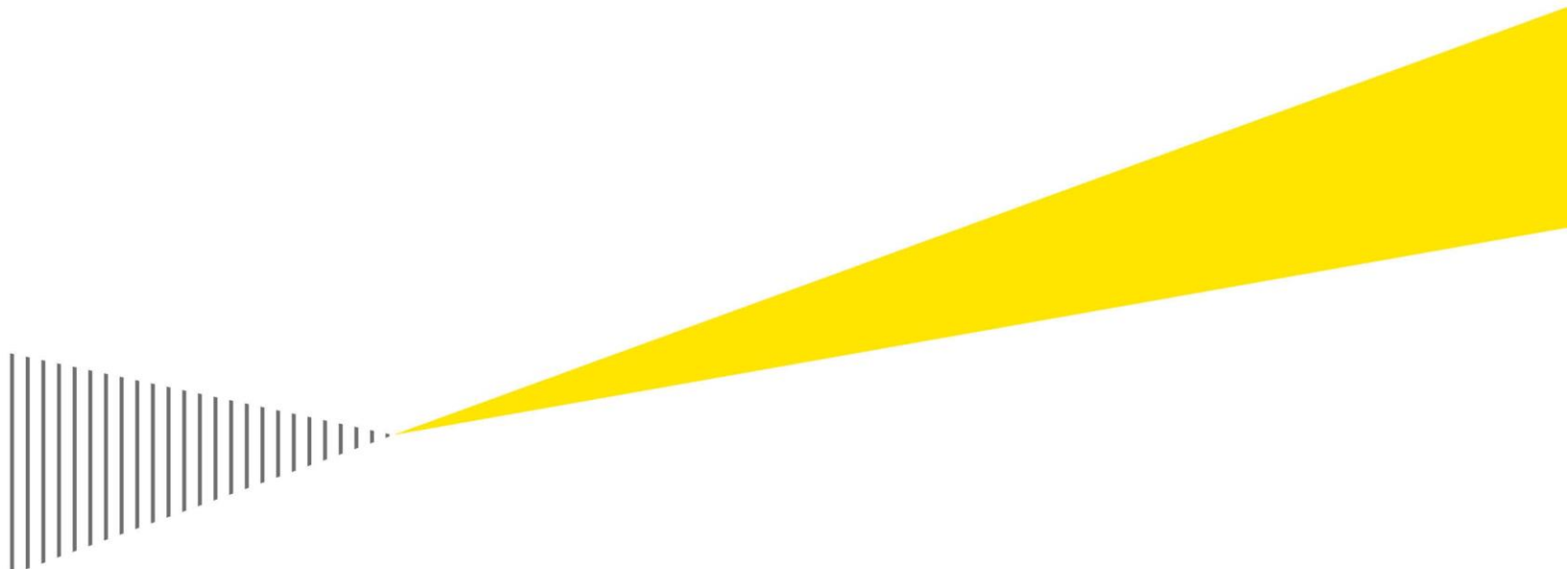


Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses

Prepared on behalf of the National Federation of Independent Business (NFIB)

September 2024



Executive summary

This report estimates the macroeconomic impacts of permanently extending the Section 199A deduction on small businesses relative to the current-law baseline. The EY Macroeconomic Model is used to estimate the macroeconomic impacts.

Background

Pass-through businesses – which include sole proprietorships, partnerships, and S corporations – are generally not subject to entity-level income tax. The entity's income, deductions, credits, and losses are generally passed through to the individual tax returns of the business owners, where they are taxed at the individual's income tax rate. The top individual income tax rate is currently 37%.

Section 199A of the Internal Revenue Code provides a 20% deduction for pass-through income, subject to limitations.ⁱ The Section 199A deduction is part of the Tax Cut and Jobs Act (TCJA), which was enacted in December 2017. The Section 199A deduction, which went into effect in 2018, is set to expire at the end of 2025.ⁱⁱ

Small businesses (i.e., those with fewer than 500 employees) comprise over 99% of all businesses in the United States.ⁱⁱⁱ There are approximately 34.3 million small businesses in the United States and more than 96% of these businesses (33.0 million) are small pass-through businesses.^{iv} These 33 million small pass-through businesses employ more than 68 million workers.

Key results

Permanently extending the Section 199A deduction is estimated to have the following US economic impacts (relative to the size of the 2024 US economy and only for small businesses):

Job equivalents:^v A significant portion of the effects of permanently extending the Section 199A deduction would benefit US workers through increased labor productivity, wages, and employment. The tax change is estimated to increase US job equivalents at small businesses by approximately:

- ▶ 1.2 million jobs, on average, in each of the first ten years; and

ⁱ Owners of certain agricultural or horticultural cooperatives, publicly traded partnerships (PTPs), and real estate investment trusts (REITs) are also eligible for this deduction.

ⁱⁱ For more details see, EY Tax Alert, "Final Section 199A regulations and other guidance provide welcome guidance, leave questions unanswered and raise new issues", January 2019.

ⁱⁱⁱ The Small Business Administration (SBA) defines small businesses as those businesses that employ fewer than 500 employees. For more details see: US Small Business Administration Office of Advocacy, *Frequently Asked Questions About Small Business*, March 2023 <https://advocacy.sba.gov/wp-content/uploads/2023/03/Frequently-Asked-Questions-About-Small-Business-March-2023-508c.pdf>.

^{iv} The majority of businesses in the United States are nonemployers but these businesses average less than 4% of US sales and receipts. Most nonemployers are self-employed individuals operating unincorporated businesses. A nonemployer business may or may not be the owner's principal source of income. See the US Census Bureau's Nonemployer Statistics (NES) program for additional information.

^v Job equivalents summarize the impact of both the increase in hours worked and increased after-tax labor income. Specifically, job equivalents are calculated as the total change in after-tax labor income divided by baseline average after-tax labor income per job.

- ▶ growing over time to 2.4 million jobs each year thereafter.

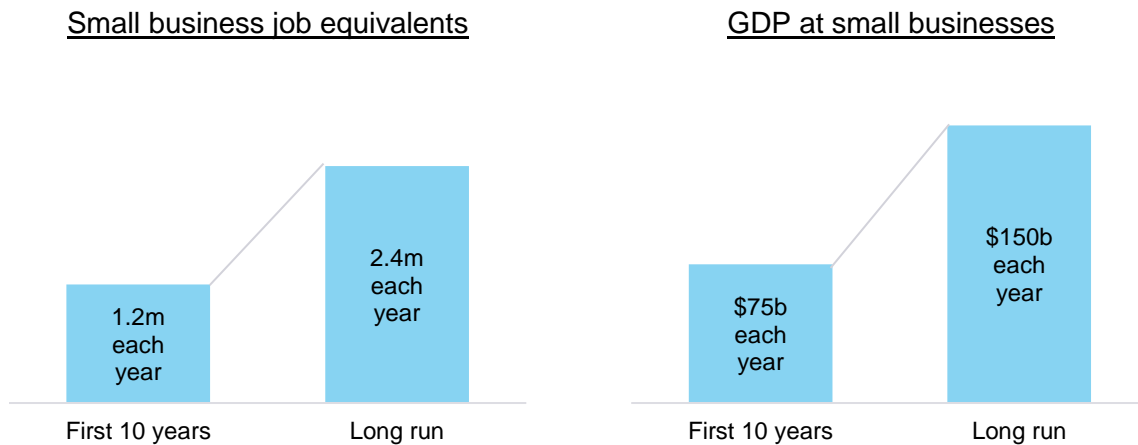
Gross domestic product. Permanently extending the Section 199A deduction is estimated to increase US GDP at small businesses by:

- ▶ \$75 billion annually, on average, over the first 10 years; and
- ▶ growing over time to \$150 billion annually in each year thereafter.

Note that because tax and spending policies must ultimately be funded (e.g., tax cuts must ultimately be paid for), it is not possible to separate entirely the impact of a given tax decrease from the impact of how it is funded. Revenue reductions in this analysis must eventually be paid for in some way and how the revenue reduction is paid for can affect the estimated impacts. Typical sources of funding in analyses like this have included temporary deficit increases, government spending or transfer decreases, tax increases, or a combination thereof. This analysis assumes that the revenue reduction is funded by a decrease in government transfers, a standard assumption for macroeconomic analysis of tax changes. Also note that the EY Macroeconomic Model includes tax-induced shifting between sectors, including between the corporate and pass-through sectors.

Figure E-1. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses

Change in level relative to the current-law baseline



Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. While GDP in each year is additive, job equivalents are not (i.e., they are the same jobs each year). Note that the EY Macroeconomic Model includes shifting between the corporate and pass-through sectors. Because (1) there is shifting of economic activity from the corporate sector to the pass-through sector, and (2) the pass-through sector has a higher concentration of small businesses than the corporate sector, the macroeconomic impact on small businesses is larger than the macroeconomic impact on the overall US economy. Permanently extending the Section 199A deduction, for example, is estimated to increase overall US GDP by only \$50 billion, on average, annually over the 10-year budget window whereas for small businesses only it is estimated to increase US GDP by \$75 billion, on average, annually over the 10-year budget window. See the appendix for more detail. Figures are rounded.

Source: EY analysis.

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Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses

I. Introduction

Pass-through businesses – which include sole proprietorships, partnerships, and S corporations – are generally not subject to entity-level income tax. The entity’s income, deductions, credits, and losses are generally passed through to the individual tax returns of the business owners, where they are taxed at the individual’s income tax rate. The top individual income tax rate is currently 37%.

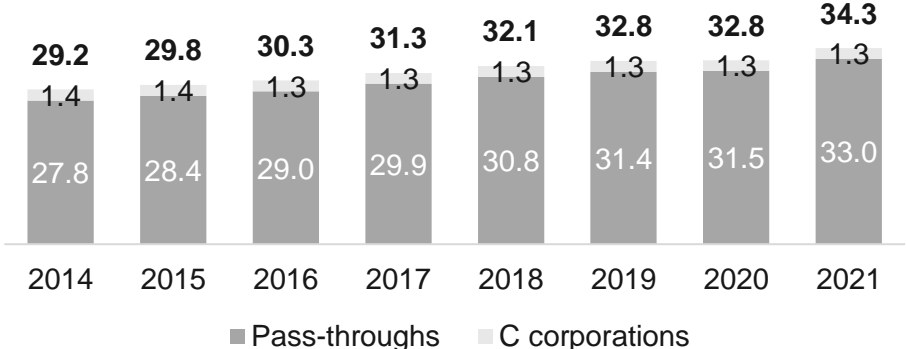
Section 199A of the Internal Revenue Code provides a 20% deduction for pass-through income, subject to limitations.¹ The Section 199A deduction is part of the Tax Cut and Jobs Act (TCJA), which was enacted in December 2017. The Section 199A deduction, which went into effect in 2018, is set to expire at the end of 2025.²

This report estimates the macroeconomic impacts of permanently extending the Section 199A deduction on small businesses relative to the current-law baseline. The EY Macroeconomic Model is used to estimate the macroeconomic impacts.

Small businesses

Small businesses (i.e., those with fewer than 500 employees) comprise over 99% of all businesses in the United States.³ There are approximately 34.3 million small businesses in the United States and more than 96% of these businesses (33.0 million) are small pass-through businesses.⁴ These small pass-through businesses benefit from the Section 199A deduction and employ more than 68 million workers.⁵ Figure 1 displays the growth in the number of small pass-through businesses in the United States from 2014 to 2021 (most recent data available). The total number of small pass-through businesses increased from 27.8 million in 2014 to 33.0 million in 2021, representing an increase of 19%.

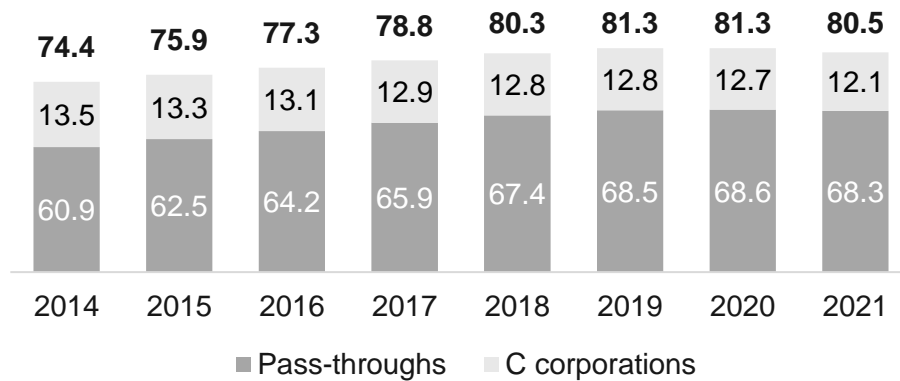
Figure 1. Number of small businesses
Millions of businesses



Note: Small businesses comprise all firms, both pass-throughs and C corporations, with fewer than 500 employees. Nonemployers (i.e., businesses without any employees, but an owner) are treated as one business with one employee. Figures are rounded.
Source: US Census Bureau.

As displayed in Figure 2, the number of workers employed by small pass-through businesses increased from 60.9 million in 2014 to 68.3 million in 2021, or by 12%.

Figure 2. Number of workers at small businesses
Millions of workers



Note: Small businesses comprise all firms, both pass-throughs and C corporations, with fewer than 500 employees. Nonemployers (i.e., businesses without any employees, but an owner) are treated as one business with one employee. Figures are rounded.

Source: US Census Bureau.

Section 199A deduction

The TCJA, enacted by Congress in December 2017, included significant changes to business taxation including lowering the corporate income tax rate to 21% and changes to the taxation of foreign source income. The TCJA also included a new deduction for pass-through businesses for 20% of Qualified Business Income (QBI) for individuals, estates, and trusts with pass-through business income (i.e., Section 199A). The computation of QBI, as well as other items needed to calculate the deduction are determined at the operating business level, but the deduction is taken by the owner of a sole-proprietorship, partner of a partnership, or shareholder of an S corporation (hereinafter referred to as the “business owner”). The Section 199A deduction sunsets at the end of 2025 along with most of the individual income tax provisions enacted under the TCJA.

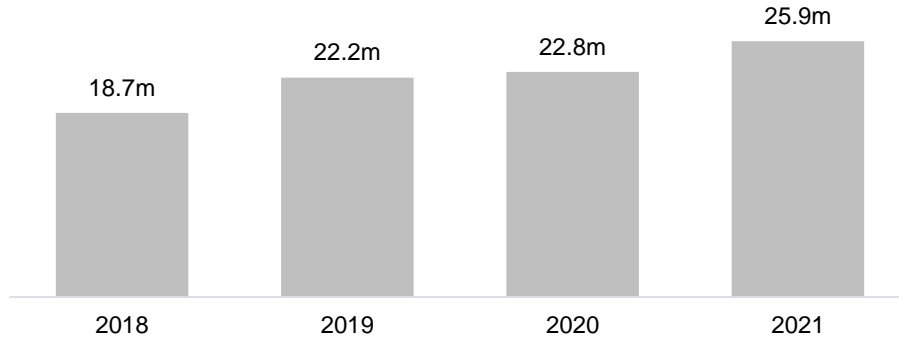
The Section 199A deduction cannot exceed 20% of a business owner’s taxable income, excluding net capital gains. Additionally, the Section 199A deduction has other limitations to determine the maximum deduction allowed. If the business owner has taxable income below a threshold (\$383,900 in 2024 for a joint filer) then the business owner can generally claim the full amount of the Section 199A deduction. If the business owner’s taxable income exceeds this threshold, then the Section 199A deduction can be limited by the specified service trade or business (SSTB) limitation and the wage and property limitation. These limitations phase in as taxable income increases (fully phased in at \$483,900 for a joint filer in 2024).

The SSTB limitation reduces (and, once fully phased in, eliminates) the Section 199A deduction for certain service-intensive business income. Service-intensive businesses include health, law, accounting, actuarial science, performing arts, consulting, athletics, financial services, investing and investment management, trading or dealing in certain assets, or any trade or business where the principal asset is the reputation or skill of one or more of its employees or owners.

The wage and property limitation caps the maximum Section 199A deduction at the greater of (1) 50% of the business owner's W-2 wages for the business or (2) 25% of those wages plus 2.5% of the business owner's share of the unadjusted basis of tangible capital assets placed in service in the past 10 years.⁶

As displayed in Figure 3, the number of tax returns claiming the Section 199A deduction grew from 18.7 million in 2018 to 25.9 million in 2021.

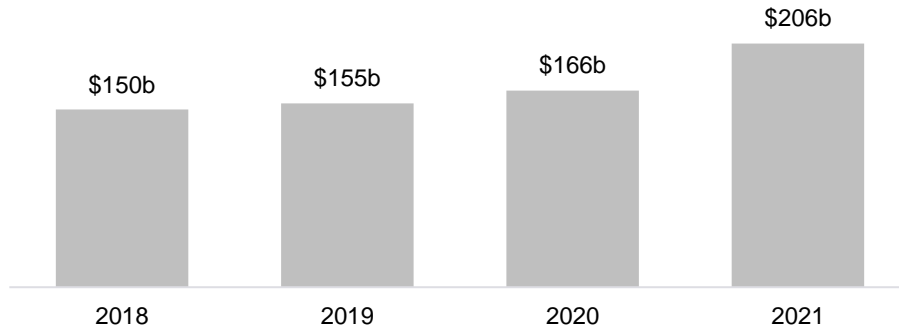
Figure 3. Number of returns claiming the Section 199A deduction



Note: Figures are rounded.
Source: Internal Revenue Service.

As displayed in Figure 4, the amount of Section 199A deduction claimed increased from \$150 billion in 2018 to \$206 billion in 2021.

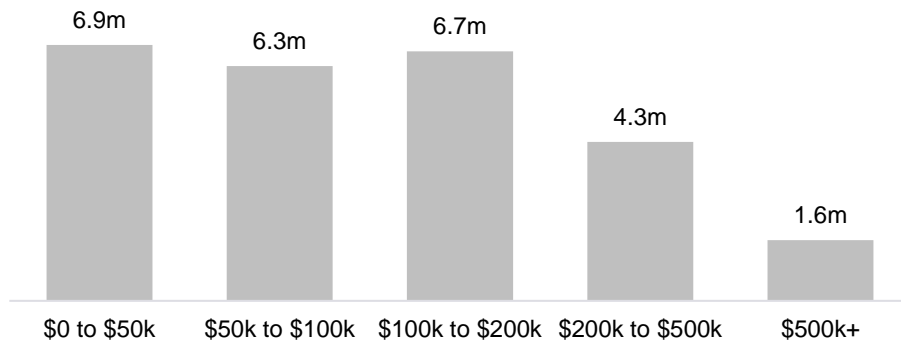
Figure 4. Amount of Section 199A deduction



Note: Figures are rounded.
Source: Internal Revenue Service.

As displayed in Figure 5, 20.0 million (77%) of the 25.9 million tax returns claiming the Section 199A deduction have less than \$200,000 of adjusted gross income and 13.3 million (51%) have less than \$100,000 of adjusted gross income.⁷

Figure 5. Number of returns claiming the Section 199A deduction, by adjusted gross income (2021)



Note: Bars sum to 25.9 million tax returns. Figures are rounded.
Source: Internal Revenue Service.

II. Macroeconomic impacts on small businesses

This report estimates the macroeconomic impacts of permanently extending the Section 199A deduction on small businesses relative to the current-law baseline. The EY Macroeconomic Model is used to estimate the macroeconomic impacts.

The Section 199A deduction reduces capital and labor taxes. Specifically, by lowering the tax burden on investment, the Section 199A deduction decreases the cost of capital, encourages investment, and results in more capital formation in the United States. With more capital available per worker, labor productivity rises. This ultimately increases the real wages of workers, gross domestic product (GDP), and Americans' standard of living. In addition to lowering the cost of capital, the Section 199A deduction also increases the after-tax return of labor for self-employed workers.⁸ Reducing taxes on labor increases the after-tax return to work, which can be expected to increase the number of workers and/or the number of hours they work.

EY Macroeconomic Model

The economic impacts are estimated using the EY Macroeconomic Model, an overlapping generations model similar to models used by the Joint Committee on Taxation (JCT), Congressional Budget Office (CBO), and US Department of the Treasury to analyze changes in tax policy.

The EY Macroeconomic Model includes a detailed modeling of industries and inter-industry linkages. Businesses choose the optimal mix of capital and labor based on relative prices and industry-specific characteristics. Each industry has a different relative size of capital, labor, and intermediate inputs associated with its output. The model also includes a corporate and pass-through sector for each industry.

The model is designed to include key economic decisions of businesses and households affected by tax policy, as well as major features of the US economy. The after-tax returns from work and savings are incorporated into business and household decisions on how much to produce, save, and work. The model also includes tax-induced shifting between sectors, including the corporate and pass-through sectors. A description of the EY Macroeconomic Model can be found in Appendix A.

Source of funding

Because tax and spending policies must ultimately be funded (e.g., tax cuts must ultimately be paid for), it is not possible to separate entirely the impact of a given tax decrease from the impact of how it is funded. Revenue reductions in this analysis must eventually be paid for in some way and how the revenue reduction is paid for can affect the estimated impacts. Typical sources of funding in analyses like this have included temporary deficit increases, government spending or transfer decreases, tax increases, or a combination thereof. This analysis assumes that the revenue reduction is funded by a decrease in government transfers, a standard assumption for macroeconomic analysis of tax changes.⁹ Government transfer programs are assumed not to boost private sector productivity or private sector output but could have other policy objectives (e.g., redistribution).

Macroeconomic estimates

Permanently extending the Section 199A deduction is estimated to have the following US economic impacts (relative to the size of the 2024 US economy and only for small businesses):

Job equivalents: A significant portion of the effects of permanently extending the Section 199A deduction would benefit US workers through increased labor productivity, wages, and employment. The tax change is estimated to increase US job equivalents at small businesses by approximately:¹⁰

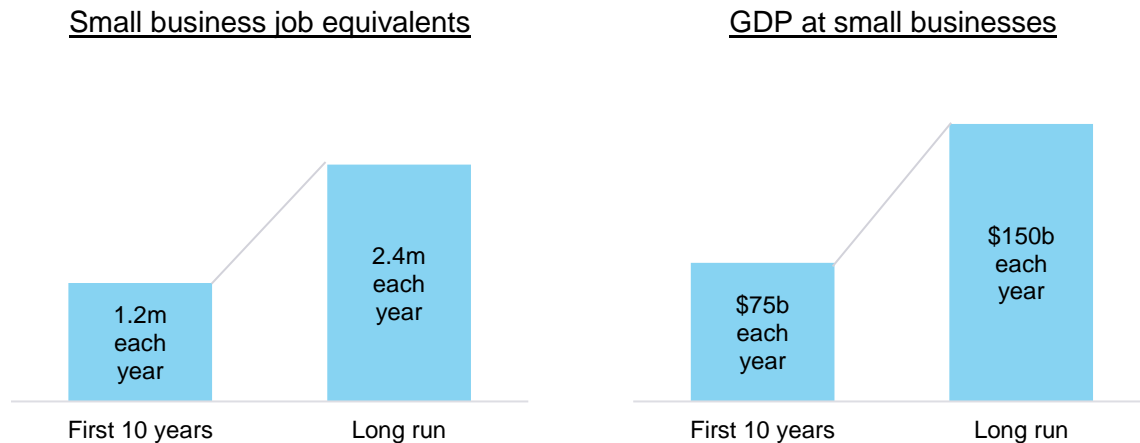
- ▶ 1.2 million jobs, on average, in each of the first ten years; and
- ▶ growing over time to 2.4 million jobs each year thereafter.

Gross domestic product. Permanently extending the Section 199A deduction is estimated to increase US GDP at small businesses by:

- ▶ \$75 billion annually, on average, over the first 10 years; and
- ▶ growing over time to \$150 billion annually in each year thereafter.

Figure 6. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses

Change in level relative to the current-law baseline



Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. While GDP in each year is additive, job equivalents are not (i.e., they are the same jobs each year). Note that the EY Macroeconomic Model includes shifting between the corporate and pass-through sectors. Because (1) there is shifting of economic activity from the corporate sector to the pass-through sector, and (2) the pass-through sector has a higher concentration of small businesses than the corporate sector, the macroeconomic impact on small businesses is larger than the macroeconomic impact on the overall US economy. Permanently extending the Section 199A deduction, for example, is estimated to increase overall US GDP by only \$50 billion, on average, annually over the 10-year budget window whereas for small businesses only it is estimated to increase US GDP by \$75 billion, on average, annually over the 10-year budget window. See the appendix for more detail. Figures are rounded.

Source: EY analysis.

More detailed results can be seen in Appendix A.

III. Macroeconomic impacts on small businesses, by state

The change in US job equivalents and GDP supported by the permanent extension of the Section 199A deduction by state (plus the District of Columbia) at small businesses over the first 10 years is displayed in Table 1. The states estimated to have the largest impacts are: California (141,000 jobs), Texas (104,000 jobs), Florida (86,000 jobs), New York (71,000 jobs), and Pennsylvania (51,000 jobs).

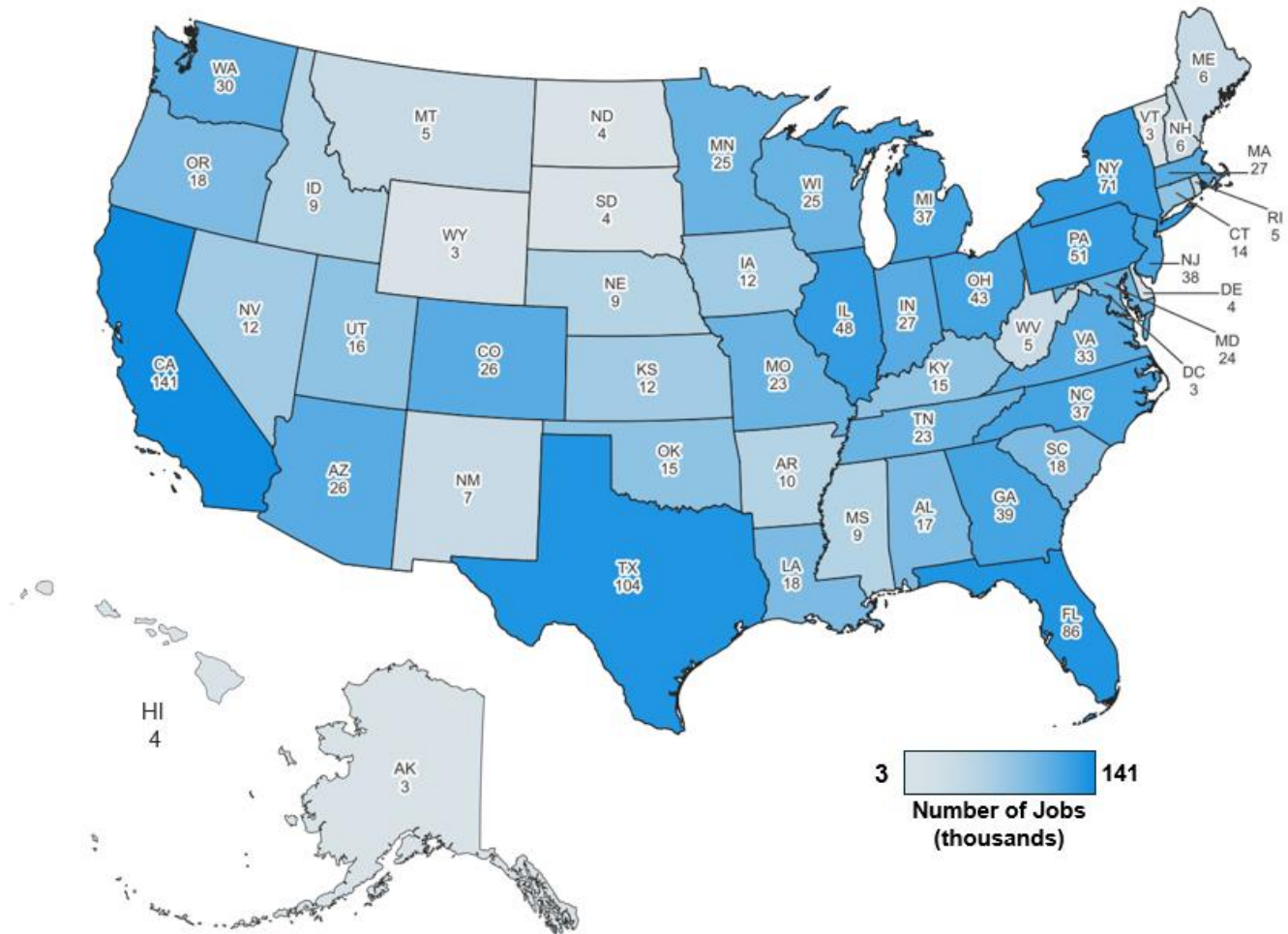
Table 1. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses each year for the first 10 years, by state
Dollars in millions

	Job equivalents	GDP		Job equivalents	GDP
Alabama	17,000	\$841	Montana	5,000	\$244
Alaska	3,000	\$175	Nebraska	9,000	\$414
Arizona	26,000	\$1,407	Nevada	12,000	\$659
Arkansas	10,000	\$440	New Hampshire	6,000	\$345
California	141,000	\$9,782	New Jersey	38,000	\$2,342
Colorado	26,000	\$1,619	New Mexico	7,000	\$308
Connecticut	14,000	\$887	New York	71,000	\$6,093
Delaware	4,000	\$233	North Carolina	37,000	\$1,822
DC	3,000	\$298	North Dakota	4,000	\$226
Florida	86,000	\$4,628	Ohio	43,000	\$2,160
Georgia	39,000	\$2,012	Oklahoma	15,000	\$707
Hawaii	4,000	\$210	Oregon	18,000	\$986
Idaho	9,000	\$397	Pennsylvania	51,000	\$2,786
Illinois	48,000	\$3,177	Rhode Island	5,000	\$250
Indiana	27,000	\$1,353	South Carolina	18,000	\$838
Iowa	12,000	\$562	South Dakota	4,000	\$197
Kansas	12,000	\$568	Tennessee	23,000	\$1,164
Kentucky	15,000	\$646	Texas	104,000	\$6,054
Louisiana	18,000	\$940	Utah	16,000	\$816
Maine	6,000	\$305	Vermont	3,000	\$142
Maryland	24,000	\$1,490	Virginia	33,000	\$1,906
Massachusetts	27,000	\$2,009	Washington	30,000	\$1,859
Michigan	37,000	\$1,919	West Virginia	5,000	\$203
Minnesota	25,000	\$1,427	Wisconsin	25,000	\$1,266
Mississippi	9,000	\$362	Wyoming	3,000	\$169
Missouri	23,000	\$1,121			

Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. Estimates are for the first 10 years scaled to the size of the US economy in 2024 and estimated relative to the current-law baseline. Figures are rounded.

Source: EY analysis.

Figure 7. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses, change in job equivalents each year for the first 10 years by state
Thousands of jobs



Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. Estimates are for the first 10 years scaled to the size of the US economy in 2024 and estimated relative to the current-law baseline. Figures are rounded.
 Source: EY analysis.

The long-run change in US job equivalents and GDP supported by the permanent extension of the Section 199A deduction by state (plus the District of Columbia) at small businesses is displayed in Table 2. The states estimated to have the largest impacts are: California (274,000 jobs), Texas (201,000 jobs), Florida (166,000 jobs), New York (138,000 jobs), and Pennsylvania (99,000 jobs).

Table 2. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses each year after 2035, by state

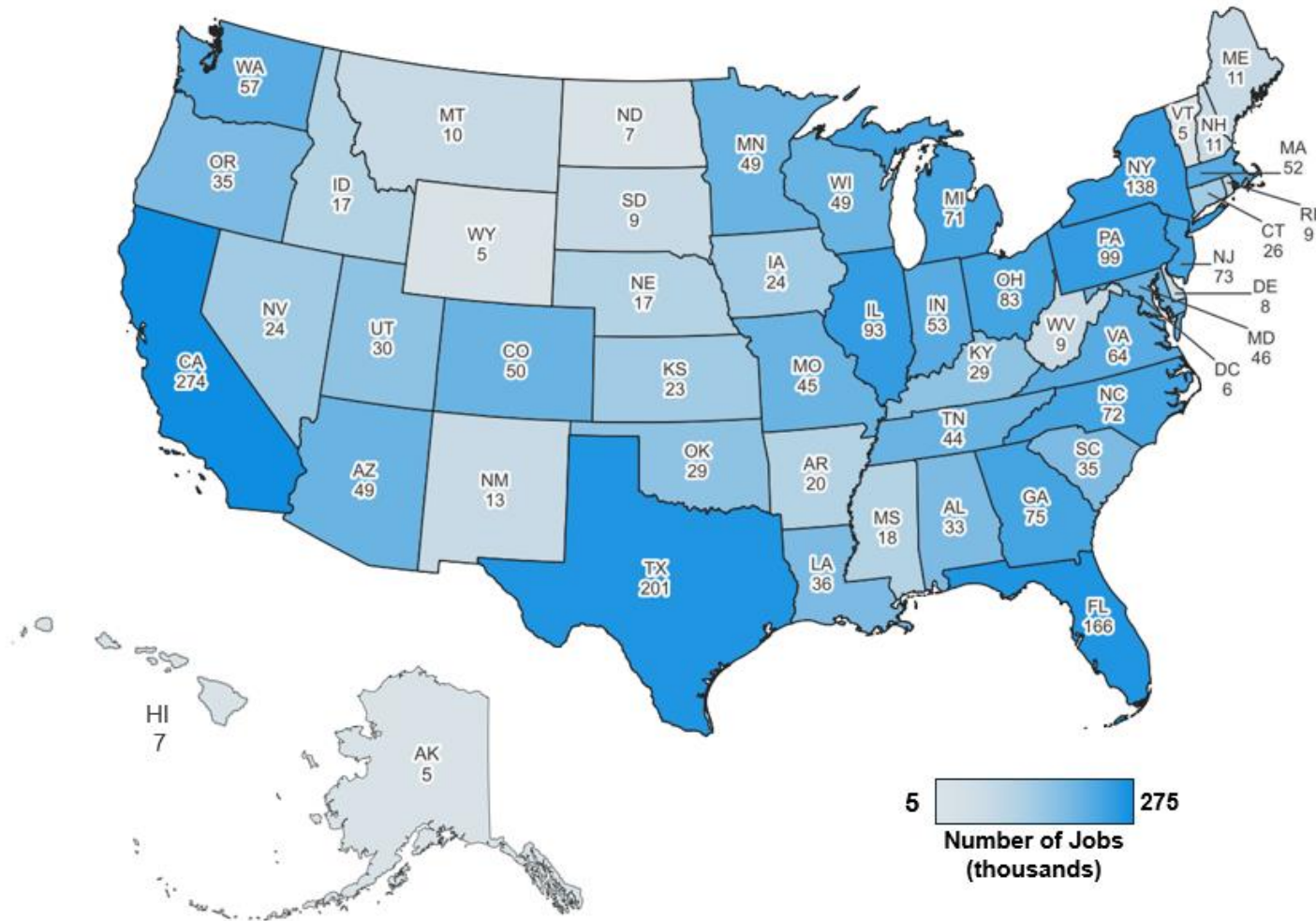
Dollars in millions

	Job equivalents	GDP		Job equivalents	GDP
Alabama	33,000	\$1,735	Montana	10,000	\$503
Alaska	5,000	\$360	Nebraska	17,000	\$855
Arizona	49,000	\$2,904	Nevada	24,000	\$1,361
Arkansas	20,000	\$909	New Hampshire	11,000	\$712
California	274,000	\$20,197	New Jersey	73,000	\$4,835
Colorado	50,000	\$3,342	New Mexico	13,000	\$636
Connecticut	26,000	\$1,832	New York	138,000	\$12,580
Delaware	8,000	\$482	North Carolina	72,000	\$3,762
DC	6,000	\$615	North Dakota	7,000	\$467
Florida	166,000	\$9,554	Ohio	83,000	\$4,461
Georgia	75,000	\$4,155	Oklahoma	29,000	\$1,459
Hawaii	7,000	\$433	Oregon	35,000	\$2,037
Idaho	17,000	\$820	Pennsylvania	99,000	\$5,753
Illinois	93,000	\$6,558	Rhode Island	9,000	\$515
Indiana	53,000	\$2,793	South Carolina	35,000	\$1,730
Iowa	24,000	\$1,161	South Dakota	9,000	\$407
Kansas	23,000	\$1,174	Tennessee	44,000	\$2,404
Kentucky	29,000	\$1,334	Texas	201,000	\$12,500
Louisiana	36,000	\$1,940	Utah	30,000	\$1,685
Maine	11,000	\$629	Vermont	5,000	\$293
Maryland	46,000	\$3,077	Virginia	64,000	\$3,935
Massachusetts	52,000	\$4,149	Washington	57,000	\$3,838
Michigan	71,000	\$3,961	West Virginia	9,000	\$419
Minnesota	49,000	\$2,945	Wisconsin	49,000	\$2,614
Mississippi	18,000	\$747	Wyoming	5,000	\$350
Missouri	45,000	\$2,315			

Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. Estimates are long-run results scaled to the size of the US economy in 2024 and estimated relative to the current-law baseline. Figures are rounded.

Source: EY analysis.

Figure 8. Macroeconomic impacts of permanently extending the Section 199A deduction on small businesses, change in job equivalents each year after 2035 by state
Thousands of jobs



Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. Estimates are long-run results scaled to the size of the US economy in 2024 and estimated relative to the current-law baseline. Figures are rounded. Source: EY analysis.

IV. Caveats and limitations

Any modeling effort is only an approximate depiction of the economic forces it seeks to represent, and the economic models developed for this analysis are no exception. Although various limitations and caveats might be listed, several are particularly noteworthy:

- ▶ **Estimated macroeconomic impacts are based on a stylized depiction of the US economy.** The economic models used for this analysis are, by their very nature, stylized depictions of the US economy. As such, they cannot capture all of the detail of the US economy, the existing US tax system, or the tax policy change.
- ▶ **Estimates are limited by available public information.** The analysis relies on information reported by government agencies (primarily the Bureau of Economic Analysis, Internal Revenue Service, and JCT). The analysis did not attempt to verify or validate this information using sources other than those described in this report.
- ▶ **Macroeconomic estimates are sensitive to how a policy change is funded.** Because tax and spending policies must ultimately be funded (e.g., tax cuts must ultimately be paid for), it is not possible to separate entirely the impact of a given tax decrease from the impact of how it is funded. Revenue reductions in this analysis must eventually be paid for in some way and how the revenue reduction is paid for can affect the estimated impacts. Typical sources of funding in analyses like this have included temporary deficit increases, government spending or transfer decreases, tax increases, or a combination thereof. This analysis assumes that the revenue reduction is funded by a decrease in government transfers, a standard assumption for macroeconomic analysis of tax changes.¹¹ Government transfer programs are assumed not to boost private sector productivity or private sector output but could have other policy objectives (e.g., redistribution).
- ▶ **Full employment model.** The EY Macroeconomic Model, like many general equilibrium models, focuses on the longer-term incentive effects of policy changes. It also assumes that all resources throughout the economy are fully employed; that is, there is no slackness in the economy (i.e., a full employment assumption with no involuntary unemployment). Any increase in labor supply is a voluntary response to a change in income or the return to labor that makes households choose to substitute between consumption and leisure. To provide a high-level measure of the potential employment impacts, a job equivalents measure has been included in this analysis' results. Job equivalent impacts are defined as the change in total after-tax labor income divided by the baseline average after-tax labor income per job.
- ▶ **Estimated macroeconomic impacts limited by calibration.** This model is calibrated to represent the US economy and then forecast forward. However, because any particular year may reflect unique events and also may not represent the economy in the future, no particular baseline year is completely generalizable.
- ▶ **Industries are assumed to be responsive to normal returns on investment.** The industries comprising the United States economy in the EY Macroeconomic Model are assumed to be responsive to the normal returns on investment. This contrasts to industries that earn economic profits and thereby have an increased sensitivity to statutory tax rates relative to marginal effective tax rates.

- ▶ **The definition of small business used in this report follows the definition from the Small Business Administration.** This analysis assumes that small businesses are those with fewer than 500 employees. Defining small businesses differently could produce different results than those obtained in this analysis.
- ▶ **Estimates depend on the assumed policy baseline.** This analysis estimates the macroeconomic impacts of permanently extending the Section 199A deduction on small businesses relative to the current-law baseline. Assuming a different policy baseline could result in different estimates than those produced by this analysis.

Appendix A. EY Macroeconomic Model

The EY Macroeconomic Model used for this analysis is similar to those used by the CBO, JCT, and US Treasury Department. In this model, changes in tax policy affect the incentives to work, save and invest, and to allocate capital and labor among competing uses. Representative individuals and firms incorporate the after-tax return from work, savings, and investment, into their decisions on how much to produce, save, and work.

The general equilibrium methodology accounts for changes in equilibrium prices in factor (i.e., capital and labor) and goods markets and simultaneously accounts for the behavioral responses of individuals and businesses to changes in taxation (or other policies). Behavioral changes are estimated in an overlapping generations (OLG) framework, whereby representative individuals with perfect foresight incorporate changes in current and future prices when deciding how much to consume and save in each period of their lives.

High-level description of model's structure

Production

Firm production is modeled with the constant elasticity of substitution (CES) functional form, in which firms choose the optimal level of capital and labor subject to the gross-of-tax cost of capital and gross-of-tax wage. The model includes industry-specific detail through use of differing costs of capital, factor intensities, and production function scale parameters. Such a specification accounts for differential use of capital and labor between industries as well as distortions in factor prices introduced by the tax system. The cost of capital measure models the extent to which the tax code discriminates by asset type, organizational form, and source of finance.

The industry detail included in this model corresponds approximately with three-digit North American Industry Classification System (NAICS) codes and is calibrated to a stylized version of the US economy. Each of 36 industries has a corporate and pass-through sector except for owner-occupied housing and government production. Because industry outputs are typically a combination of value added (i.e., the capital and labor of an industry) and the finished production of other industries (i.e., intermediate inputs), each industry's output is modeled as a fixed proportion of an industry's value added and intermediate inputs to capture inter-industry linkages. These industry outputs are then bundled together into consumption goods that consumers purchase.

Consumption

Consumer behavior is modeled through use of an OLG framework that includes 55 generational cohorts (representing adults aged 21 to 75). Thus, in any one year, the model includes a representative individual optimizing lifetime consumption and savings decisions for each cohort aged 21 through 75 (i.e., 55 representative individuals) with perfect foresight. The model also distinguishes between two types of representative individuals: those that have access to capital markets (savers) and those that do not (non-savers or rule-of-thumb agents).

Non-savers and savers face different optimization problems over different time horizons. Each period non-savers must choose the amount of labor they supply and the amount of goods they

consume. Savers face the same tradeoffs in a given period, but they must also balance consumption today with the choice of investing in capital or bonds. The model assumes 50% of US households are permanently non-savers and 50% are permanently savers across all age cohorts.

The utility of representative individuals is modeled as a CES function, allocating a composite commodity consisting of consumption goods and leisure over their lifetimes. Representative individuals optimize their lifetime utility through their decisions of how much to consume, save, and work in each period subject to their preferences, access to capital markets, and the after-tax returns from work and savings in each period. Representative individuals respond to the after-tax return to labor, as well as their overall income levels, in determining how much to work and thereby earn income that is used to purchase consumption goods or to consume leisure by not working. In this model the endowment of human capital changes with age — growing early in life and declining later in life — following the estimate of Altig et al. (2001).¹²

Government

The model includes a simple characterization of both federal and state and local governments. Government spending is assumed to be used for either: (1) transfer payments to representative individuals, or (2) the provision of public goods. Transfer payments are assumed to be either Social Security payments or other transfer payments. Social Security payments are calculated in the model based on the 35 years in which a representative individual earns the most labor income. Other transfer payments are distributed on a per capita basis. Public goods are assumed to be provided by the government in fixed quantities through the purchase of industry outputs as specified in a Leontief function.

Government spending in the model can be financed by collecting taxes or borrowing. Borrowing, however, cannot continue indefinitely in this model. Eventually, the debt-to-GDP ratio must stabilize so that the government's fiscal policy is sustainable. The model allows government transfers, government provision of public goods, or government tax policy to be used to achieve a selected debt-to-GDP ratio after a selected number of years. This selected debt-to-GDP ratio could be, for example, the initial debt-to-GDP ratio or the debt-to-GDP ratio a selected number of years after policy enactment.

Modeling the United States as a large open economy

The model is an open economy model that includes both capital and trade flows between the United States and the rest of the world. International capital flows are modeled through the constant portfolio elasticity approach of Gravelle and Smetters (2006).¹³ This approach assumes that international capital flows are responsive to the difference in after-tax rates of return in the United States and the rest of the world through a constant portfolio elasticity expression. Trade is modeled through use of the Armington assumption, wherein products made in the United States versus the rest of the world are imperfect substitutes.

Table A-1. Key model parameters

Intertemporal substitution elasticity	0.4
Intratemporal substitution elasticity	0.6
Leisure share of time endowment	0.4
International capital flow elasticity	3.0
Capital-labor substitution elasticity	0.8
Adjustment costs	2.0

Source: Key model parameters are generally from Joint Committee on Taxation, *Macroeconomic Analysis of the Conference Agreement for H.R. 1, The 'Tax Cuts and Jobs Act,'* December 22, 2017 (JCX-69-17) and Jane Gravelle and Kent Smetters, "Does the Open Economy Assumption Really Mean that Labor Bears the Burden of a Capital Income Tax?" *Advances in Economic Analysis and Policy*, 6(1) (2006): Article 3.

Table A-2. Macroeconomic impacts of permanently extending the Section 199A deduction on the overall US economy

	First ten years	Long run
GDP	0.2%	0.3%
Consumption	-0.2%	0.4%
Investment	1.7%	0.7%
After-tax wage rate	0.3%	0.8%
Labor supply	0.2%	0.2%
Private capital	0.1%	0.7%
<i>Economy-wide results (scaled to 2024 US economy)</i>		
GDP	\$50b	\$100b
Job equivalents	800,000	1,500,000
<i>Small businesses only (scaled to 2024 US economy)*</i>		
GDP	\$75b	\$150b
Job equivalents	1,200,000	2,400,000

*The EY Macroeconomic Model includes shifting between the corporate and pass-through sectors. Because (1) there is shifting of economic activity from the corporate sector to the pass-through sector and (2) the pass-through sector has a higher concentration of small businesses than the corporate sector, the macroeconomic impact on small businesses is larger than the macroeconomic impact on the overall US economy. Permanently extending the Section 199A deduction, for example, is estimated to increase overall US GDP by only \$50 billion, on average, annually over the 10-year budget window whereas for small businesses only it is estimated to increase US GDP by \$75 billion, on average, annually over the 10-year budget window.

Note: Job-equivalent impacts are defined as the change in after-tax labor income divided by baseline average after-tax labor income per job. Changes are relative to 2024 US economy. Long run denotes when the economy has fully adjusted to policy change; generally, 2/3 to 3/4 of this adjustment occurs within 10 years.

Source: EY analysis.

Endnotes

¹ Owners of certain agricultural or horticultural cooperatives, publicly traded partnerships (PTPs), and real estate investment trusts (REITs) are also eligible for this deduction.

² For more details see, EY Tax Alert, “Final Section 199A regulations and other guidance provide welcome guidance, leave questions unanswered and raise new issues”, January 2019 <https://taxnews.ey.com/news/2019-0218-final-section-199a-regulations-and-other-guidance-provide-welcome-guidance-leave-questions-unanswered-and-raise-new-issues>.

³ The Small Business Administration (SBA) defines small businesses as those businesses that employ fewer than 500 employees. For more details see: US Small Business Administration Office of Advocacy, *Frequently Asked Questions About Small Business*, March 2023 <https://advocacy.sba.gov/wp-content/uploads/2023/03/Frequently-Asked-Questions-About-Small-Business-March-2023-508c.pdf>.

⁴ The majority of businesses in the United States are nonemployers but these businesses average less than 4% of US sales and receipts. Most nonemployers are self-employed individuals operating unincorporated businesses. A nonemployer business may or may not be the owner’s principal source of income. See the US Census Bureau’s Nonemployer Statistics (NES) program for additional information. Total small businesses includes the following legal forms of organization: C corporations, S corporations, partnerships, and sole proprietorships.

⁵ These are 2021 data (most recent available) from the US Census Bureau’s Statistics of US Businesses (SUSB) and Nonemployer Statistics (NES). The numbers presented follow the definitions of those data. Note that partnerships, a type of pass-through business, include corporate-owned partnerships.

⁶ Specifically, Section 199A generally allows non-corporate taxpayers to deduct the combined qualified business income (CQBI) amount. Subject to certain limitations and netting rules, the CQBI amount is the sum of (i) 20% of qualified business income from each “qualified trade or business” (QTB) conducted by a partnership, S corporation, and/or sole proprietorship, (ii) 20% of qualified REIT dividends, and (iii) 20% of qualified publicly traded partnership income. The taxpayer’s deduction cannot be greater than 20% of the taxpayer’s taxable income, less net capital gain. For higher-income individuals, Section 199A limits amount of deductible qualified business income from a trade or business based on the W-2 wages paid by the trade or business, and, in certain cases, the unadjusted basis immediately after acquisition of qualified property used in the trade or business (the wage and property limitation). It also excludes “specified service trades or businesses” from the definition of a QTB. For more details see, EY Tax Alert, “Final Section 199A regulations and other guidance provide welcome guidance, leave questions unanswered and raise new issues”, January 2019 <https://taxnews.ey.com/news/2019-0218-final-section-199a-regulations-and-other-guidance-provide-welcome-guidance-leave-questions-unanswered-and-raise-new-issues>; Internal Revenue Service, Instructions for Form 8995-A (2023), [irs.gov](https://www.irs.gov/instructions/i8995a), accessed July 2024, <https://www.irs.gov/instructions/i8995a>; and Internal Revenue Service, *Tax Cuts and Jobs Act, Provision 11011 Section 199A - Qualified Business Income Deduction FAQs*, [irs.gov](https://www.irs.gov/newsroom/tax-cuts-and-jobs-act-provision-11011-section-199a-qualified-business-income-deduction-faqs), July 2024 <https://www.irs.gov/newsroom/tax-cuts-and-jobs-act-provision-11011-section-199a-qualified-business-income-deduction-faqs>.

⁷ The distribution differs, however, when examining the amount of Section 199A deduction. Specifically, \$56 billion (27%) of the \$206 billion of Section 199A deduction is claimed on tax returns with less than \$200,000 of adjusted gross income and \$26 billion (13%) of Section 199A deduction is claimed on tax returns with less than \$100,000 of adjusted gross income.

⁸ Pass-through income can reflect either returns to capital or labor. It is difficult to determine how much of pass-through profits represent returns to capital invested by the business owner or returns from the owners’ labor. For example, if an entrepreneur starts a new manufacturing business as a pass-through and earns a profit, it is difficult to estimate how much of the business profit is attributable to the investment in machines and facilities (capital) versus the expertise and skills of the entrepreneur (labor). Some research suggests that approximately 75% of pass-through income can be considered as labor income. See, for example, Matthew Smith, Danny Yagan, Owen M. Zidar and Eric Zwick, “Capitalists in the Twenty-First Century”, NBER Working Paper 25442, June 2019, <https://www.nber.org/papers/w25442>. The analysis estimates the labor share of proprietors’ income using the ratio of total compensation paid to employees (wages, salaries, and supplemental benefits) to gross domestic income (GDI) excluding proprietors’ income. This ratio is applied to proprietors’ income and the result is considered the labor share. This follows CBO’s methodology. For more details see, CBO, “How CBO Projects Income,” July 2013.

⁹ This is discussed, for example, in Congressional Research Service, “Dynamic Scoring for Tax Legislation: A Review of Models,” 2023. For papers modeling a tax increase where changes in revenue are offset by changes in government spending (transfers or government consumption) see, for example, Rachel Moore and Brandon Pecoraro, “Quantitative analysis of a wealth tax for the United States: Exclusions and expenditures,” *Journal of Macroeconomics* 78 (2023); Shinichi Nishiyama, “Fiscal Policy Effects in a Heterogeneous-Agent Overlapping-Generations Economy With an Aging Population,” Congressional Budget Office, Working Paper 2013-07; and US Department of the Treasury, *A Dynamic Analysis of Permanent Extension of the President’s Tax Relief*, 2006.

¹⁰ Job equivalents summarize the impact of both the increase in hours worked and increased after-tax labor income. Specifically, job equivalents are calculated as the total change in after-tax labor income divided by baseline average after-tax labor income per job.

¹¹ This is discussed, for example, in Congressional Research Service, “Dynamic Scoring for Tax Legislation: A Review of Models,” 2023. For papers modeling a tax increase where changes in revenue are offset by changes in government spending (transfers or government consumption) see, for example, Rachel Moore and Brandon Pecoraro, “Quantitative analysis of a wealth tax for the United States: Exclusions and expenditures,” *Journal of Macroeconomics* 78 (2023); Shinichi Nishiyama, “Fiscal Policy Effects in a Heterogeneous-Agent Overlapping-Generations Economy With an Aging Population,” Congressional Budget Office, Working Paper 2013-07; and US Department of the Treasury, *A Dynamic Analysis of Permanent Extension of the President’s Tax Relief*, 2006.

¹² See David Altig, Alan Auerbach, Laurence Koltikoff, Kent Smetters, and Jan Walliser, (2001), “Simulating Fundamental Tax Reform in the United States,” *American Economic Review*, 91(3) (June): 574-595. <https://doi.org/10.1257/aer.91.3.574>

¹³ See Jane Gravelle and Kent Smetters, (2006), “Does the Open Economy Assumption Really Mean That Labor Bears the Burden of a Capital Income Tax?” *Advances in Economic Analysis and Policy*, 6(1) (August): 1-42. <https://doi.org/10.2202/1538-0637.1548>