers in their prime working years.

Figure 2



Due to a lack of support from Democrats in Congress, TCJA could only be enacted under complex budget reconciliation procedures, which led to the expiration of TCJA provisions affecting individuals after 2025. Essentially, JCT provided an economic argument for extending the individual tax relief by noting:

> *After the sunset of the individual tax provisions, the increase in employment is expected to decline.*[11]

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[10] "Macroeconomic Analysis of the Conference Agreement for H.R. 1, the 'Tax Cuts and Jobs Act'," Joint Committee on Taxation, p. 5, December 22, 2017. https://www.jct.gov/publications.html?func=startdown&id=5055

[11] "Macroeconomic Analysis of the Conference Agreement for H.R. 1, the 'Tax Cuts and Jobs Act'," Joint Committee on Taxation, p. 6, December 22, 2017. https://www.jct.gov/publications.html?func=startdown&id=5055

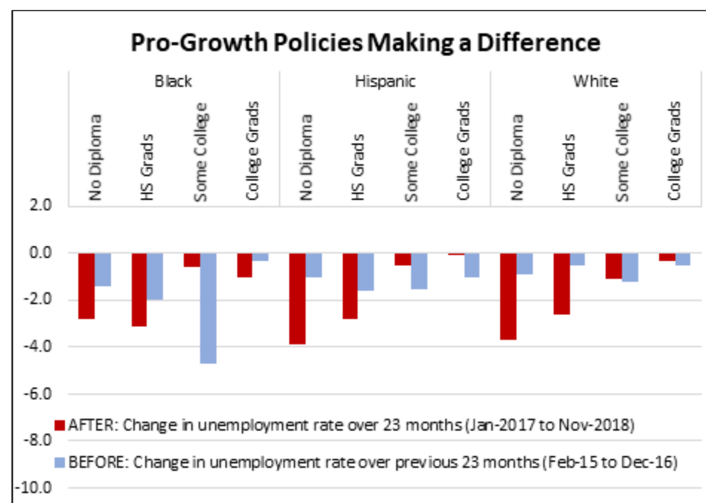
The myth of “tax cuts only benefit the wealthy”

TCJA also increased the progressiveness of the tax code. While TCJA is evenhanded by lowering taxes for all income groups, during the time that TCJA provisions affecting individuals are in effect, the new and lower overall tax burden will be borne more heavily by taxpayers with incomes greater than $1 million. For example, JCT estimated that in 2019, taxpayers with incomes over $1 million will pay 19.8 percent of all federal taxes, compared to 19.3 percent without TCJA. Conversely, under TCJA, taxpayers with less than $50,000 in income will see their share of federal taxes in 2019 fall from 4.4 percent to 4.1 percent.[12] JCT also noted that in 2019, Americans with incomes less than $50,000 will enjoy the largest percentage cut in their taxes.

JCT indicated that this increased progressiveness of the tax code under TCJA would disappear, if a future Congress decided not to renew the individual tax provisions, providing yet another argument for extending them beyond 2025.

In addition to the tax relief that low- and middle-income Americans will enjoy through 2025, data on falling unemployment rates defy the critics who claim the current strong economy (made possible by TCJA and regulatory reforms) is only benefiting a privileged few. Headline unemployment is at the lowest levels seen in nearly 50 years, but it is falling faster for disadvantaged workers who tend to suffer most in a weak economy—those with less education and members of minority populations—than it is for all workers (Figure 3).

Figure 3



Source: Bureau of Labor Statistics

[12] “Distributional Effects of the Conference Agreement for H.R. 1, the ‘Tax Cuts and Jobs Act’,” Joint Committee on Taxation, December 18, 2017. https://www.jct.gov/publications.html?func=startdown&id=5054

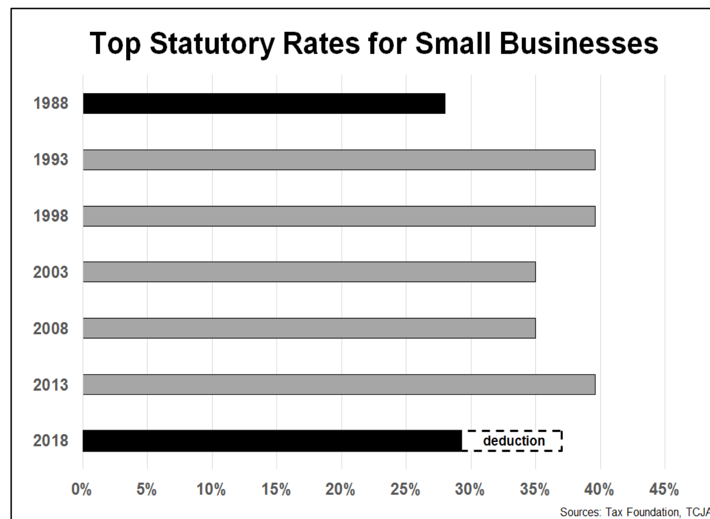
Lower small business rates and the pass-through deduction

Approximately 95 percent of businesses pay taxes at the individual level rather than corporate level; these are known as pass-through businesses.[13] The vast majority of small businesses are organized as pass-throughs, and are therefore very sensitive to individual tax rates.

TCJA reversed part of the Obama-era tax increase on pass-through businesses by lowering the top individual rate from 39.6 percent to 37 percent. Additionally, TCJA provided a new deduction equal to 20 percent of pass-through business income, with safeguards to prevent abuse.

The combination of the lower statutory rate and the pass-through deduction creates a top effective rate of 29.6 percent, very near the top 28 percent rate (represented by the top bar in Figure 4) established by the bipartisan Tax Reform Act of 1986.[14]

Figure 4



William Dunkelberg, the Chief Economist of the National Federation of Independent Business (NFIB), was also a witness at the JEC hearing. NFIB is the largest trade association representing small business owners and regularly surveys its members to gauge the economic well-being, future plans, and top concerns of the small business community. Dr. Dunkelberg described the positive response of small business owners to TCJA, with small business optimism at record highs:

> *The TCJA has made a significant contribution to the growth of the economy, in terms of improving the bottom lines of small firms but also changing the metrics about the future value of investments.*[15]

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[13] "Selected Issues Relating to Choice of Business Entity," Testimony before the Senate Finance Committee, Joint Committee on Taxation, p. 5, August 1, 2012. https://www.jct.gov/publications.html?func=startdown&id=4478

[14] Public Law 99-514.

[15] Testimony of Dr. William C. Dunkelberg, JEC hearing, September 6, 2018, p. 1. https://www.jec.senate.gov/public/_cache/files/1d9a9a09-ef3a-4538-a252-d96c30532225/180906dunkelberg.pdf

Dr. Dunkelberg noted that three-fourths of small business owners expected their business would benefit from tax reform, and this was translating into plans to increase investment, worker pay, and hiring:

> *Almost half (47 percent) of small business owners who expect to pay less in taxes next year plan to increase business investments with their tax savings, and 44 percent plan to increase employee compensation… Twenty-seven percent plan to hire an additional employee…*[16]

Dr. Dunkelberg noted that these plans of small business owners do not simply reflect their belief in a short-term burst of economic growth that will fade:

> *All the decisions that small business owners make are always about the future… So decisions they are making now to spend and to hire are commitments to the future, not just six months or a year, but much longer than that, especially when you look at the fact that we have a record high number now saying it is a good time to expand their business…*
>
> *So we think they are very optimistic about the future, not just the immediate future but long term. They see a different set of policies that are conducive to growth in the economy, and that are encouraging them to do the kinds of things that will raise worker productivity. And to go along with that we have a record-high percentage who are now already reporting raising worker compensation. So as our workers become more productive, we do pay them more.*[17]

Unfortunately, the pass-through deduction is scheduled to expire after 2025, along with the other provisions in TCJA affecting the individual side of the tax code. Dr. Dunkelberg warned against allowing these provisions to expire:

> *The new tax law is a significant step forward in easing one of the main concerns of small business owners: the impact of federal taxes on business income. For long term growth in the small business sector, NFIB strongly urges Congress to make these provisions permanent so that increasing uncertainty over future changes to the tax code do not erode the law's benefits.*[18]

Indeed, the Tax Foundation estimates that making the individual provisions (including the pass-through deduction) permanent would have a long-run impact of 2.2 percent higher GDP, a 0.9 percent increase in wages, and the equivalent of 1.5 million more full-time jobs.

<u>Faster cost recovery through expensing</u>

As noted earlier, instead of allowing an immediate tax deduction for the full cost of purchasing an asset (expensing), tax rules generally required businesses to use complicated depreciation

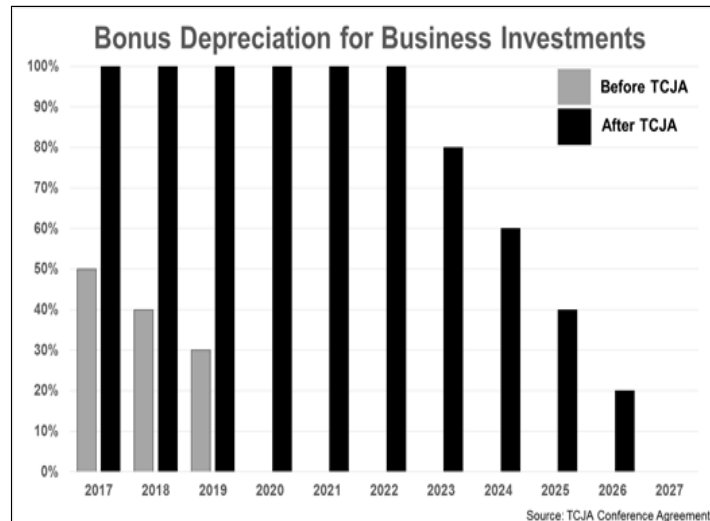
[16] Dunkelberg testimony, p. 4.
[17] Dunkelberg response to questions at the JEC hearing.
[18] *Ibid.*

schedules to deduct the cost gradually over many years,[19] which discourages investment and dampens long-term wage growth.

In order to boost business investments and economic growth, Congress has passed temporary extensions of bonus depreciation, under which companies can deduct a large portion of the purchase price in the first tax year. However, before TCJA, the extra portion of investments that could be deducted immediately was scheduled to decline from 50 percent in 2017, to 40 percent in 2018, and to 30 percent in 2019, after which it would disappear completely.

TCJA provides 100 percent bonus depreciation—which is essentially expensing—for purchases made after Sept. 27, 2017, through the end of 2022, after which it will phase down and eventually disappear by 2027 (Future 5). (Congressional and Administration leaders had announced earlier that expensing would be made retroactive to September so that businesses could begin anticipating that change and make investment decisions at the end of 2017 accordingly even before TCJA became law.)

Figure 5



Because expensing is a powerful tool for encouraging new capital investment, the Tax Foundation estimates that making expensing permanent would generate a 0.9 percent increase in long-run GDP over the decade, along with a 0.8 percent increase in wages and the equivalent of 172,300 more full-time jobs.[20]

Lower corporate tax rates and moving to a territorial tax system

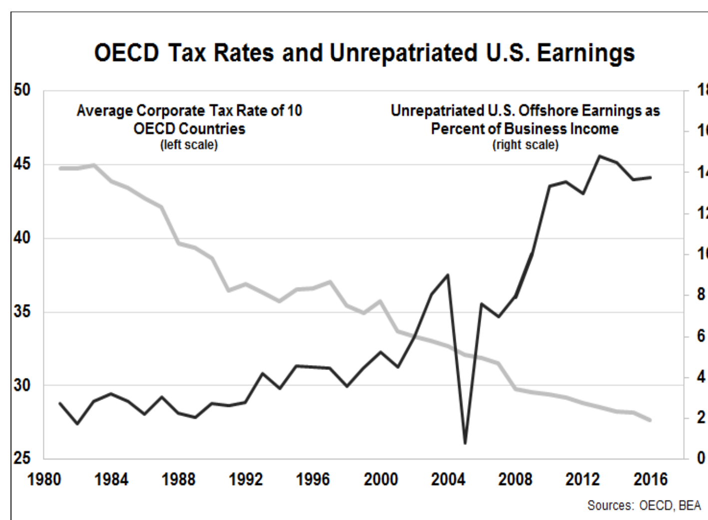
Before TCJA, the tax code imposed substantial burdens on American corporations competing in global markets on two fronts. First, among the 34 advanced economies in the OECD, the U.S. corporate rate topped all others in 2017 at nearly 39 percent, including both the 35 percent federal rate and average state taxes.[21] In addition, U.S. businesses were faced with an uncompetitive worldwide tax system rather than a territorial system. Territorial systems allow

[19] "How to Depreciate Property," Internal Revenue Service, Publication 946, February 28, 2018. https://www.irs.gov/pub/irs-pdf/p946.pdf
[20] Hodge testimony, p. 7.
[21] "Table II.1 Corporate income tax rate," OECD, https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_II1

active business income earned overseas to be brought back to the home country with little or no tax. In contrast, America's worldwide system subjected all income to U.S. taxation, regardless of where it was earned. The tax was triggered when profits were brought back to the United States, giving companies a strong incentive to leave earnings overseas. This created a lock-out effect, which resulted in reduced levels of investment by American companies in the United States.

The chart below illustrates that as the corporate tax rates declined in 10 large economies in the OECD—all of which adopted territorial tax systems—a larger share of the international income of U.S. businesses was left offshore.[22] Unsurprisingly, the dip in earnings that were left overseas in 2005 occurred due to a temporary tax holiday that allowed businesses to repatriate their profits to the United States at a much lower tax rate.[23]

Figure 6

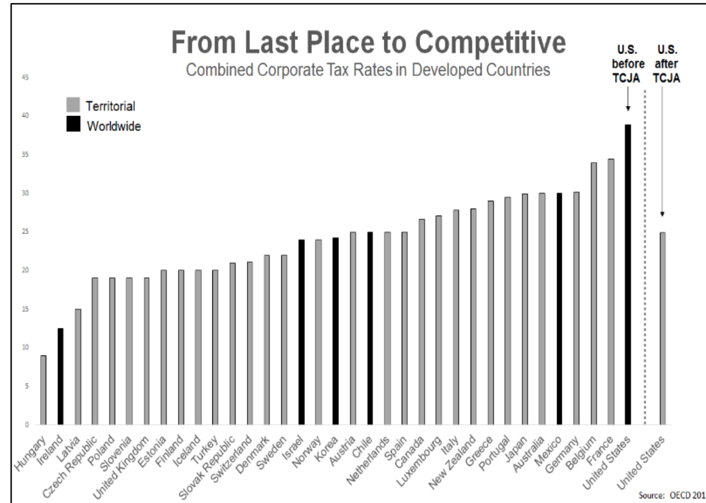


In order to prevent the loss of headquarters, jobs, and investment to nations with more attractive tax systems, TCJA lowered America's federal corporate rate from 35 percent to 21 percent and adopted a more territorial system. Figure 7, which incorporates both national and average sub-national taxes in OECD countries, illustrates how these two changes put America on a much more competitive footing with other developed economies.

[22] The graph includes average combined corporate income tax rates for OECD member nations (Australia, Canada, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, and the United Kingdom). Except for the United States, these were the only countries with OECD tax data going back to 1981. In the same graph, reinvested earnings on U.S. direct investment abroad are shown as a percent of income receipts on assets. The data source is BEA's Table 1.6 Sources and Uses of Private Enterprise Income.

[23] "American Jobs Creation Act of 2004," Public Law 108-357, October 22, 2004. https://www.congress.gov/108/plaws/publ357/PLAW-108publ357.pdf

Figure 7



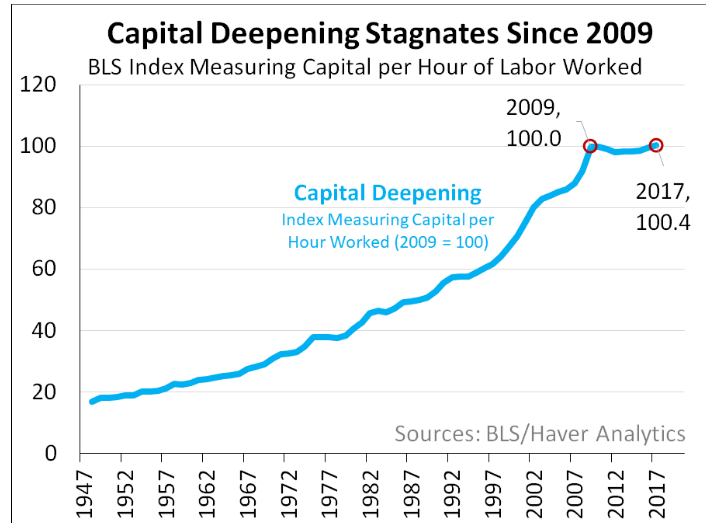
Additionally, TCJA includes several provisions to limit the artificial shifting of U.S. profit to overseas locations. After analyzing the full effect of these anti-abuse provisions, the corporate and pass-through rate cuts, and new territorial system, JCT concluded:

> *The provisions affecting taxation of foreign activity are expected to reduce the incentive for this "profit-shifting" activity… The macroeconomic estimate projects* ***an increase in investment in the United States****, both as a result of the proposals directly affecting taxation of foreign source income of U.S. multinational corporations, and from the reduction in the after-tax cost of capital in the United States due to more general reductions in taxes on business income.*[24]

"Capital deepening" is a measure of the value of capital available to workers per hour worked. As noted earlier, more capital raises workers' productivity, which in turn enables wage growth. During the Obama-era recovery, capital deepening experienced its most acute and prolonged stagnation in the 70 years for which data is available (Figure 8).

[24] "Macroeconomic Analysis of the Conference Agreement for H.R. 1, the 'Tax Cuts and Jobs Act'," Joint Committee on Taxation, pp. 6-7, December 22, 2017. https://www.jct.gov/publications.html?func=startdown&id=5055

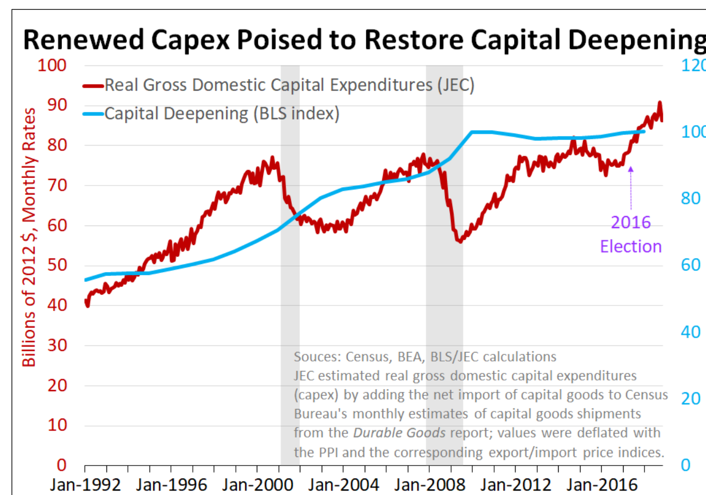
Figure 8



Critics of TCJA claim that the proceeds from lower corporate tax rates are being used primarily for stock buybacks, which are actually good for the economy. Ultimately, buybacks free up investment dollars to be redirected to companies that are expanding. Also, a substantial portion of U.S. corporate stock is held in retirement accounts, which means that workers can benefit from stock buybacks through increased retirement income.

And importantly, there are encouraging signs of increased business investment. While the measure of capital deepening is only available through 2017 at this time, more timely indicators suggest the stagnation trend is reversing.[25] Business investment (also known as capital expenditures, or "capex") rose dramatically when expensing first became available in the 4th quarter of 2017, and it has remained strong since then.

Figure 9



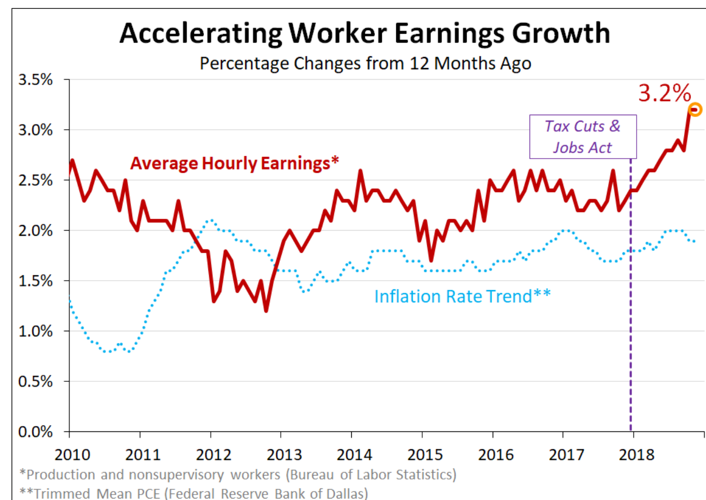
[25] As the economy's performance continues to improve, more people are joining the labor force, which may exert some temporary downward pressure on capital deepening.

"ARE WE THERE YET?"

Since TCJA was signed into law on December 22, 2017, growth in real GDP has averaged 3.3 percent over the last three quarters—a level that critics previously believed was no longer possible. Unemployment is at the lowest levels since 1969, and almost 2.3 million new jobs have been created so far in 2018.

Workers are seeing higher paychecks with fewer taxes withheld, and there are also encouraging signs of rising wages and salaries. In November, the average hourly earnings of rank-and-file workers rose 3.2 percent, the fastest rate since 2009. And importantly, inflation has remained low.

Figure 10



But for those still impatient with the rate of progress, Mr. Hodge offered these words at the JEC hearing:

> *Politics demand results now and spectators are eager to pass an early judgment of the new law, but unfortunately, tax reform and economic growth do not do their work within a news cycle. In fact, the current debate resembles a long car ride with your kids. An hour into the ride they kick the back of your seat and demand to know, "Are we there yet?" But these things take time and patience.*[26]

And for those who expect only a short burst of growth from the demand side of the economy, Mr. Hodge explained:

> *The Tax Cuts and Jobs Act was designed to do more; to improve incentives in the economy, encouraging taxpayers to work more, save more, and invest more over the long term. Lowering taxes on capital and labor is expected to boost productivity, wages, and the size of the economy.*[27]

[26] Hodge testimony, p. 1.

[27] *Ibid.*

The Tax Foundation model finds that over the long run, TCJA will result in GDP that is 1.7 percent larger, 1.5 percent higher wages, a 4.8 percent larger supply of capital, the equivalent of 339,000 additional jobs, and—as noted earlier—far more growth in all of these if the individual and expensing provisions of TCJA are made permanent.[28]

CBO also validated the pro-growth aspects of TCJA in several passages of its most recent 2018-2028 economic outlook (bold emphasis added):

> *The lower marginal income tax rates that will be in place for much of the projection period will encourage workers to work more hours and businesses to increase investment in productive capital, thereby* ***raising potential output over the entire projection period.***[29]
>
> *Although the* ***growth of potential output*** *is determined primarily by long-run forces (such as trends in population growth, the labor force participation rate, and productivity),* ***the acceleration of that growth over the next few years in CBO's forecast is also driven by the 2017 tax act, which according to the agency's estimates, boosts investment (and therefore labor productivity) and labor supply and thus increases the economy's underlying productive capacity.***[30]
>
> *In later years, as many temporary provisions of the 2017 tax act phase out or expire, growth of actual GDP falls below the growth of potential output in CBO's projections,* ***but the law's total effect on the levels of investment, employment, and output remains positive through 2028.***[31]

CONCLUSION

TCJA made important improvements in incentives to work and invest, which lead to higher productivity and ultimately higher long-term wage growth, employment, and economic growth. While the short-term economic indicators are very encouraging, they only provide early signs that the long-term incentives are starting to work. It will take time for TCJA to have its full effect.

It is also important to remember that while tax policy is an important factor, it is not the only factor influencing the economy. Trade and other fiscal policy, monetary policy, and numerous factors beyond the control of policy-makers can affect the economy. However, the incentives in TCJA lay a solid foundation for the levers that drive wage and economic growth, which should help the economy better withstand any challenges ahead. Congress should continue to improve the tax code to meet the ever-changing challenges of a global economy and produce even stronger growth and expanded opportunities for American workers.

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[28] Hodge testimony, p. 2.
[29] CBO, "An Update to the Economic Outlook: 2018 to 2028," August 2018, p. 4. https://www.cbo.gov/system/files?file=2018-08/54318-EconomicOutlook-Aug2018-update.pdf
[30] CBO, p. 10.
[31] CBO, p. 4.