Tax Cuts and Jobs Act of 2017

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Tax Cut and Jobs Act (TCJA): key provisions and timing

Corporate tax provision	Effective date	Type
Lower corporate tax rate	1/1/18	Permanent
Expensing of capital equipment	9/28/17	Temporary; 100% expensing for 5 years, phased-out by 2026
Cap on business interest deduction	1/1/18	Permanent; EBITDA test for 2018-2021, stricter EBIT test thereafter
Territoriality	1/1/18	Permanent
Repatriation	12/31/17	One time tax (8% or 15.5%)

Individual tax provision	Effective date	Type
Individual tax rates	1/1/18	Sunsets (12/31/25)
Higher standard deduction	1/1/18	Sunsets (12/31/25)
Itemized deduction limits	1/1/18	Sunsets (12/31/25)
Lower rate on pass through entities	1/1/18	Sunsets (12/31/25)
Doubling of gift/estate/GST tax exemptions	1/1/18	Sunsets (12/31/25)

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Today's agenda

- **What it means for the economy**
- What it means for the stock market
- What it means for you

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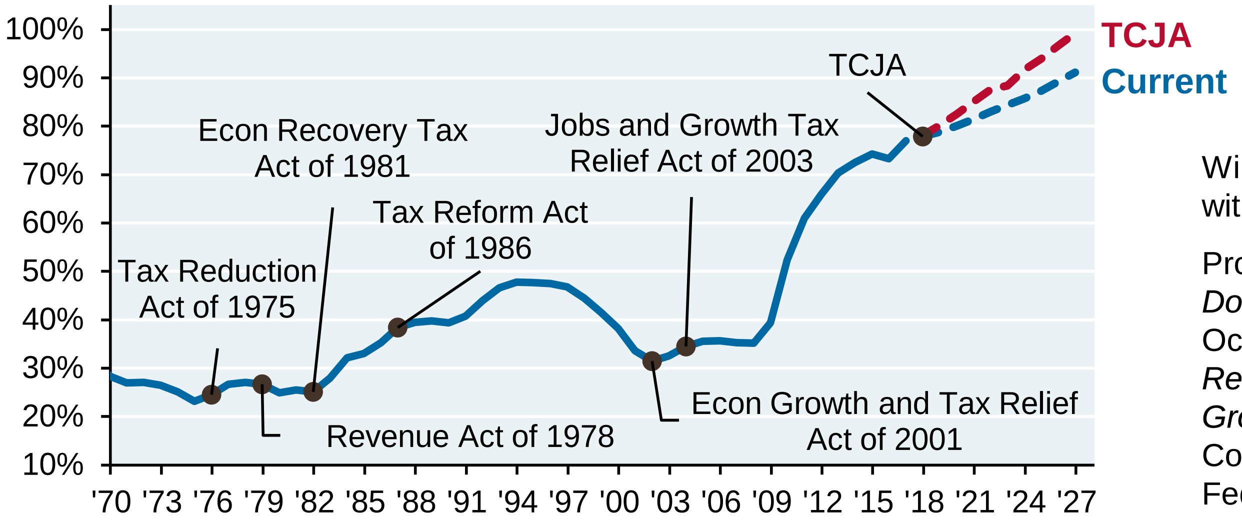
What happened to all the fiscal conservatives in the GOP? All prior tax cuts took place when debt/GDP ratios were less than 40%

Prior tax cuts coincided with much lower levels of debt
Federal debt as a % of GDP



Source: Congressional Budget Office, U.S. Treasury, CRFB. TCJA projections based on Senate bill as of November 14, 2017.

Will tax cuts "pay for themselves" with respect to debt and deficits?

Probably not. See "*Tax Cuts Don't Pay for Themselves*", October 4, 2017, and "*Can Tax Reform Generate 0.4% Additional Growth?*", November 27, 2017, Committee for a Responsible Federal Budget

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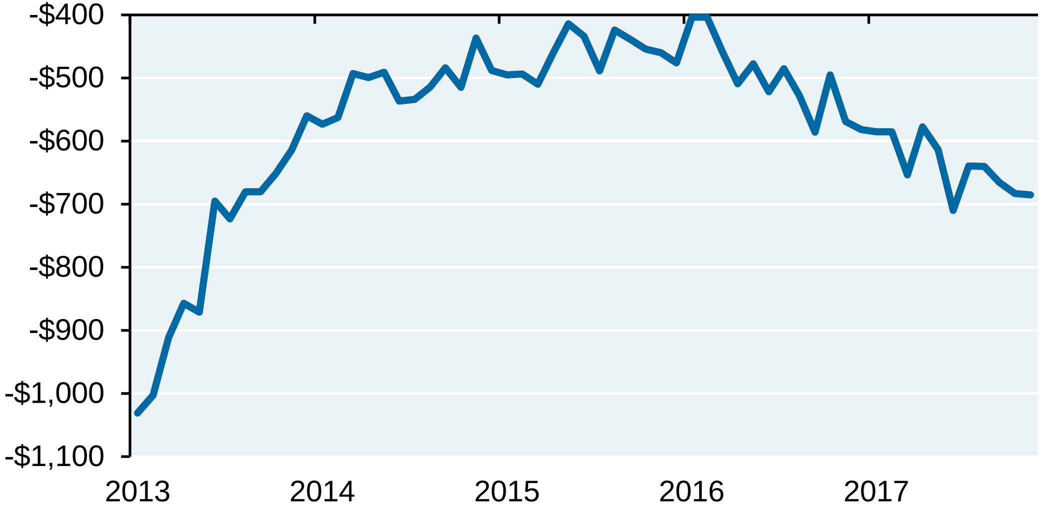
As a reminder, the budget deficit is already growing again, which is unusual for this point in the business cycle (when it is usually improving)

An unusual late-cycle decline in the US federal budget

US$ billion, rolling12 months

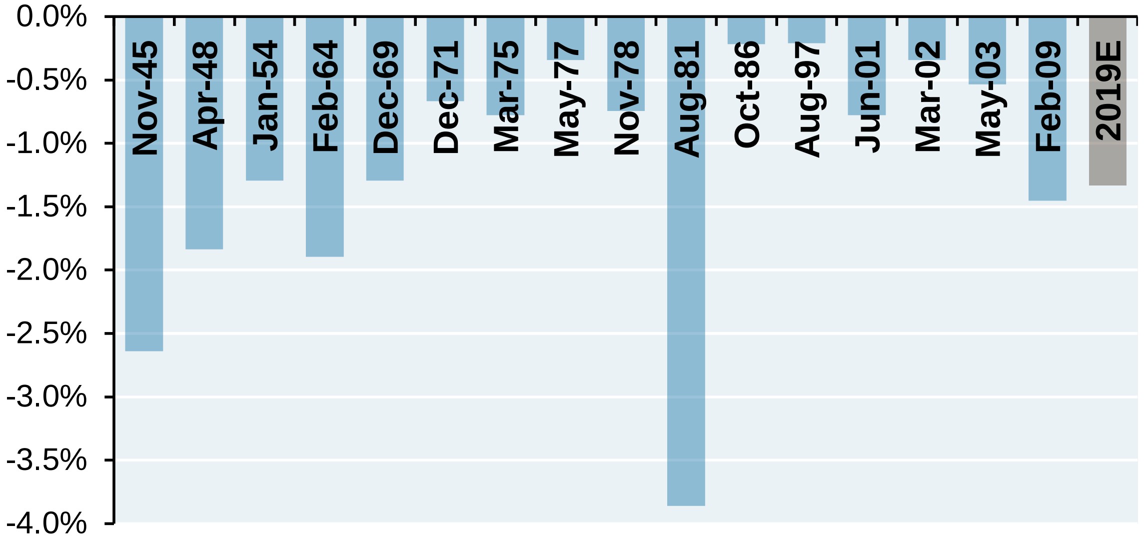


Source: US Treasury. November 2017.

TCJA is one of the larger tax cuts since 1969, with the exception of 1981; however, some benefits fade over time while others sunset

Tax Cuts as a share of GDP, 1945 - 2019E

% of US nominal GDP



Source: *"A Narrative Analysis of Post-war Tax Changes,"* Romer and Romer. 2009. 2019E based on JCT scoring of Conference Agreement.

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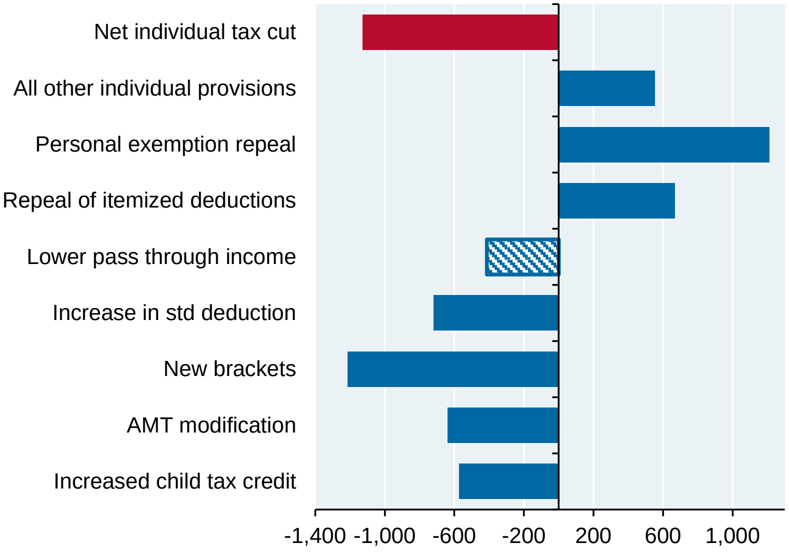
TCJA sprung from desire to cut corporate taxes and improve competitiveness, but individual tax cuts are now 3x as large. Tail wags dog.

Tax reform for individuals

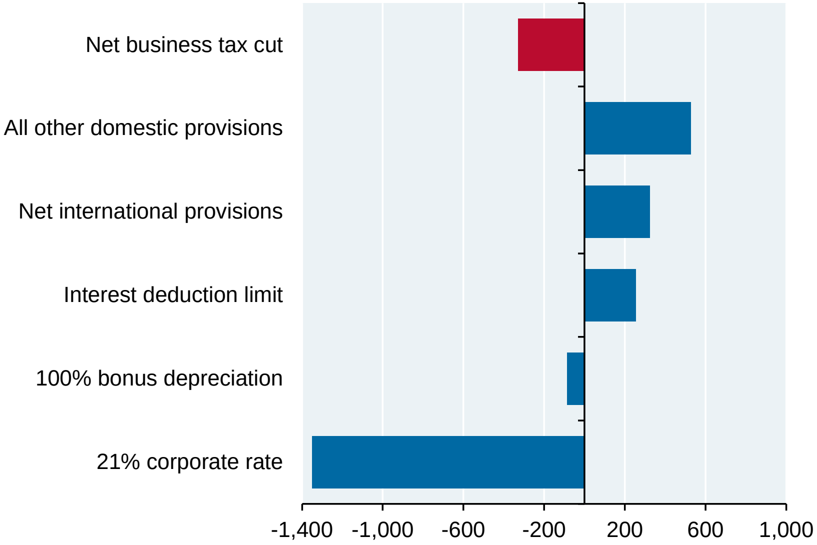
Estimated revenue effects of TCJA (2018-2027), US$ billions



Source: Joint Committe on Taxation (based on Conference Agreement). 12/18/17.

Tax reform for businesses

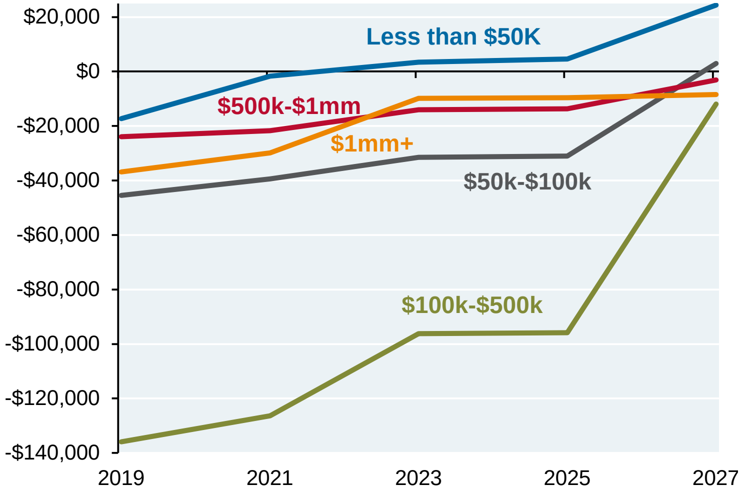
Estimated revenue effects of TCJA (2018-2027), US$ billions



Source: Joint Committe on Taxation (based on Conference Agreement). 12/18/17.

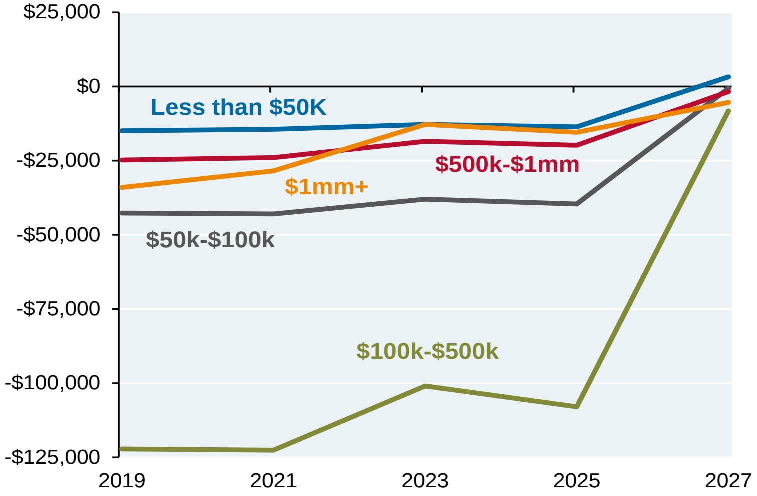
In dollar terms, TCJA tax cuts are primarily channeled to taxpayers with incomes between $100k and $500k

Change in Federal taxes paid by income level
US$ millions



Source: Joint Committee on Taxation (based on Conference Agreement). December 18, 2017.

Change in Federal taxes paid by income level, ex-effects of eliminating Individual Mandate Penalty, US$ millions



Source: Congressional Budget Office (based on proposed Senate bill). November 27, 2017.

Note: the distributional effects of the bill excluding the elimination of the Individual Mandate Penalty are not yet available. In the chart on the right, we show a CBO estimate of such effects from late November. The increases in Federal taxes shown in the JCT chart for those earning less than $50k from 2021 to 2025 reflect the impact of lost ACA subsidies and credits, rather than changes in tax rates, which don't sunset until the end of 2025.

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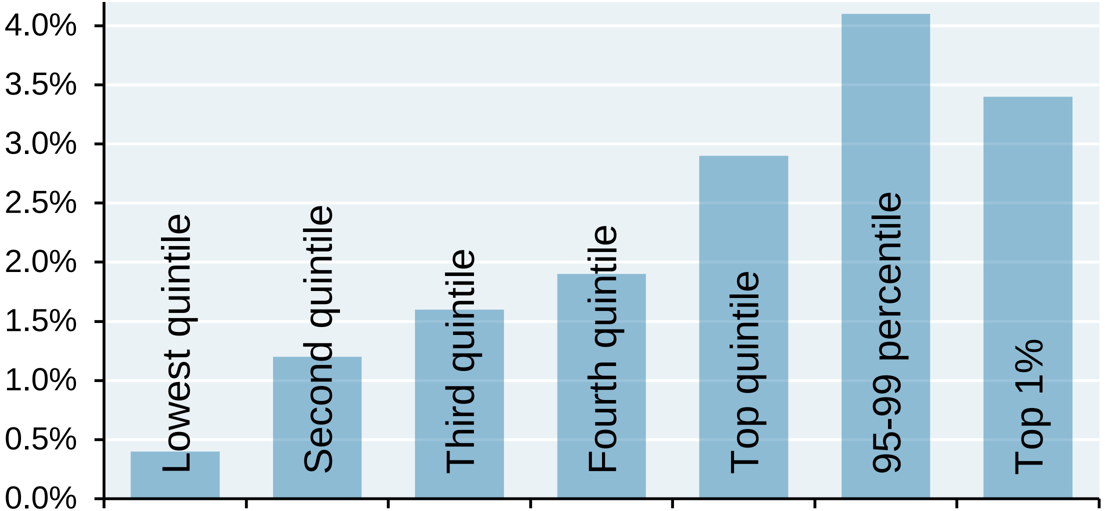
Larger percentage increases in after-tax income accrue to the top quintile and decile of taxpayers

Distribution of federal tax change by income quintile

Change in after-tax income, 2018



Source: Urban Institute-Brookings Tax Policy Center. Based on Conference Agreement, 12/15/17. Includes impact of increased estate tax exemption.

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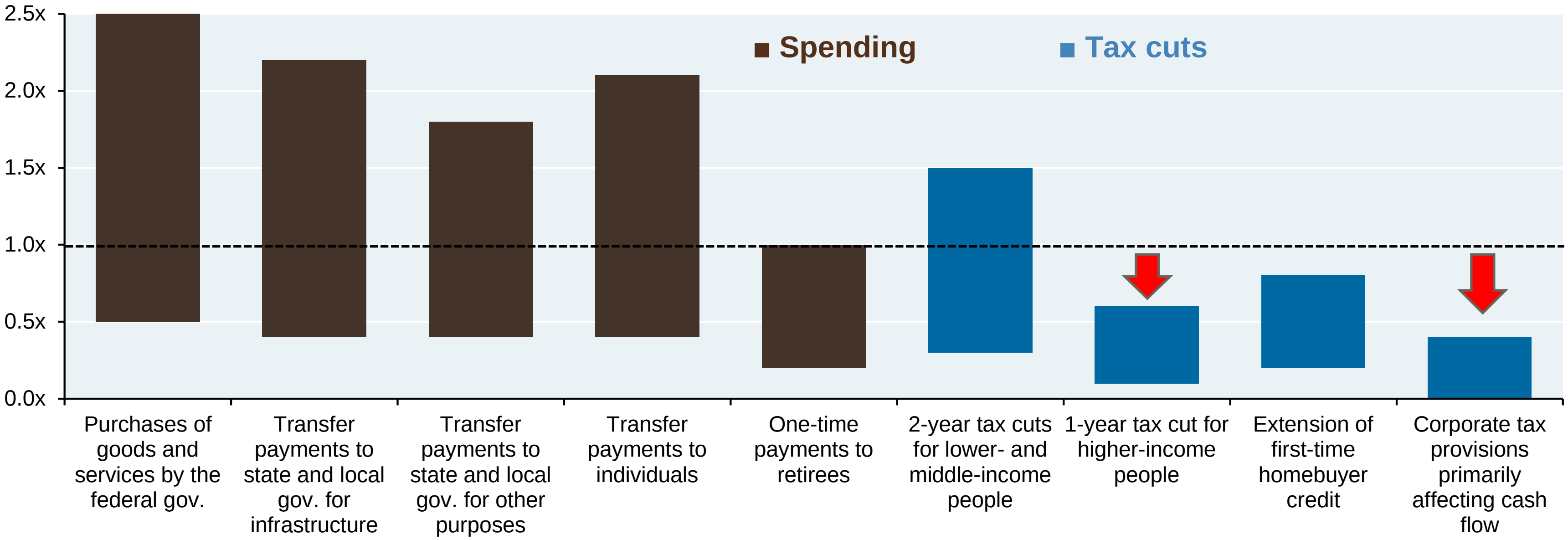
While TCJA tax cut is sizable, TCJA beneficiaries have lower propensities to spend (i.e., low fiscal multipliers)

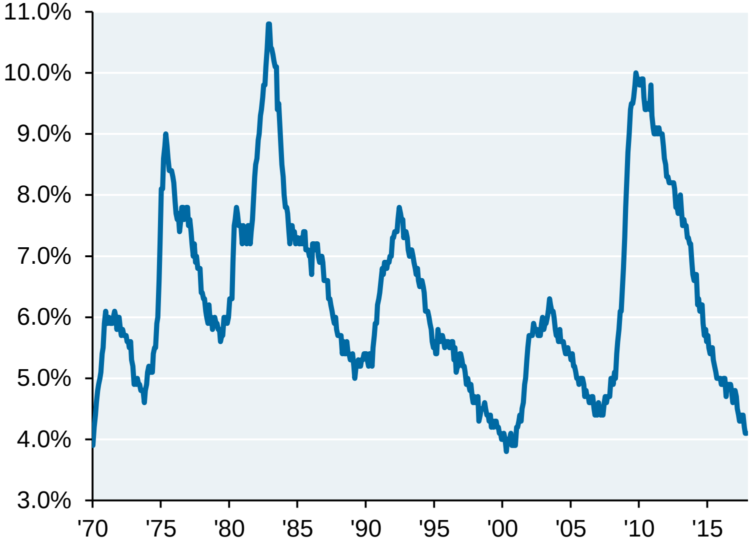
Ranges for US fiscal multipliers



Source: "*Fiscal Multiplier and Economic Policy Analysis in the United States"*, Congressional Budget Office, Whalen & Reichling. Feb 2015.

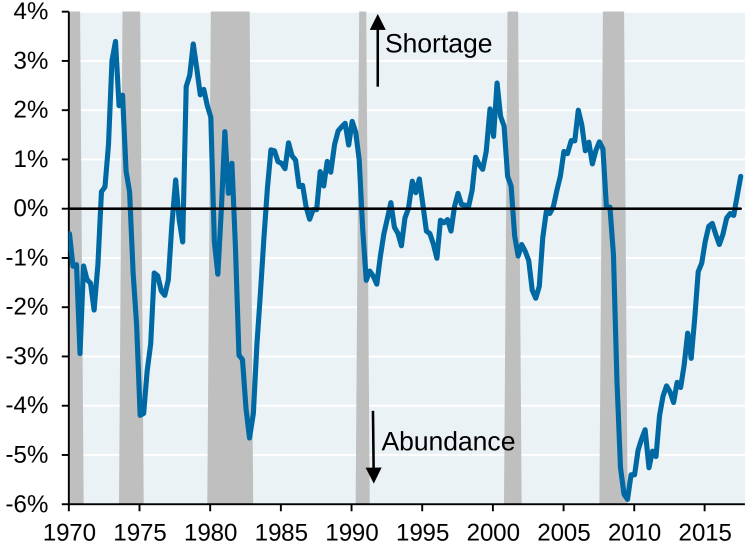
Since the US is close to full employment and since the output gap has disappeared, there are no *cyclical* reasons for a tax cut

US unemployment rate
%, seasonally adjusted



Source: Bureau of Labor Statistics. November 2017.

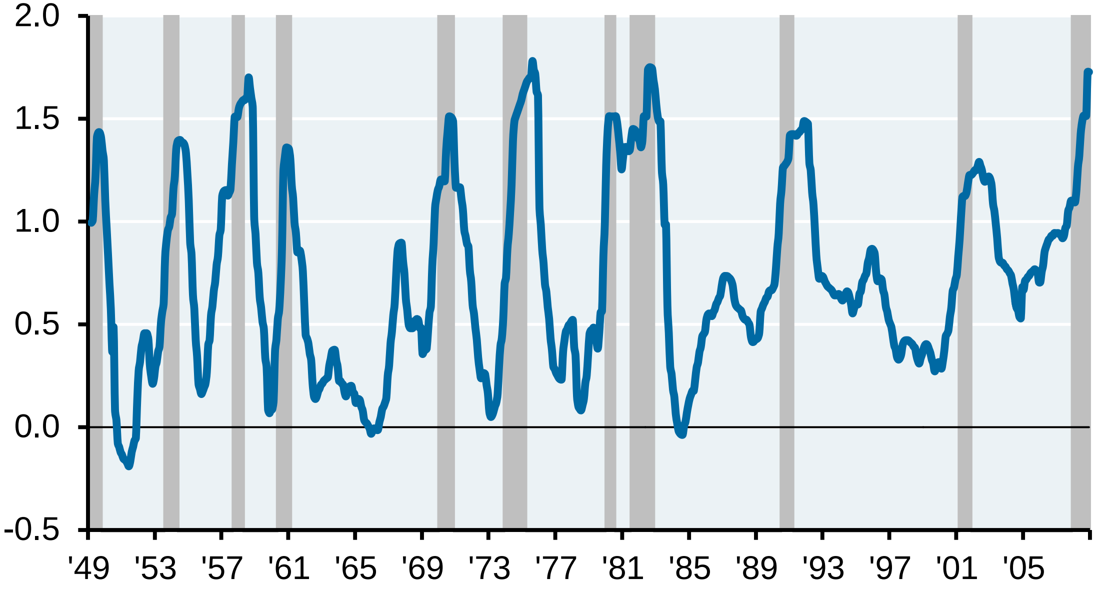
US "output gap" (a proxy for capacity constraints)
%



Source: JP Morgan Economic Research. 3Q 2017. Grey bars indicate US recession.

Highest fiscal multipliers are linked to government spending rather than tax cuts, and peak during or right after recessions

Historical multiplier for total government spending



Source: "*Measuring the Output Responses to Fiscal Policy*", Auerbach and Gorodnichenko. 2012. Grey bars indicate US recessions.

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Given corporate and high income beneficiaries of the bill, and ample current liquidity, we don't envision much of an immediate boost to GDP from TCJA

- We envision higher US GDP growth of ~3% in 2018, but are not making major changes to growth, capital spending or employment forecasts due to TCJA
- While the TCJA's territorial system is more restrictive than in other countries, its anti-abuse provisions have been watered down
    - Minimum tax on foreign profits only applies to "excess profits" over "routine levels", and allow aggregation across jurisdictions*
- Larger projected Federal budget deficits and modestly higher interest rates in the long run
- Increased potential for interstate migration, and more pressure on "blue state" spending and unfunded pensions

* "*Republican tax bills have too many loopholes for sending jobs overseas*", TheHill.com, Pozen (MIT), Rosenthal (Tax Policy Center), 11/29/2017

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No tax states are already experiencing faster population, employment and income growth than high tax states; TCJA may amplify these trends

The nine states with the lowest and highest marginal personal income tax rates (10 year economic performance)

	1/1/2016 Top marginal rate	Growth 2006-2016 Population	Growth 2006-2016 Employment	Growth 2006-2016 Income
Average of 9 **zero** earned income tax rate states	0.0%	11.9%	7.1%	23%
Average of 9 **highest** earned income tax rate states	10.1%	5.8%	4.8%	19%

Source: U.S. Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis, Tax Foundation. 2016.

Note: In NY, CA, NJ, and CT, high earners with incomes over $500k account for 30%-35% of state tax revenue

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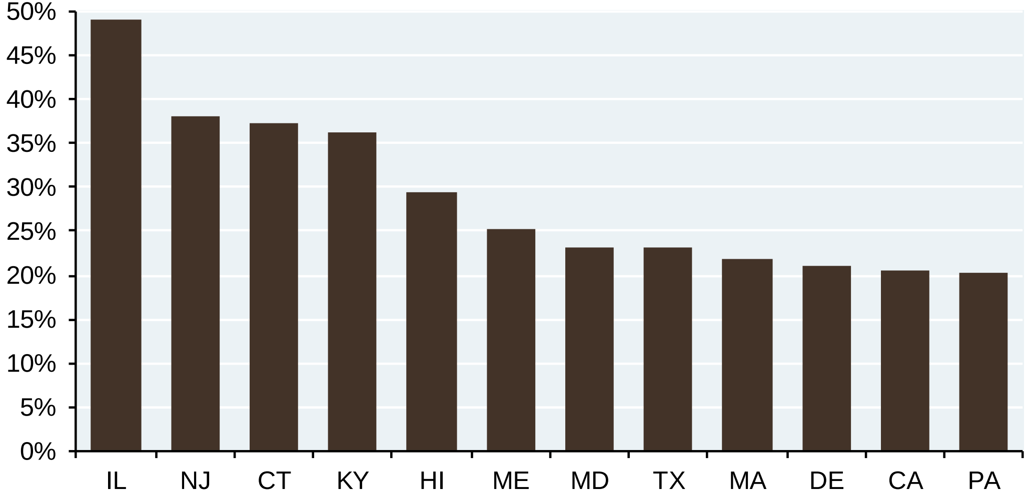
States with the largest unfunded pension and retiree healthcare obligations are often "blue" high-tax states, but there are exceptions

12 states with the highest ratio of unfunded obligations to income

% of state revenues required to pay interest on net direct debt, state share of unfunded pension and healthcare liabilities, and defined contribution plan payments



	IL	NJ	CT	KY	HI	ME	MD	TX	MA	DE	CA	PA
State tax rate	5.0%	9.0%	7.0%	6.0%	8.3%	7.2%	5.8%	0.0%	5.1%	6.6%	13.3%	3.1%
Clinton vote share	55%	55%	55%	33%	62%	48%	60%	43%	60%	53%	62%	47%

Source: *"The Arc and the Covenants 3.0: US cities and counties"*, JPMAM, Sep 2017.

Link to our 2017 muni paper "The ARC & the Covenants"

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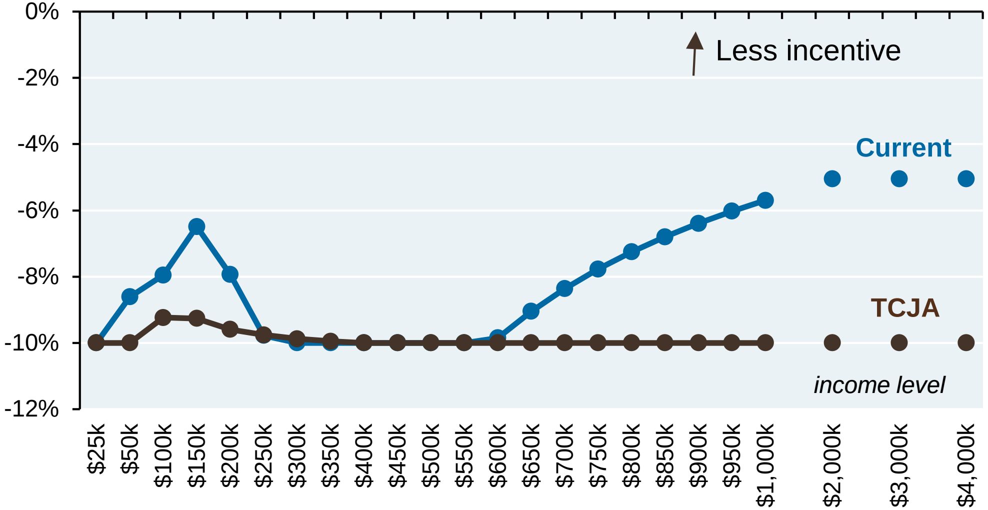
TCJA increases incentives to move for *some* individuals, but not others

Salaried worker

Change in effective tax rate from moving from high tax to low tax state, %



The incentive to move is based on the effective cost of state and local income and property taxes, which is reduced when they can be deducted against Federal taxes.

Under **current** law, the incentive reflects the interplay between the respective entry and exit points for the AMT in both states, and marginal tax rates.

Under the **TCJA**, the incentive is simpler, since it reflects the cap on deductibility across all ranges of income.

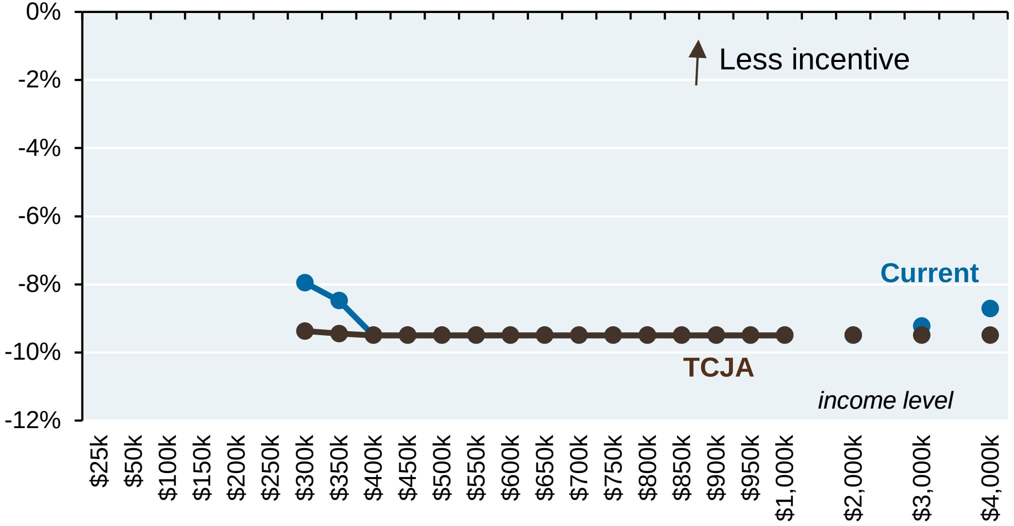
The **gap** between the two series shows the extent to which the TCJA increases incentives to move.

Analysis assumes a move from a high tax state (10% state/local tax, 2% property tax) to low tax state (0% state/local tax, 1% property tax)

TCJA increases incentives to move for *some* individuals, but not others

Private equity principal

Change in effective tax rate from moving, %



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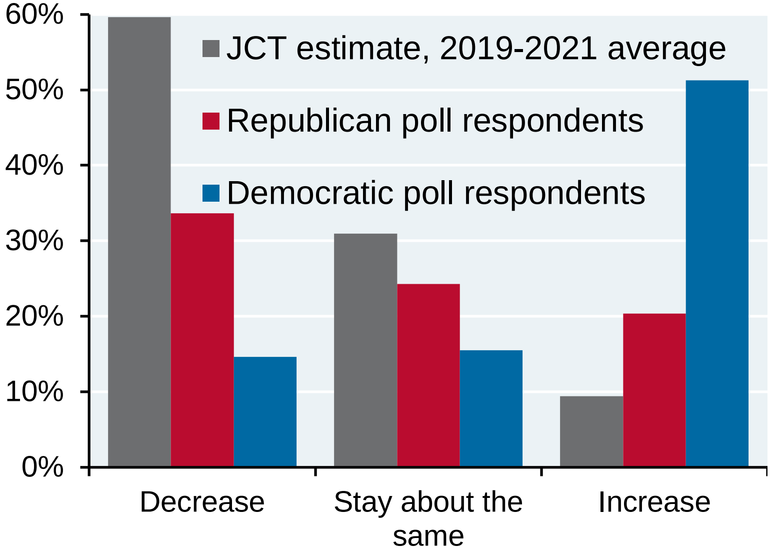
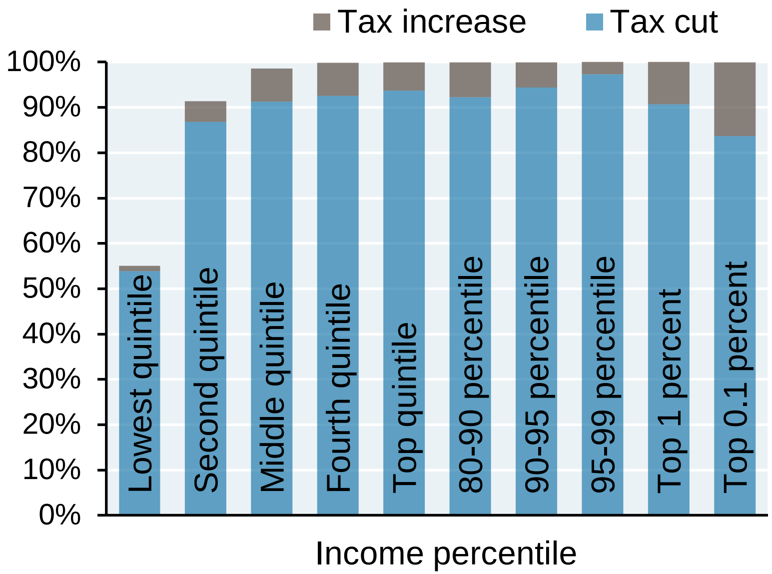
Fewer political tailwinds for the GOP than you might think, given the (mis)-perception by many poll respondents that their taxes will be going up

Expected change in tax liabilities resulting from reform



Sources: JCT (based on Senate bill), Politico (based on House). Nov 2017.

Tax winners and losers under TCJA in 2018, Percentage of family units



Source: Urban-Brookings Tax Policy Center. Based on Conference Agreement for the TCJA. December 18, 2017.

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US equity markets are now pricing in benefits from tax reform
Our sense is that 50%-60% is priced in as of today's call

Markets starting to price in corporate tax reform

Outperformance of tax cut winners vs losers, 11/8/2016 = 100

Source: JP Morgan Equity Strategy. December 15, 2017.

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TCJA likely to result in 5%-8% EPS growth, since more of the Senate version prevailed during reconciliation

Tax scenario analysis: potential impact to S&P 500 EPS

		HOUSE plan 21% rate	SENATE plan 21% rate
A	S&P 500 Consensus 2018 EPS	$146.00	$146.00
B	+ Reduction in corporate tax rate	+ $12.90	+ $12.90
C	- Limiting interest expense deductibility	- $1.00	- $2.80
D	- One-time repatriation tax on foreign earnings	- $3.80	- $4.00
E	+ Cash repatriation induced buybacks	+ $2.50	+ $2.40
F	**Total benefit from tax reform (B + C + D + E)**	**+ $10.60**	**+ $8.50**
	Upside to consensus 2018 EPS	*+ 7.3%*	*+ 5.8%*
G	**S&P 500 EPS impact (A + F)**	**$156.60**	**$154.50**
H	+ Immediate expensing of capex (CF benefit)	+ $3.80	+ $3.80
I	**Total cash flow benefit (G + H)**	**$160.40**	**$158.30**

Source: JP Morgan Equity Strategy. December 14, 2017.

The 5%-8% increase from the TCJA would be in addition to the 8%-10% increase in US EPS growth that we already project for 2018

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EPS gains from the tax bill are focused on domestically oriented companies with large capital spending needs and normal levels of leverage

	Reported Domestic Revenue	Lower US Corporate Tax Rate	Move to Territorial Taxation	Expense Capex vs. Depreciation	Lose Interest Expense Deductibility
Telecom	97%	↑↑↑	NM	↑↑	↓↓
Financials	77%	↑↑↑	↑	NM	NM*
Discretionary	76%	↑↑↑	↑	↑	↓
Health Care	82%	↑↑	↑	NM	↓
Staples	74%	↑↑	↑	NM	↓
Industrials	63%	↑↑	↑	↑	↓
Technology	40%	↑	↑↑	NM	↓
Energy	58%	↑	↑↑	↑↑	↓
Materials	50%	↑	↑↑	↑	↓
S&P 500	**71%**	↑↑	↑	↑	↓

Source: "*Assessing the Impact of the Proposed House Tax Plan*", JP Morgan Equity Strategy, 11/8/2017.

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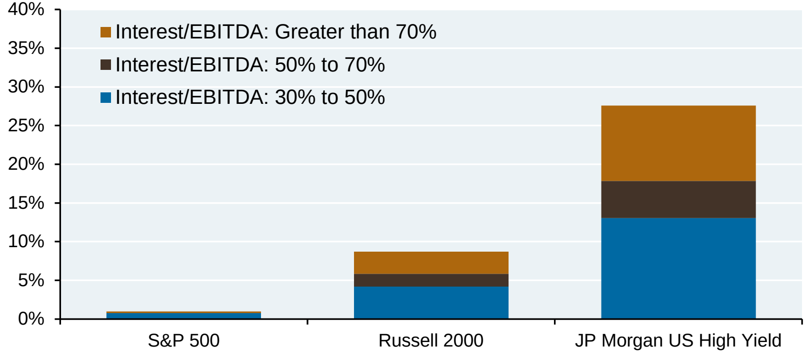
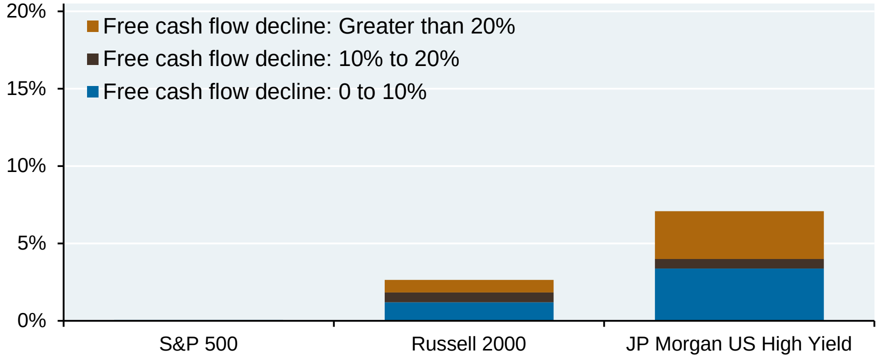
The impact of the interest/EBITDA rule is not projected to have a large impact on equity markets; modestly higher impact on HY market

Percentage of market affected by 30% interest/EBITDA rule on interest deductibility, % of total index (market value)



Source: Bloomberg, JPMAM. 2017. *Universe analyzed excludes financial & utility sectors, companies with negative EBIT, and companies with no available EBIT or interest expense data. High Yield analysis applied to 67% of High Yield Index which is publicly traded.

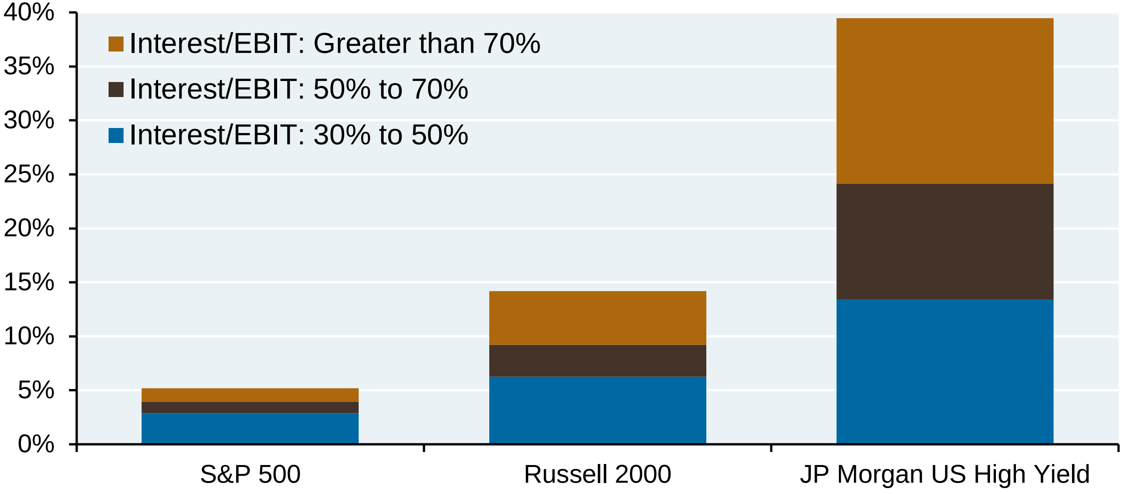
Decline in Free Cash Flow due to impact of 30% interest/EBITDA rule on interest deductibility, % of total index (market value)



Source: Bloomberg, JPMAM. 2017. Universe analyzed excludes financial & utility sectors, companies with negative EBIT, and companies with no available EBIT or interest expense data. High Yield analysis applied to 67% of High Yield index which is publicly traded.

The bill will eventually limit the deductibility of interest above 30% of EBIT
Much larger impact on High Yield than S&P 500 or Russell 2000

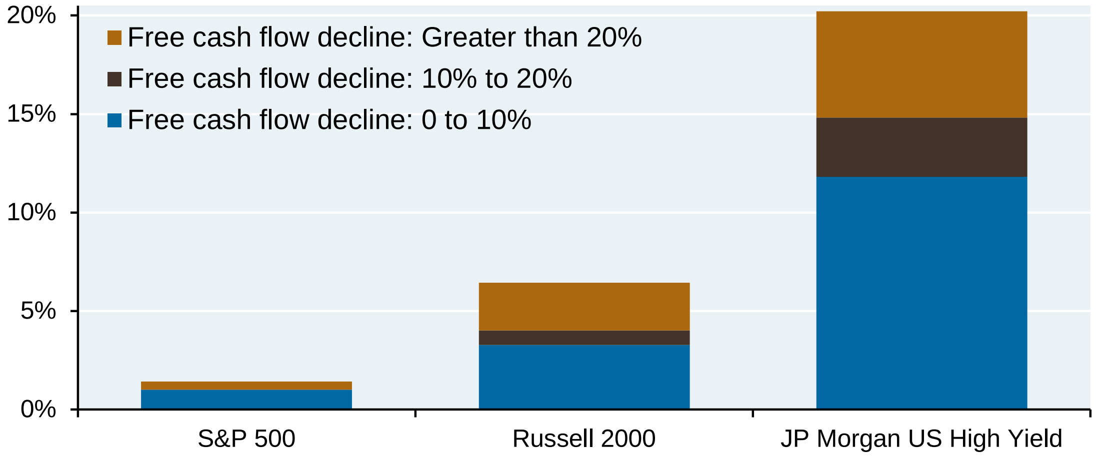
Percentage of market affected by 30% interest / EBIT cap on interest deductibility, % of total index (market value)



Source: Bloomberg, JPMAM. 2017. *Universe analyzed excludes financial & utility sectors, companies with negative EBIT, and companies with no available EBIT or interest expense data. High Yield analysis applied to 67% of High Yield Index which is publicly traded.

Analyzing the impact on free cash flow from the new rule
Much bigger negative impact on HY market than the S&P or Russell 2000

Decline in Free Cash Flow due to impact of 30% interest / EBIT cap on interest deductibility, % of total index (market value)



Source: Bloomberg, JPMAM. 2017. Universe analyzed excludes financial & utility sectors, companies with negative EBIT, and companies with no available EBIT or interest expense data. High Yield analysis applied to 67% of High Yield index which is publicly traded.

Risks would be magnified in the next downturn:
- Interest/EBIT ratios will rise
- Tax shield is reduced
- Tax payments rise
- Free cash flow falls further

Risks from linking interest deductibility to market variables:
- Glover, Gomes and Yarons, "*Corporate Taxes, Leverage, And Business Cycles*" (St. Louis Fed 2011): limiting interest deductibility *increases* default frequency and average credit spreads

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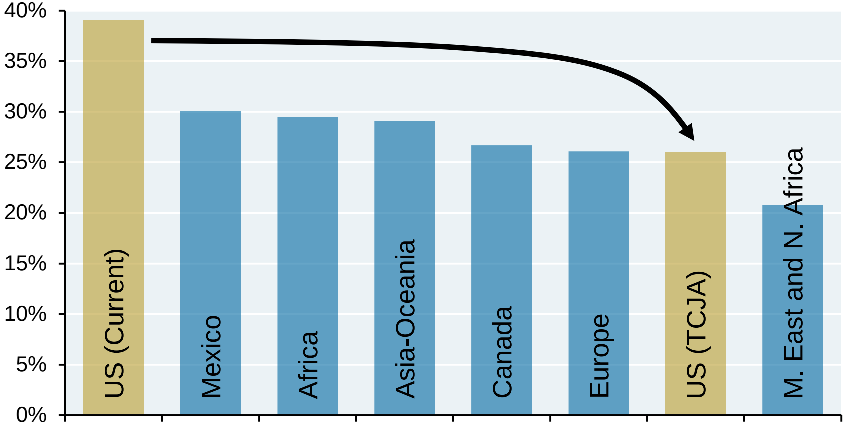
TCJA reduces marginal effective tax rates on new projects, improving US competitiveness

Corporate tax rate

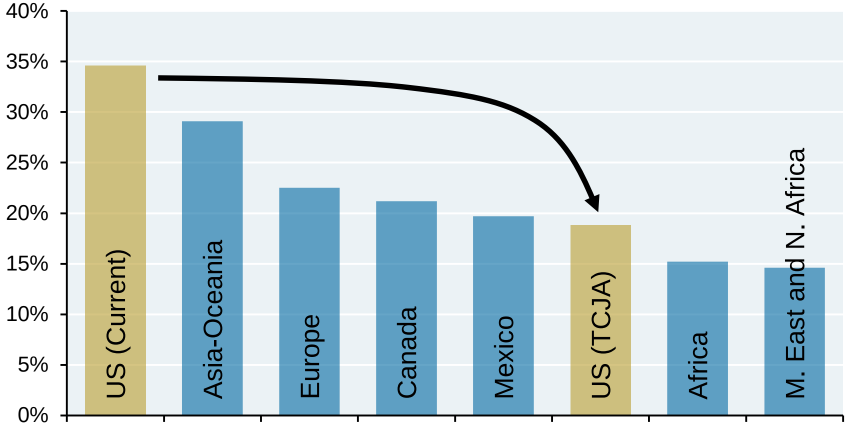
%, combined central-sub-national corporate tax rates



Source: University of Calgary School of Public Policy, Mintz & Bazel. Corporate tax rates are GDP weighted. December 17, 2017.

Marginal effective tax rate

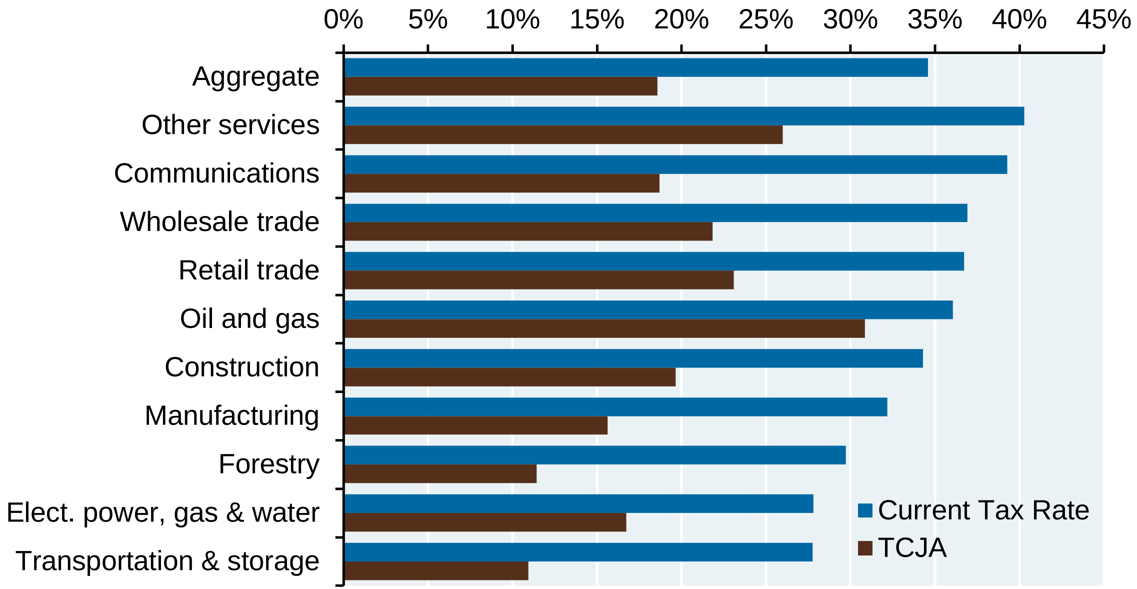
%, effective tax rate on new investment in manufacturing & services



Source: University of Calgary School of Public Policy, Mintz & Bazel. Corporate tax rates are GDP weighted. December 17, 2017.

Competitiveness improvements by sector

Marginal effective tax rates by sector



Source: "U.S. Tax Reform: Implications", University of Calgary School of Public Policy, Mintz. December 4, 2017.

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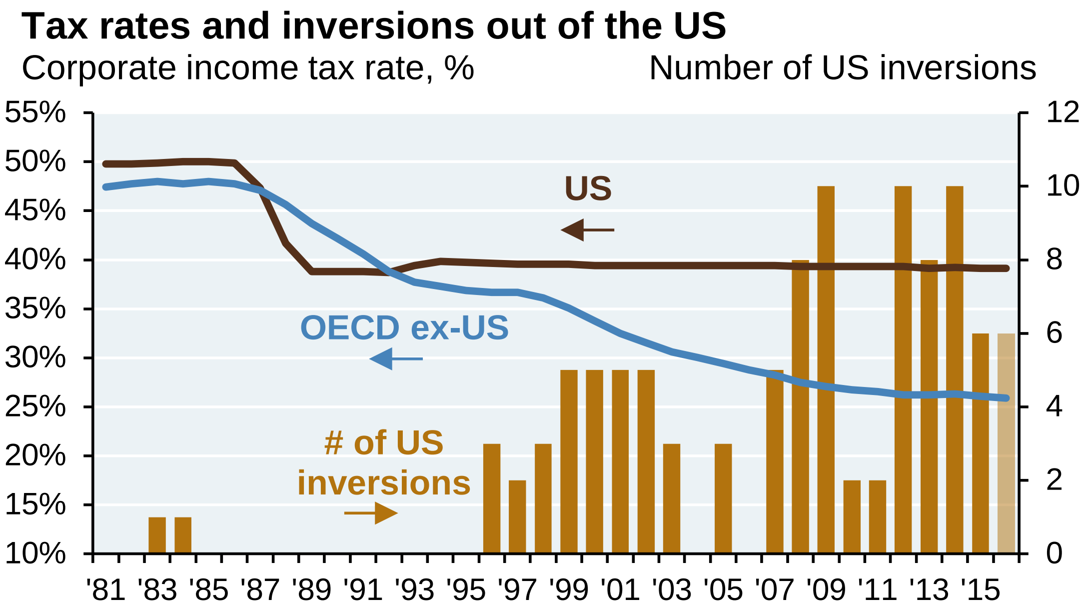
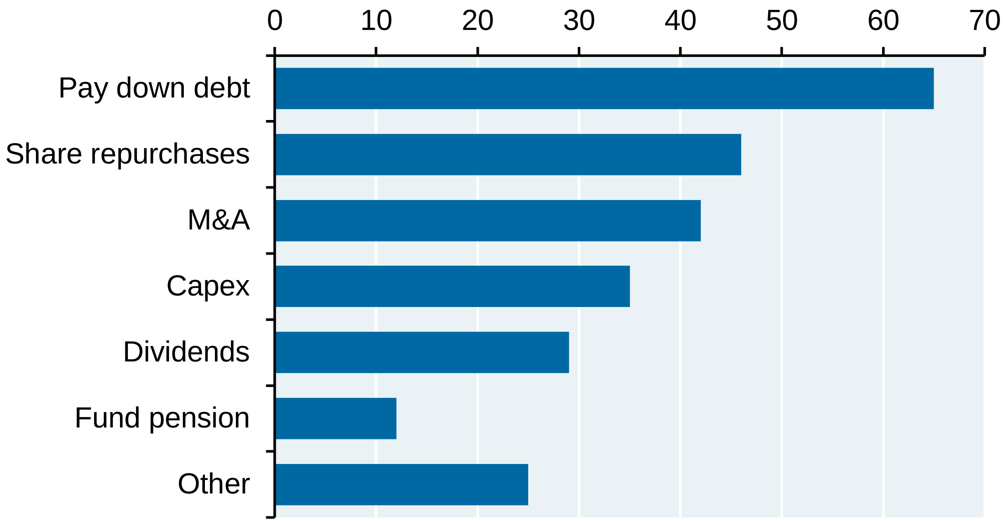
Given lower tax rates and a 100% dividends received deduction, TCJA would reduce incentives for US companies to invert overseas



Source: Mercatus Center at George Mason University. 2016.
Note: Pending inversions shown for 2016.

What will companies do with repatriated cash?

How would the proceeds of repatriated earnings be used?
# of companies (N = 302)



Source: BoA Merrill Lynch Corporate Risk Management Survey. July 2017.

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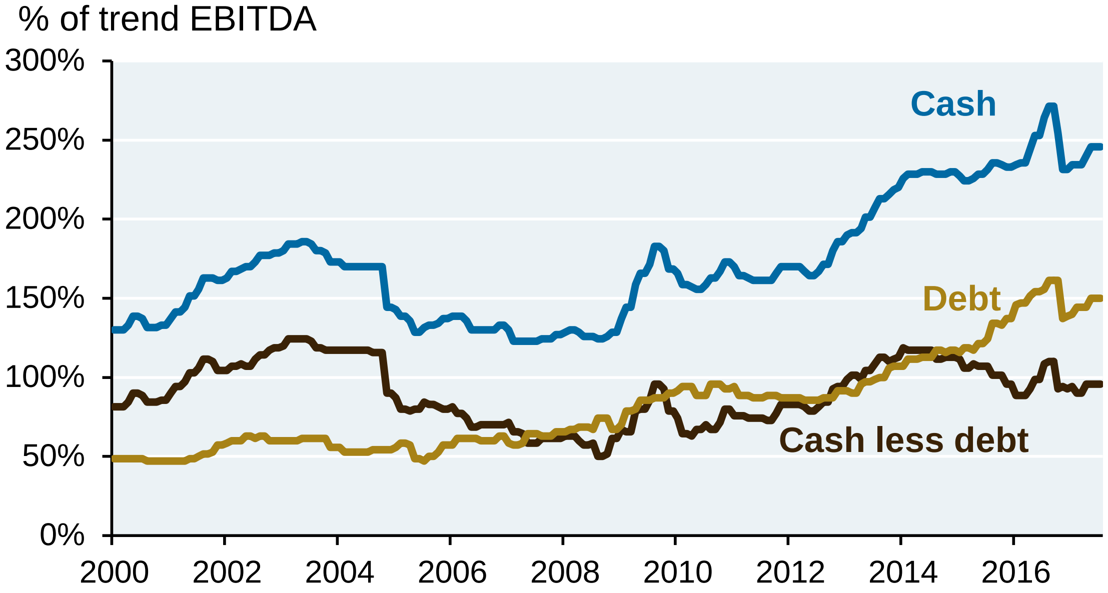
Debt paydown is a popular answer, since rising foreign cash balances are often accompanied by rising debt

Companies with large foreign cash balances



Source: Bridgewater Associates. November 2017.

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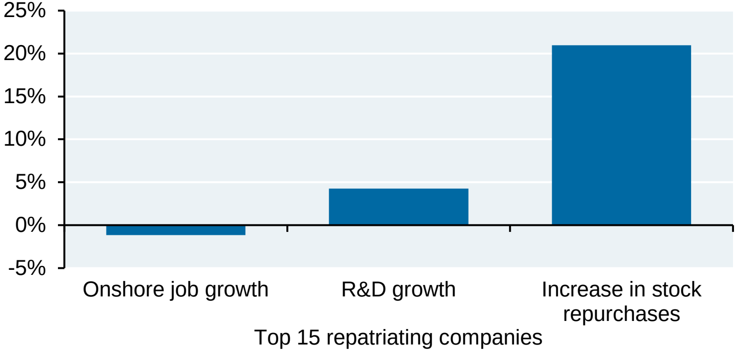
Since most companies are not cash constrained and credit markets are liquid, TCJA impact on capital spending is likely to be modest

- Debt paydown, stock buybacks and dividends likely to benefit. After 2004 repatriation holiday, a similar time of liquid credit and ample free cash flow, buybacks rose while hiring, R&D and capital spending were mostly unchanged
- Accelerated depreciation already available at a time of low interest rates, mitigating benefit of immediate expensing
- While the TCJA impact on capex may be modest, capex surveys are already elevated based on global business cycle improvement and positive response to deregulatory efforts

Repatriation holiday boosted buybacks, not jobs or R&D

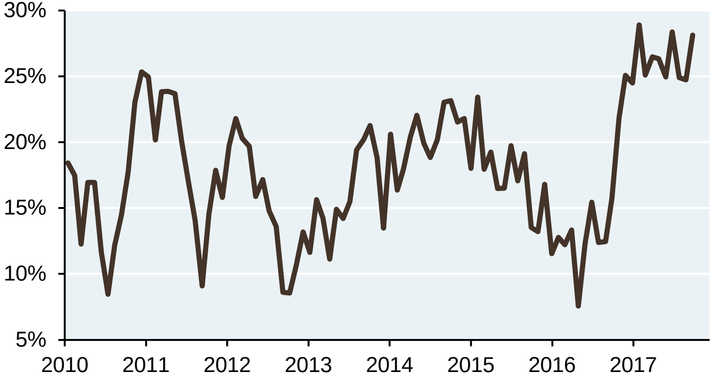
Average increase in payrolls, R&D and buybacks for top 15 repatriating US multinational companies, 2005 to 2007



Source: US Senate Permanent Subcommittee on Investigations. 2011.

Rising capital spending plans

% of respondents planning to increase capital expenditures

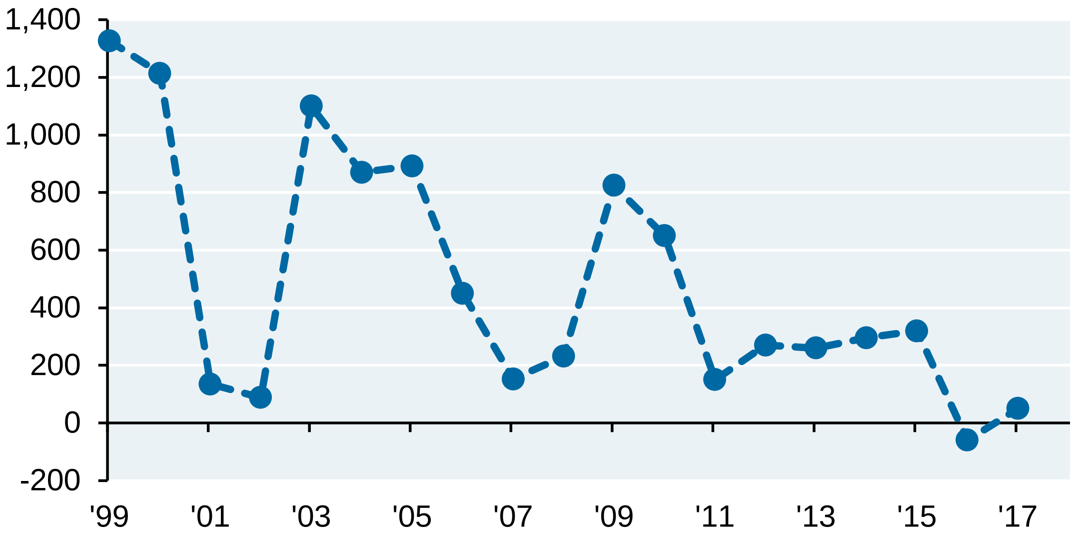


Source: JP Morgan Economic Research, Regional Fed surveys. Nov 2017.

Increased stock buybacks would be taking place at a time when growth in net equity supply is already low

Global net equity supply

US$ bn per year, based on expansion of MSCI All country world



Source: MSCI, JP Morgan Equity Strategy. 2017.

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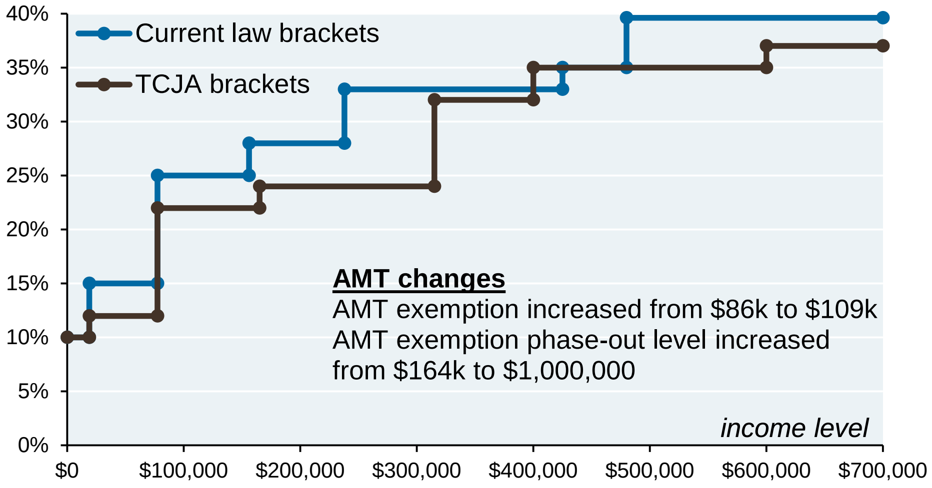
Key provisions: individual tax rates

Changes
Modest reductions to some tax brackets
Limitations on state income tax, property tax and mortgage deductions
Changes in AMT rules reducing its impact
Lower tax rate on “pass through” income
Increased exclusions for estate/GST/gift taxes
Like-kind exchanges limited to real property

Marginal tax rates and brackets



Source: JP Morgan Asset Management. 2017.

Key provisions: individual tax rates

No Changes
Capital gains and qualified dividend taxation
ACA taxes on earned and unearned income
Traditional municipal bond exemption
Charitable contribution and business/investment interest deductions
401k plan and IRA contribution limits
Non qualified deferred compensation

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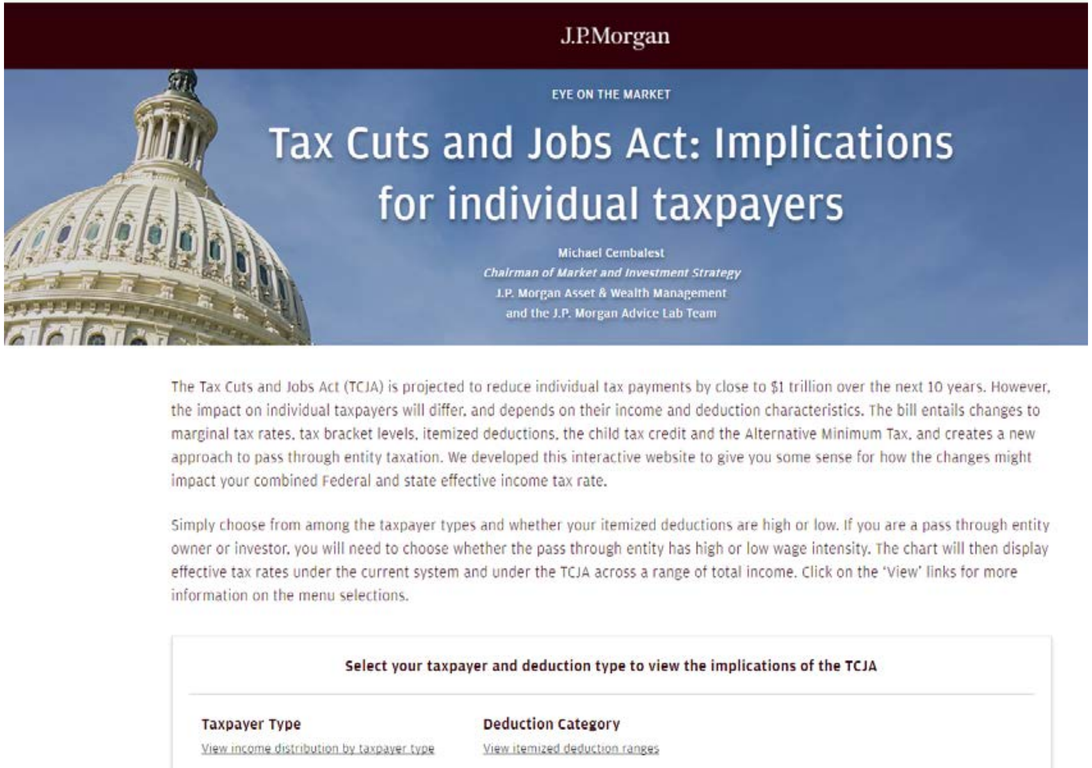
Our interactive TCJA website



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EYE ON THE MARKET

Tax Cuts and Jobs Act: Implications for individual taxpayers

Michael Cembalest
Chairman of Market and Investment Strategy
J.P. Morgan Asset & Wealth Management
and the J.P. Morgan Advice Lab Team

The Tax Cuts and Jobs Act (TCJA) is projected to reduce individual tax payments by close to $1 trillion over the next 10 years. However, the impact on individual taxpayers will differ, and depends on their income and deduction characteristics. The bill entails changes to marginal tax rates, tax bracket levels, itemized deductions, the child tax credit and the Alternative Minimum Tax, and creates a new approach to pass through entity taxation. We developed this interactive website to give you some sense for how the changes might impact your combined Federal and state effective income tax rate.

Simply choose from among the taxpayer types and whether your itemized deductions are high or low. If you are a pass through entity owner or investor, you will need to choose whether the pass through entity has high or low wage intensity. The chart will then display effective tax rates under the current system and under the TCJA across a range of total income. Click on the 'View' links for more information on the menu selections.

Select your taxpayer and deduction type to view the implications of the TCJA

Taxpayer Type
View income distribution by taxpayer type

Deduction Category
View itemized deduction ranges

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Our interactive TCJA website

While most taxpayers will see their effective tax rates decline in 2018, the details will depend on your deduction and income characteristics

- Example: for NY residents, there is a complex interplay among lower deductions, lower tax rates, extended brackets and changing AMT rules

We have created an interactive website to provide examples of the TCJA impact on different taxpayer types

- 20 different taxpayer scenarios included
- Click here to visit our interactive website

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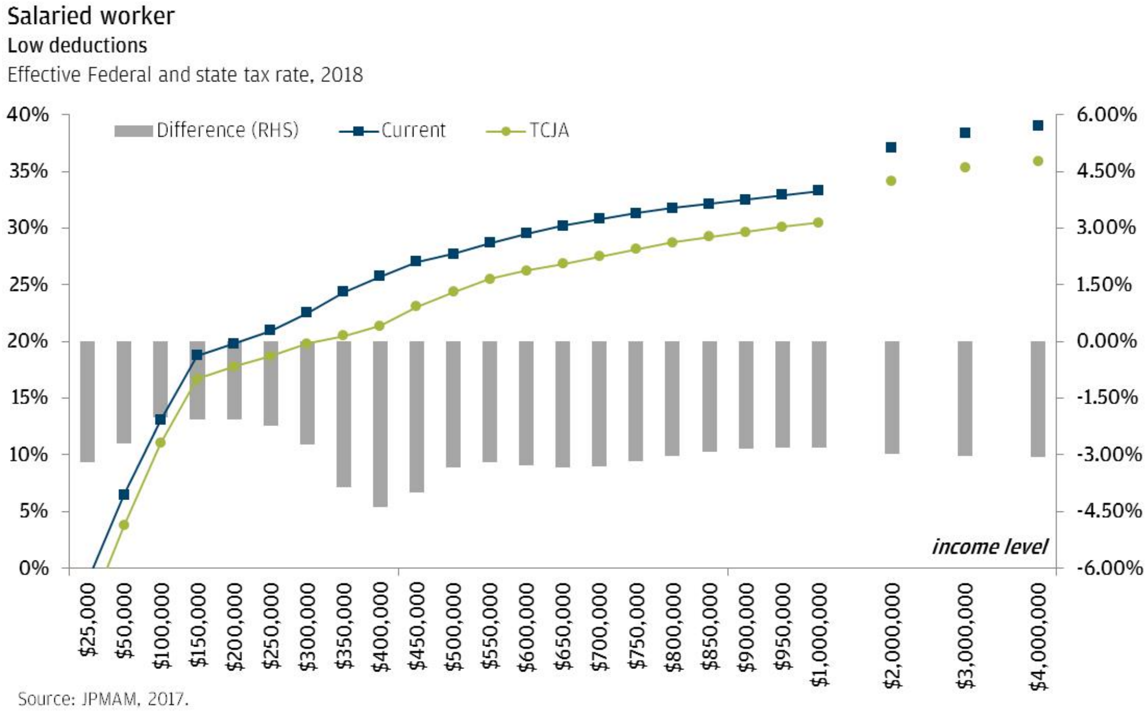
Using our interactive effective tax rate website

- Step 1: select from 9 taxpayer types
  - Salaried worker, hedge fund principal, retiree, private equity principal, pass through owner or investor, etc whose income characteristics differ (wages, unearned ordinary income, capital gains, pass through income, etc).
- Step 2: indicate high or low deductions
  - Applies to state/local tax rate, property tax rate, charitable contribution rate and home price to income ratio
- Step 3: for pass through entity taxpayers, specify the degree of wage intensity of the pass through business (affects phase-out of the pass through deduction)
- Charts compare Current vs TCJA effective tax rates, and assess incentives to move under the TCJA

Some sample charts



For taxpayers with **low** deductions whose income is primarily wages and salaries, the benefits of TCJA are consistent across income levels

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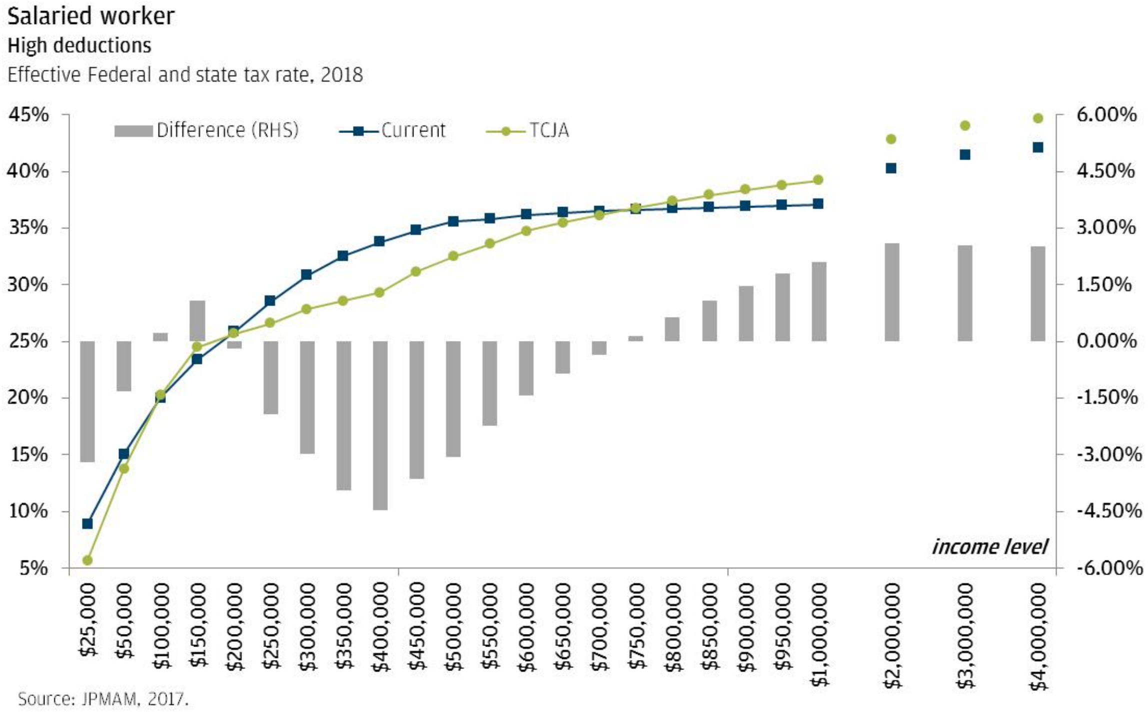
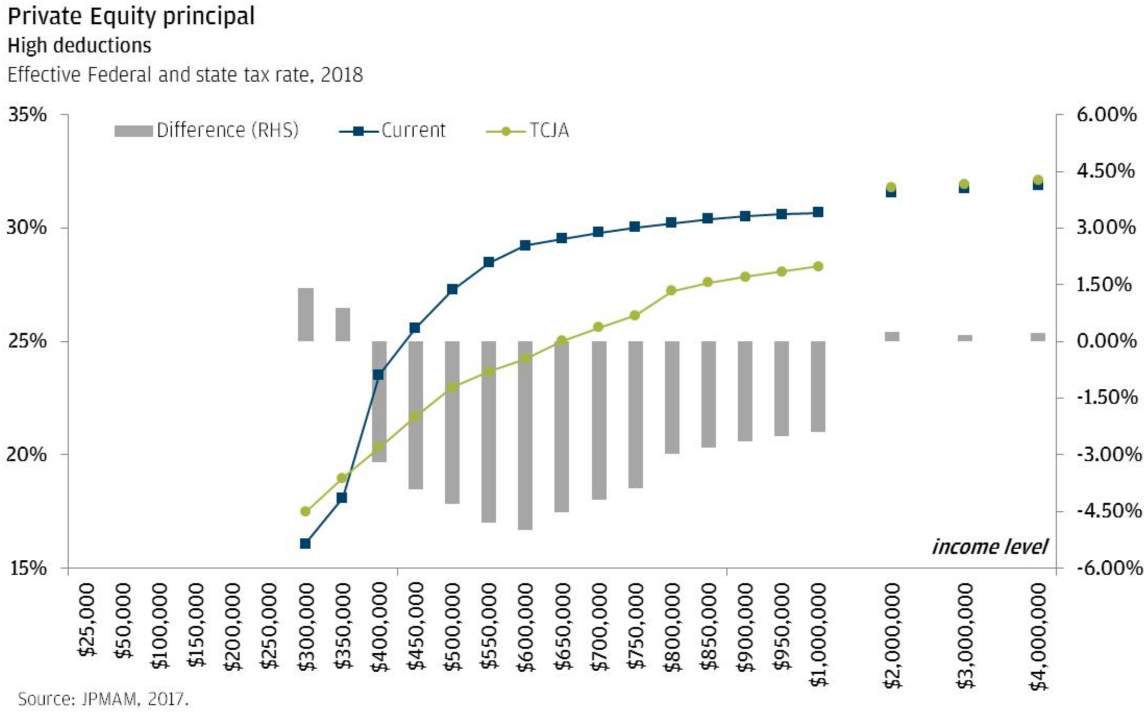
Some sample charts



For taxpayers with **high** deductions whose income is primarily wages/salaries:

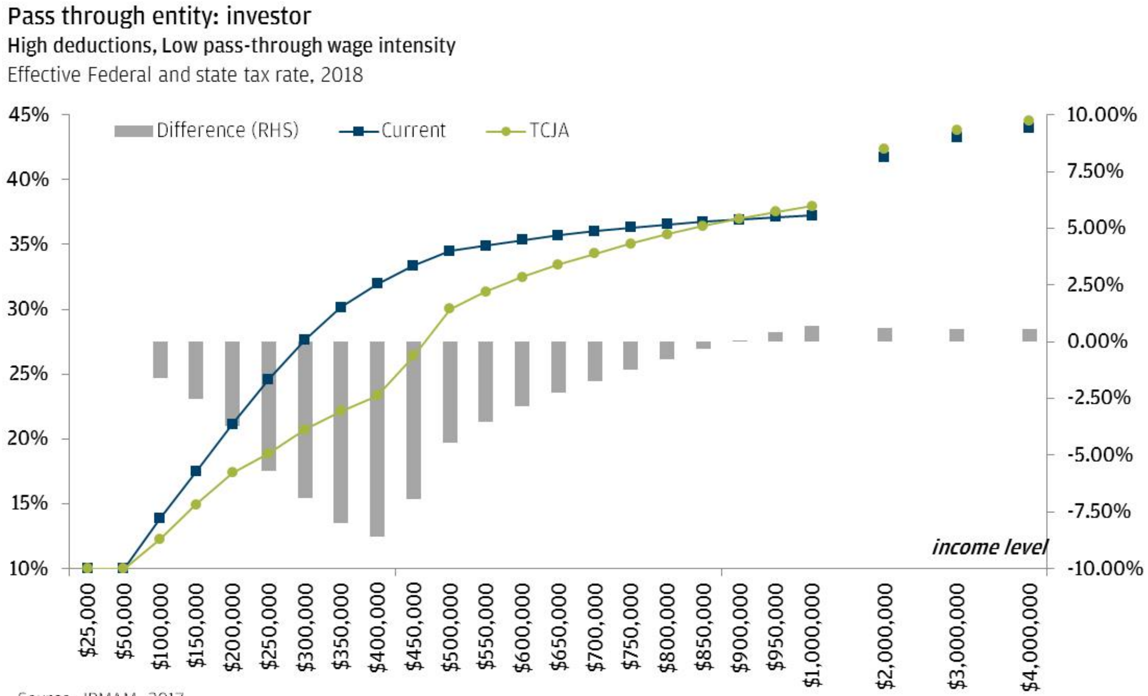
- At the lowest incomes, there's a benefit from increased child tax credits, lower tax rates and a higher standard deduction
- At $150k in income, lost deductions more than offset the rate cut
- From $250k to $700k, the taxpayer would have been in the AMT under current law and lost their deductions anyway, and now benefits from relaxed AMT rules and lower tax rates
- Above $750k, the net impact of changing AMT rules, lost deductions and lower tax rates is negative

Some sample charts



For taxpayers with **high** deductions whose income is heavily composed of **long term gains and qualified dividends**, the taxpayer benefits from relaxed AMT rules and lower tax rates until $1mm in income. From $1mm to $4mm in income, the taxpayer is in the AMT under TCJA, just as under current law, and loses their deductions in both cases.

Some sample charts



Source: JPMAM, 2017.

For taxpayers with **high** deductions whose income is primarily **pass through entity income**, but when the entity is deemed to be either related to certain “professional services”, or when the wage intensity of the pass through entity is low, or when it lacks sufficient depreciable assets, the pass through deduction benefit phases out above $315k in taxable income and disappears by $415k.

Planning for 2017-2018 and beyond – Consider:

- By year-end:
  - Paying 2017 state and local income taxes due (but don't tip into AMT)
  - Paying property taxes (with an invoice from the tax assessor)
  - Exercising in-the-money options or realizing other discretionary ordinary income (mostly for those in AMT)
  - Making or delaying donations to charity (depending on, *e.g.,* expected 2017/18 marginal rates, character of '17/'18 income, patterns of giving, residence, effect of repealed Pease limitation)
- Early in 2018:
  - Using gift tax exclusion (increase from $5.49MM to $11.2MM) via gifts to or in trust for family
  - Reviewing estate plans and life insurance coverage (for, *e.g.*, liquidity for estate taxes)
  - Reviewing investments in light of changed tax treatment of some assets (*e.g.*, REITs, MLPs)
  - If possible, reorganizing closely-held businesses

P.S. Don't worry about the proposed FIFO rule – it didn't make the cut

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