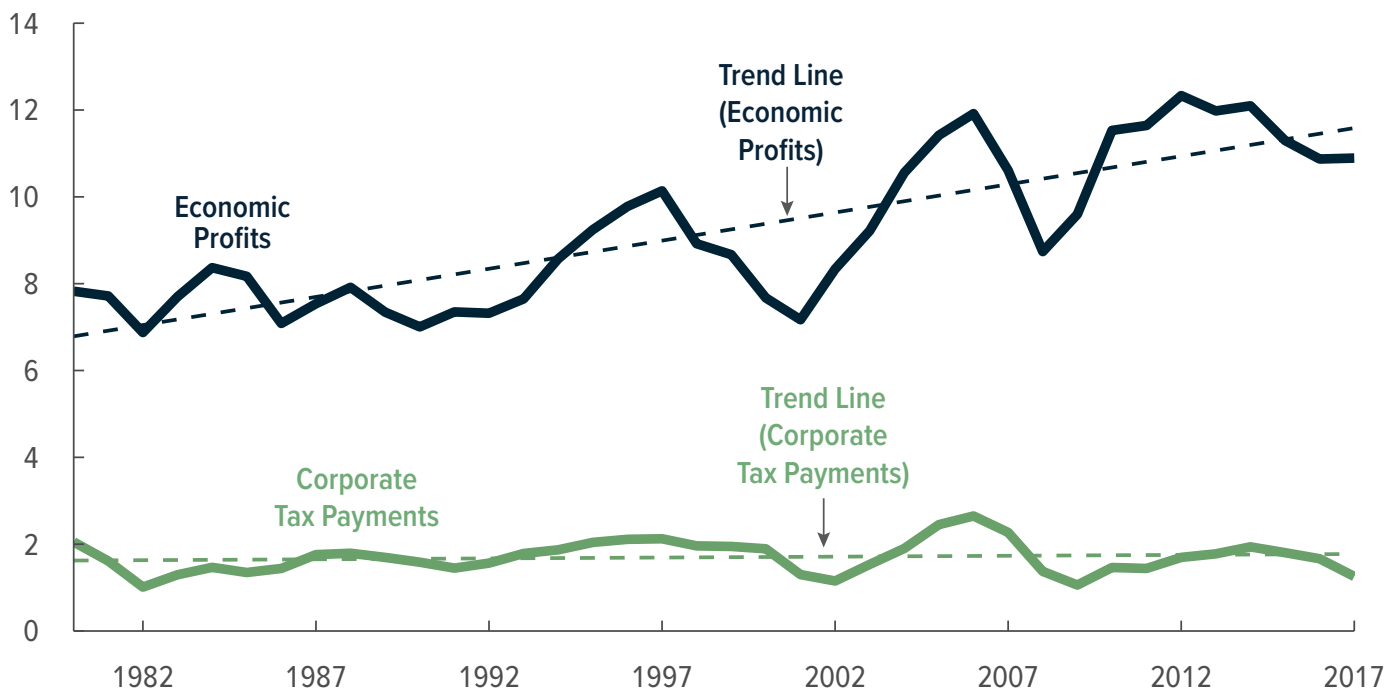




# Trends in Corporate Economic Profits and Tax Payments, 1998 to 2017

Percentage of Gross Domestic Product



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# At a Glance

Over recent decades, the economic profits of corporations (that is, profits from current production) have grown in relation to the size of the economy, whereas the amounts that corporations pay in federal taxes have remained stable. That pattern, which cannot be explained by changes in federal statutory corporate tax rates, reflects a divergence between economic profits and the corporate tax base (income that is subject to the corporate tax). Because such differences affect how the Congressional Budget Office projects revenues from the corporate income tax, the agency has analyzed the relationship between the two measures. This report breaks down and explains that relationship.

Economic profits and the corporate tax base are two different concepts, and there are many reasons they might diverge. In the analysis underlying this report, CBO considered three factors that contribute to that divergence:

- Conceptual differences between the measure of economic profits and the measure of tax profits (net income as defined under tax rules);
- Differences in the types of businesses included in each measure of profits; and
- The tax treatment of losses and special deductions.

Overall, CBO finds that conceptual differences, particularly differences in the treatment of foreign profits, account for much of the growth in the gap between economic profits and the corporate tax base. Differences in the types of businesses included in each measure also help explain why there is a gap, but the effect of those differences has been relatively stable in recent years. Finally, the tax treatment of losses helps explain variations in the gap over the business cycle.

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# Notes

Unless otherwise indicated, all years referred to in this report are calendar years.

For additional information about terms used in this report, see the [glossary](#).

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# Trends in Corporate Economic Profits and Tax Payments, 1998 to 2017

## Summary

Over recent decades, corporate economic profits—profits from current production—have grown faster than the amounts that corporations pay in federal taxes. Specifically, economic profits as a share of gross domestic product (GDP) have grown, but federal corporate tax payments as a share of GDP have shown no clear trend (see Figure 1). That divergence in trends began in the 1990s and accelerated through the 2000s.

Corporate tax payments reflect the corporate tax base—that is, income that is subject to the corporate tax—and the statutory tax rates applied to that base. Before Public Law 115-97 (referred to in this report as the 2017 tax act) made significant changes to the corporate tax system, the last major changes to federal statutory corporate tax rates occurred in 1986, when the Tax Reform Act (P.L. 99-514) was enacted. Consequently, the divergence in trends between economic profits and corporate tax payments through the 2000s was not the result of changes in federal statutory corporate tax rates; instead, it reflected changes in the relationship between economic profits and the corporate tax base.

Because such differences affect how the Congressional Budget Office projects revenues from the corporate income tax, the agency has examined the factors that explain why corporate tax payments have not grown with corporate economic profits. This report focuses on why the gap between economic profits and the corporate tax base grew in the 20 years before the 2017 tax act went into effect.

## What Causes the Gap Between Economic Profits and the Corporate Tax Base?

Three factors account for the divergence between economic profits and the corporate tax base.

- **Conceptual differences.** The first factor involves conceptual differences in the way that profits are measured for economic and tax purposes. Whereas economic profits reflect the profits that U.S. corporations earn from current production, tax profits reflect net income as defined under federal

tax rules. Those two concepts differ in a variety of important ways, including differences in the types of international income that are included in each measure.

- **Types of corporations.** The second factor involves differences in the set of corporations that are included in each measure. Economic profits include the profits of all corporations, but only some corporations are subject to the corporate tax.
- **Losses and deductions.** The third factor centers on the effects of the tax treatment of losses as well as certain special deductions that are included in the calculation of the corporate tax base.

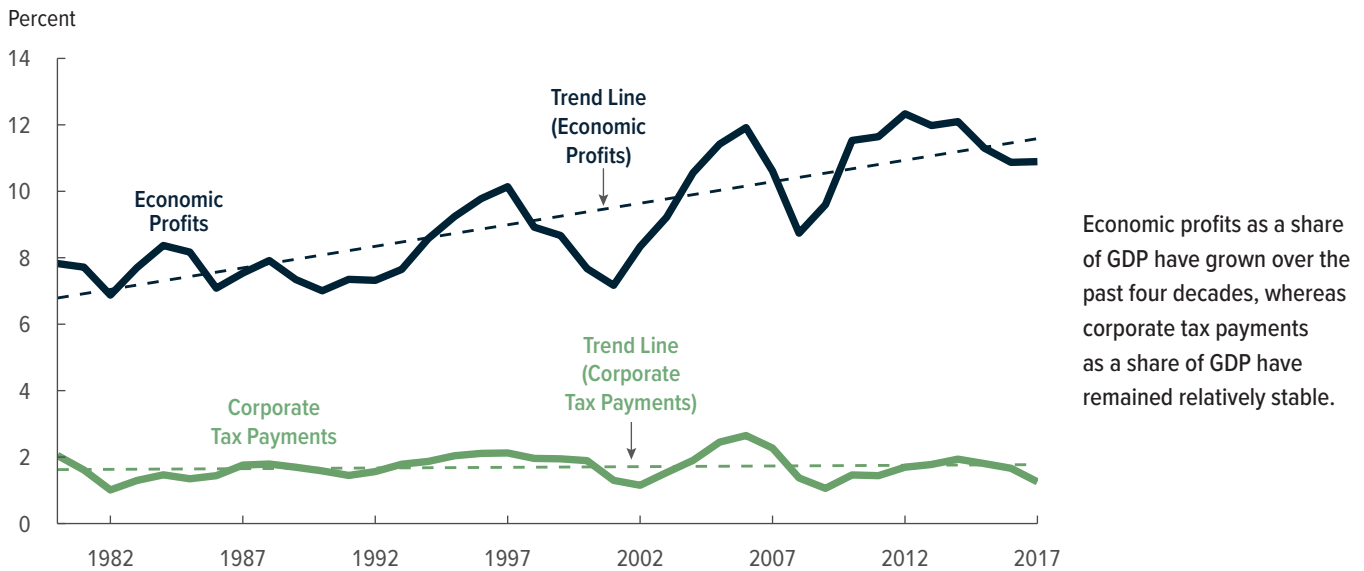
CBO finds that both conceptual differences and the inclusion of a broader set of corporations in measures of economic profits cause economic profits to exceed the corporate tax base. The tax treatment of losses goes in the opposite direction, increasing the size of the corporate tax base relative to economic profits. Overall, each factor is important for understanding the average gap between 1998 and 2017, the period under consideration in this report (see Figure 2). The role of conceptual differences, particularly differences in the way foreign income is treated, is especially important in explaining the growth in the gap.

## How Could Recent Legislation Change the Relationship Between Economic Profits and Corporate Tax Payments?

This report focuses primarily on the historical gap between economic profits and the corporate tax base through 2017, the last year before provisions of the 2017 tax act took effect. The relationship between economic profits and corporate tax payments in the years after 2017 will be affected by both the 2017 tax act and the minimum tax on corporations' book profits included as part of the 2022 reconciliation act (P.L. 117-169). Currently, detailed data are available only through 2019. In addition, changes brought about by the 2017 tax act were significant enough to call for caution when drawing precise conclusions that are based on only a few years of

Figure 1.

## Economic Profits and Federal Corporate Tax Payments as a Share of GDP



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

GDP = gross domestic product.

data. Still, it is possible to draw some conclusions about the relationship between economic profits and corporate tax payments since 2017.

The 2017 tax act both lowered the federal statutory corporate tax rate and expanded the definition of income subject to the corporate tax.<sup>1</sup> In 2018, CBO estimated that the act would increase incentives for investment, resulting in higher projected corporate profits that partially offset the negative net effect of those legislative changes on corporate tax receipts.<sup>2</sup> Corporate tax receipts as a share of GDP, which averaged 1.7 percent between fiscal years 1998 and 2017, have ranged between

1.0 percent and 1.7 percent in the fiscal years since 2017.<sup>3</sup> (Federal fiscal years run from October 1 to September 30 and are designated by the calendar year in which they end.) Consistent with the broadening of the corporate tax base, the gap between economic profits and the corporate tax base in calendar years 2018 and 2019 narrowed relative to its size in recent years.

### Trends in Economic Profits and Corporate Tax Payments

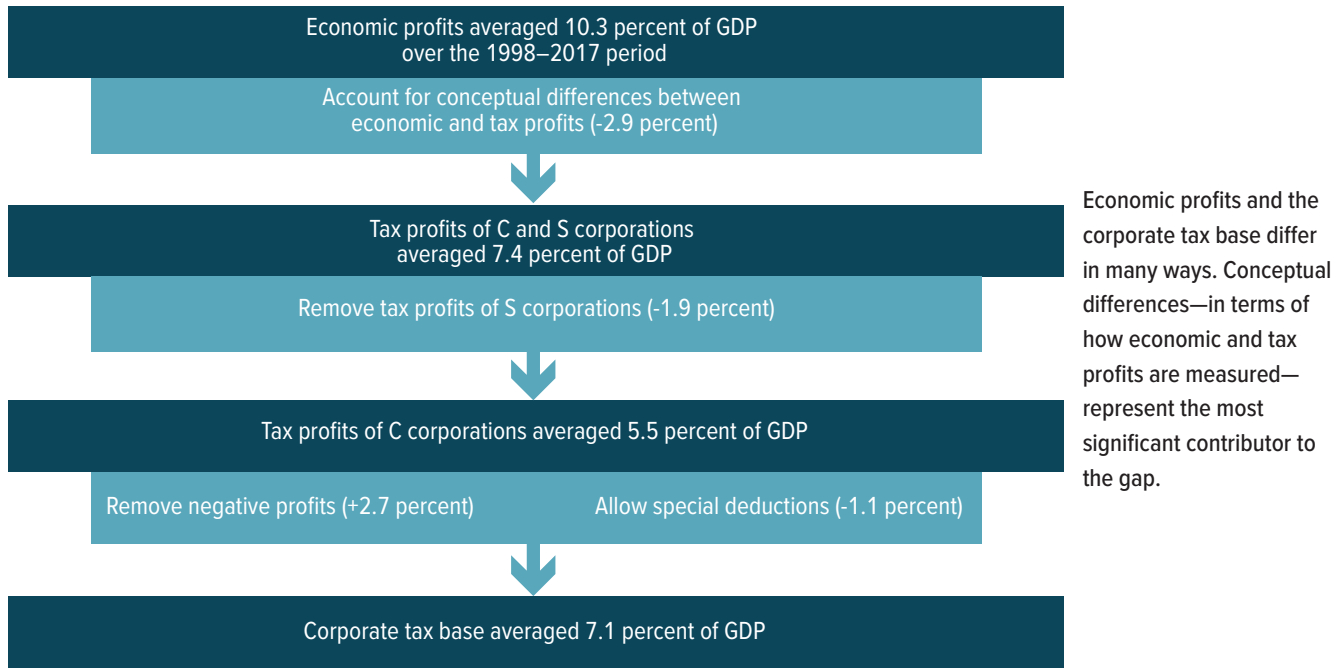
The Bureau of Economic Analysis (BEA) provides measures of both corporate economic profits and corporate tax payments. One might expect that those two series would move together over time, but from 1998 to 2017, economic profits as a share of GDP increased from

1. Although the period analyzed in this report—1998 to 2017—was not affected by the legislative changes included in the 2017 tax act, a portion of the decline in the corporate tax base that is evident in 2017 is probably attributable to the shifting of profits between 2017 and 2018. Those shifts took place because of the incentive to report income in 2018 to benefit from the reduction in the statutory corporate tax rate that occurred in that year.
2. For an analysis of the economic and budgetary effects of the 2017 tax act, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), Appendix B, [www.cbo.gov/publication/53651](http://www.cbo.gov/publication/53651).

3. For the post-2017 period, CBO focused on fiscal year corporate tax receipts rather than on the calendar year measure of corporate tax payments that was used for the main analysis in this report. CBO took that approach in order to analyze additional years in the post-2017 period. The measure of corporate tax payments, tabulated by the Bureau of Economic Analysis, that was used for the analysis of the 1998–2017 period is based on data from the Internal Revenue Service. As a result, only estimated values are available for 2020 through 2022. Data on fiscal year corporate tax receipts are available through 2022.

Figure 2.

## The Average Effect Over the 1998–2017 Period of Factors That Contributed to the Gap Between Economic Profits and the Corporate Tax Base



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

Tax profits are corporations' net income as defined under tax rules.

The corporate tax base is income that is subject to the corporate tax.

C corporations are labeled as such because they are taxed under subchapter C of the Internal Revenue Code. S corporations are entities that meet certain qualifications that allow them to pass through their profits to the owners of the corporation.

GDP = gross domestic product.

8.9 percent to 10.9 percent, whereas corporate tax payments showed no clear upward trend.<sup>4</sup>

Two main factors determine the path of corporate tax payments over time: federal statutory corporate tax rates and the amount of income subject to tax (that is, the corporate tax base). Over the 1998–2017 period, federal statutory corporate tax rates did not change, so

a reduction in rates does not account for the stability of corporate tax payments over a period when economic profits were rising. In contrast, differences between economic profits and the corporate tax base grew over that period: Specifically, the gap between the two series increased from 1.6 percent of GDP in 1998 to 5.8 percent in 2017 (see Figure 3).<sup>5</sup>

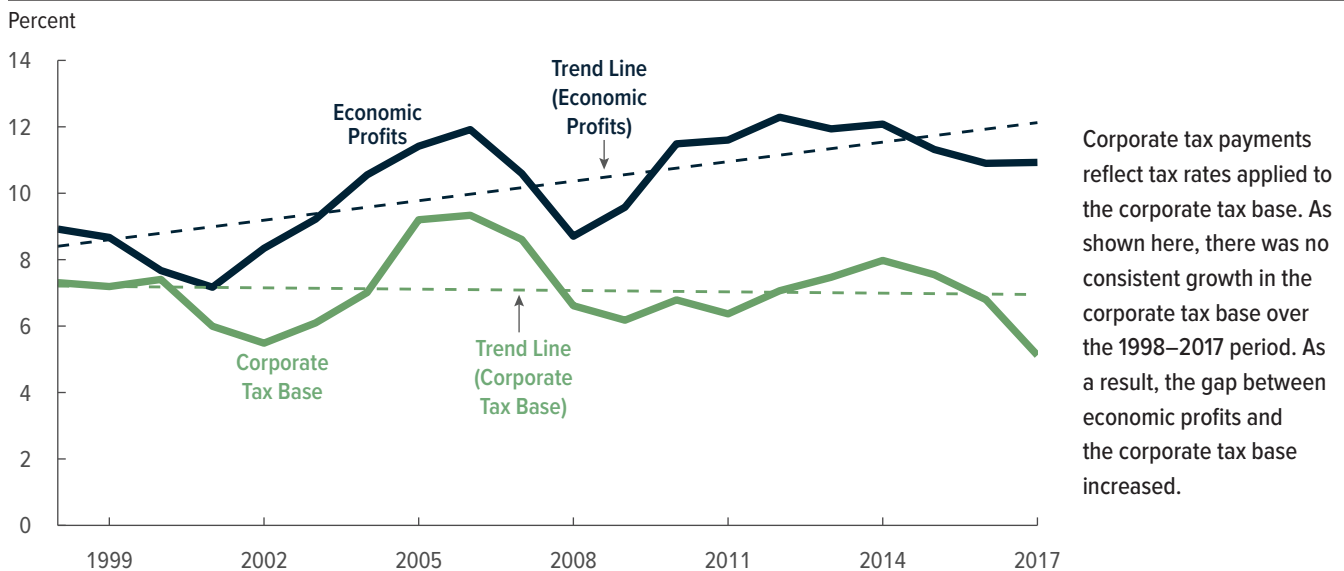
The path of BEA's measure of federal corporate tax payments also reflects credits allowed under the tax code—including foreign tax credits and investment tax credits—and adjustments that BEA makes for amendments and

4. As recorded in BEA's national income and product accounts, corporate economic profits are intended to measure the income from current production that is earned by U.S. corporations, whether in the United States or abroad. That measure is constructed so that it is independent of changes in tax law and includes the profits of all types of corporations (although some are not subject to the corporate tax). BEA's measure of federal corporate taxes differs from a measure of corporate tax receipts. Whereas corporate taxes for a given year represent the tax payments associated with income earned in that year, corporate tax receipts reflect tax payments as they are collected.

5. The measure of the corporate tax base used in this report is equal to the income of C corporations that is subject to taxation as detailed in Statistics of Income (SOI) publications. See, for example, Internal Revenue Service, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 2.3, <https://tinyurl.com/3eezcxfw>.

Figure 3.

## Economic Profits and the Corporate Tax Base as a Share of GDP



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

GDP = gross domestic product.

revisions.<sup>6</sup> An increase in the size of those credits and adjustments could also help explain why corporate tax payments have not increased with economic profits. If those credits and adjustments were increasing over time, then the ratio of federal corporate tax payments to the corporate tax base—which can be thought of as the average tax rate—would fall over time. That ratio is cyclical but has not exhibited a clear downward trend (see Figure 4).<sup>7</sup>

The rest of this report focuses on the growing gap between economic profits and the corporate tax base as the main explanation for why corporate tax payments have not grown with economic profits. To tie its budgetary projections to its economic projections, CBO uses economic profits as the starting point for its

projections of corporate tax receipts.<sup>8</sup> CBO's projections of the corporate tax base account for the many important differences in what economic profits and the corporate tax base measure, incorporating information on both longer-run trends and the projected effects of recent changes to the corporate tax system. Understanding what has contributed to the gap between economic profits and the corporate tax base historically and how those factors have changed over time has important implications for the methods CBO uses to project corporate tax receipts.<sup>9</sup>

### The Relationship Between Economic Profits and the Corporate Tax Base

Three major factors cause economic profits and the corporate tax base to differ: conceptual differences in the

6. BEA's adjustments account for changes in tax liability that result from audits and renegotiations. They also account for the value of tax refunds associated with current-year losses that are carried back to offset tax liability in a prior year.

7. During economic downturns, policies are frequently put in place that give corporations greater flexibility to carry losses back to past years and receive refunds for taxes that were paid in those prior years. Corporate taxes reflect the effect of those refunds. As a result, the average tax rate on the corporate tax base dips during recessions; that effect was especially clear in 2009 when the economy was emerging from the 2007–2009 recession. However, refunds from loss carryback are small relative to what would result if losses led to an immediate tax refund.

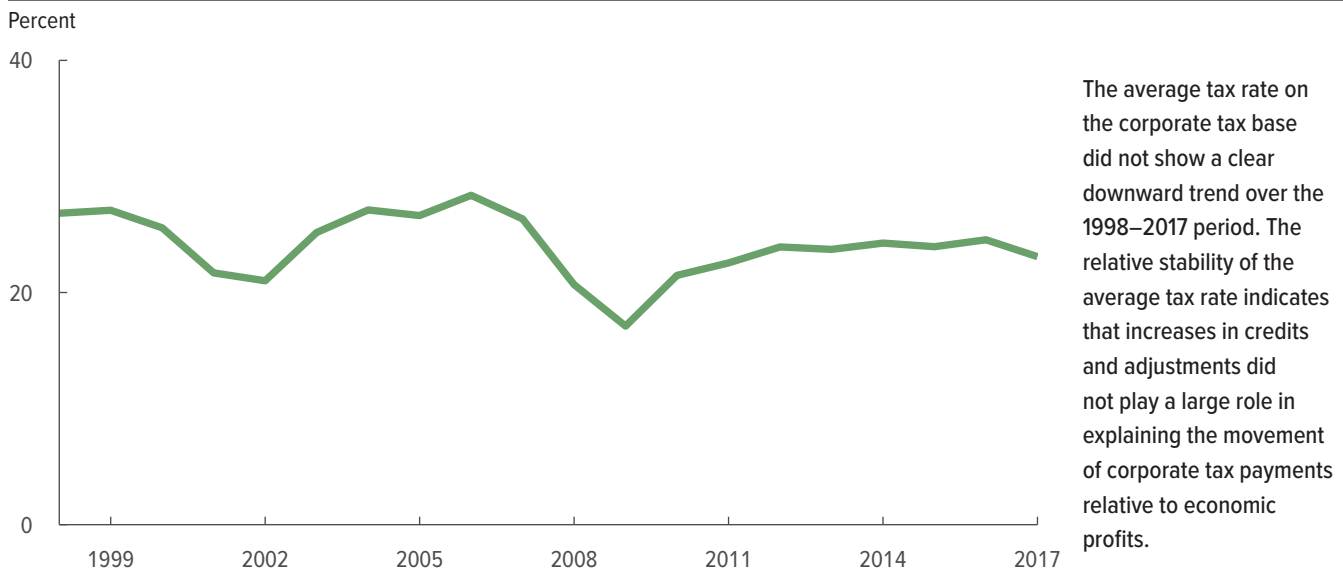
8. Corporate tax receipts as reported in CBO's baseline budget projections represent federal corporate tax payments collected in a given *fiscal* year. That differs from BEA's measure of corporate taxes, which records tax payments associated with activity in a specific *tax* year. Corporate tax receipts in a given fiscal year are heavily influenced by tax profits for that tax year, but some of those receipts are related to activities in earlier tax years.

9. CBO's projections of corporate income tax receipts are based on projections of BEA's measure of profits before taxes. For a crosswalk between that measure of profits and CBO's projections, see Congressional Budget Office, "Revenue Projections, by Category" (February 2023), Table 9, [www.cbo.gov/data/budget-economic-data#7](http://www.cbo.gov/data/budget-economic-data#7).



Figure 4.

## Average Tax Rate on the Corporate Tax Base



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

The corporate tax base is income that is subject to the corporate tax.

Economic profits are corporate profits from current production.

way income and deductions are defined for economic and tax purposes; differences in the set of corporations included in each measure; and differences in how losses affect each measure. The importance of each of the three factors in explaining the gap between economic profits and the corporate tax base has changed over time and has also tended to vary over the business cycle (see Figure 5).<sup>10</sup>

Conceptual differences in the way income and expenses are measured for economic versus tax purposes have consistently contributed to the gap. Those differences are important in explaining the widening gap between economic profits and the corporate tax base that occurred over the period considered in this report.

10. Earlier work exploring the decline in corporate tax payments through the 1960s and 1970s, and the pattern of corporate tax payments from 1983 to 2003, used a different framework. However, that work focused on similar explanatory factors and quantified the importance of those factors in explaining the gap between the statutory corporate tax rate and the average tax rate paid by corporations that were subject to the corporate tax. See Alan J. Auerbach and James M. Poterba, “Why Have Corporate Tax Revenues Declined?,” in Lawrence H. Summers, ed., *Tax Policy and the Economy* (National Bureau of Economic Research, 1987), <https://tinyurl.com/3t2ucchx> (PDF); and Alan J. Auerbach, *Why Have Corporate Tax Revenues Declined? Another Look*, Working Paper 12463 (National Bureau of Economic Research, August 2006), [www.nber.org/papers/w12463](http://www.nber.org/papers/w12463).

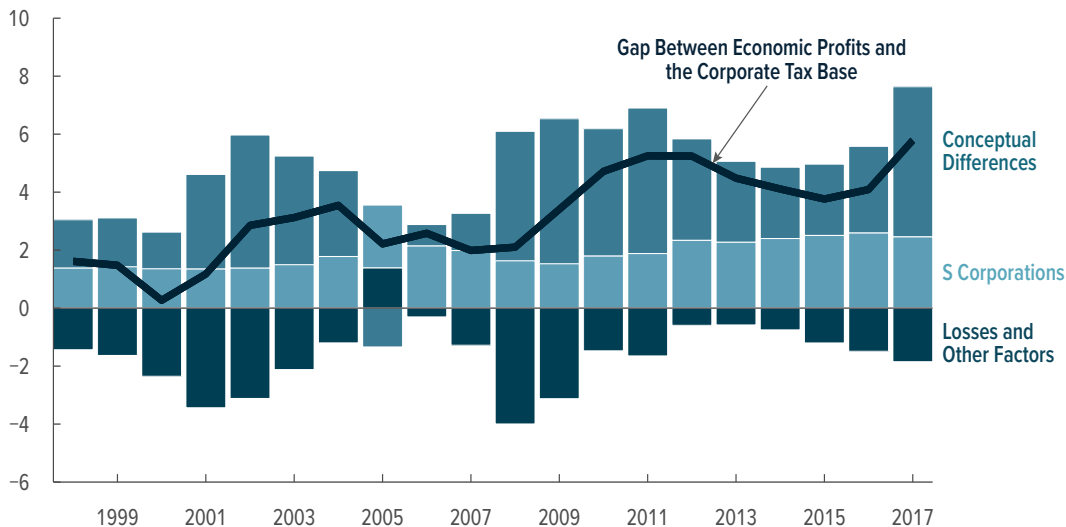
The inclusion of corporations that are not subject to corporate taxes (also known as corporate pass throughs) in measures of corporate economic profits has consistently caused economic profits to be larger than the corporate tax base. Specifically, S corporations (businesses that meet certain qualifications to be taxed under subchapter S of the Internal Revenue Code) are included in economic profits but are not subject to corporate taxes.<sup>11</sup> Only C corporations (so called because they are taxed under subchapter C of the Internal Revenue Code) are subject to the corporate income tax. The effect of including

11. Some types of corporations, specifically real estate investment trusts (REITs) and regulated investment companies (RICs), generate little to no economic profits and also have little to no income that is subject to the corporate tax. For the purposes of this report, REITs and RICs are excluded from tax profits and are assumed to generate no economic profits. If REITs and RICs generate economic profits, then that treatment will slightly alter the interpretation of the first factor (conceptual differences) because it will also capture slight compositional differences. Other types of pass throughs—sole proprietorships and partnerships—are not included in economic profits. The profits of those businesses are included as proprietors’ income in the national income and product accounts and so are not directly relevant in the context of this report. For a description of proprietors’ income, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 11: Nonfarm Proprietors’ Income, <https://tinyurl.com/2p9ajhpp>.

Figure 5.

## Components of the Gap Between Economic Profits and the Corporate Tax Base

Percentage of GDP



Economic profits and the corporate tax base differ in many ways. Over the 1998–2017 period, conceptual differences were the most significant contributor to the growth in the gap between the two series, but the cyclical nature of losses also played an important role.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

S corporations are entities that meet certain qualifications that allow them to pass through their profits to the owners of the corporation.

GDP = gross domestic product.

S corporations in measures of economic profits has grown slowly over time.

Economic profits are a net income concept, so they reflect current-year losses. By contrast, the corporate tax base excludes current-year losses. That exclusion partially offsets the effects of the first two factors and narrows the gap between the two series. The difference in the treatment of current-year losses helps explain why the gap between economic profits and the corporate tax base tends to decrease during economic downturns. When losses are especially large, the exclusion of losses does more to offset the other two factors. As the economy emerges from a recession and losses shrink, the offsetting effect of excluding losses gets much smaller and the gap between economic profits and the corporate tax base grows. Two periods of relatively rapid growth in the gap—in the early 2000s and between 2008 and 2011—occurred as the economy was emerging from recessions. The treatment of losses helps explain that growth.

### Conceptual Differences Between Economic and Tax Profits

The corporate tax base and economic profits are based on different concepts of profits.<sup>12</sup> Whereas corporate economic profits represent profits from current production, tax profits reflect policy choices about how to define net income.<sup>13</sup> As a result, there are conceptual differences in

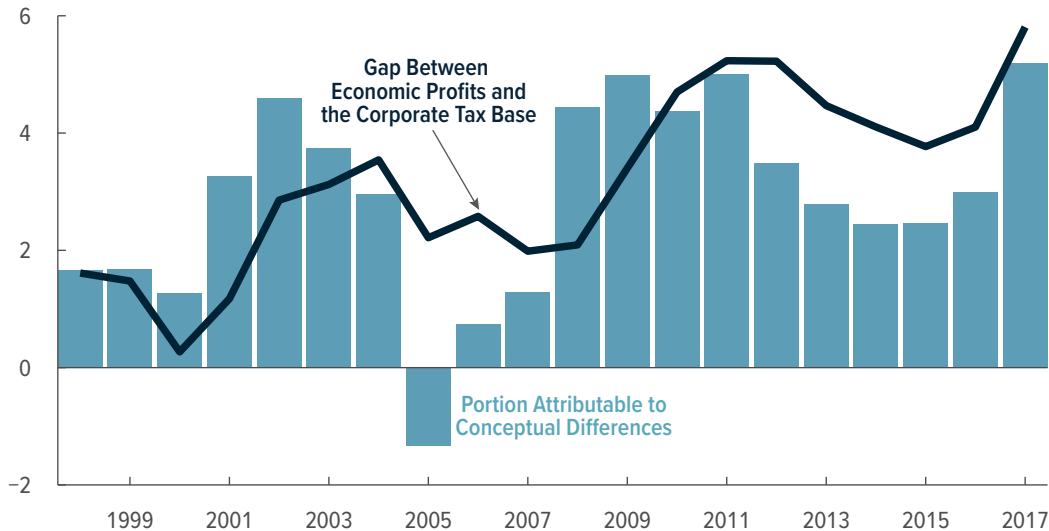
12. Book profits, or profits for financial-reporting purposes, are a third concept of profits. They differ from both economic profits and tax profits. For a discussion of different corporate income concepts, see Molly F. Sherlock and Jane G. Gravelle, *Minimum Taxes on Business Income: Background and Policy Options*, Report for Congress R46887, version 6 (Congressional Research Service, updated November 16, 2021), <https://tinyurl.com/2ejbwwb>.

13. BEA uses data from the Internal Revenue Service on total receipts less total deductions of all corporations as the starting point for its estimates of economic profits and then uses data from a variety of sources to adjust that measure of tax profits so that it captures income that U.S. corporations earn from production in the current year. For more information about the way economic profits are constructed, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 13: Corporate Profits, <https://tinyurl.com/2p9ajhpp>.

Figure 6.

## The Role of Conceptual Differences in Explaining the Gap Between Economic Profits and the Corporate Tax Base

Percentage of GDP



From 1998 to 2017, conceptual differences between economic and tax profits were a large component of the gap between economic profits and the corporate tax base. They also varied over time in a way that helps explain the year-to-year fluctuations in that gap.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

Tax profits are corporations' net income as defined under tax rules.

The corporate tax base is income that is subject to the corporate tax.

GDP = gross domestic product.

how income and expenses are defined for the purposes of measuring economic and tax profits.

Some of those conceptual differences reflect the fact that certain types of income or deductions are consistently included in one of the measures but excluded from the other. Other components reflect variations in tax policy over time, particularly how income and expenses are defined for tax purposes. Finally, tax profits reflect corporations' behavioral responses—specifically, their efforts to reduce the amount of taxes they owe. Those behaviors, which result in either understating income or overstating deductions, reduce tax profits.

Changes in the magnitude of conceptual differences closely mirror the growth in the gap between economic profits and the corporate tax base both in the early 2000s and between 2007 and 2011 (see Figure 6). The pattern of conceptual differences also mirrors what occurred after 2011, when the gap narrowed through 2015 and then widened in subsequent years.

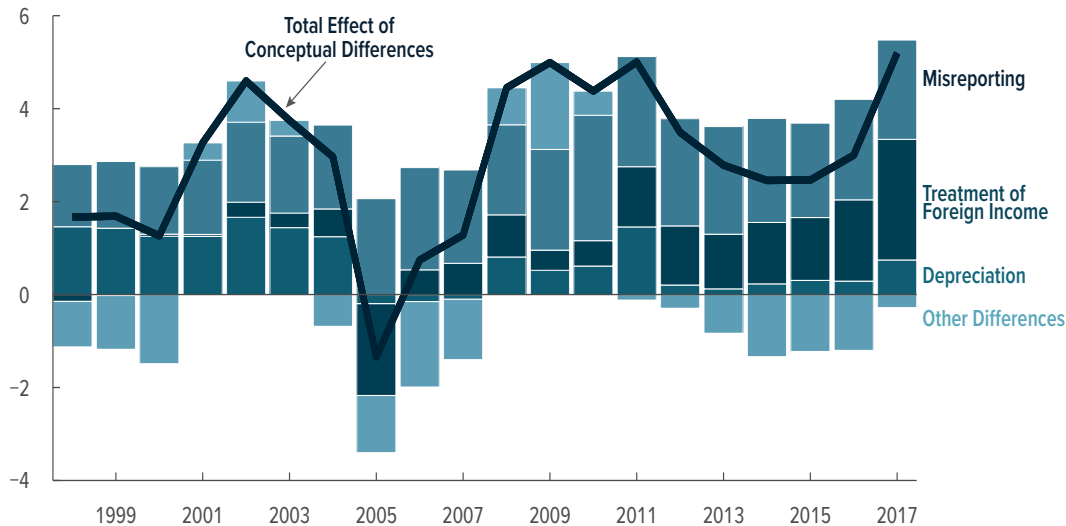
One major driver of the growth in conceptual differences is how the two measures treat foreign income (see Figure 7). Misreporting is also an important factor, although that effect has been more stable in recent years. Differences in the treatment of depreciation did not grow over the 1998–2017 period; however, the fluctuations caused by changing bonus depreciation over time aligned with fluctuations in the gap between economic and tax profits. When the effects of bonus depreciation were especially large—for instance, in the early 2000s and then again from 2008 to 2011—growth in the gap was especially strong.

**International Profits.** In measurements of economic profits and tax profits, international profits are treated differently. Because economic profits are a national income concept, they include all profits of U.S. corporations, whether earned in the United States or abroad. They do not include the profits that foreign corporations earn in the United States. Tax profits include all profits earned in the United States, whether by a foreign

Figure 7.

## Components of Conceptual Differences Between Economic Profits and Tax Profits

Percentage of GDP



The treatment of foreign income and the misreporting adjustment included in economic profits are two major reasons that conceptual differences between economic and tax profits grew over the 1998–2017 period.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

Tax profits are corporations' net income as defined under tax rules.

GDP = gross domestic product.

company or by a U.S. company, but they include only some of the foreign profits earned by U.S. corporations.

Those differences in the treatment of international profits are a significant conceptual difference between economic profits and tax profits. The exclusion of profits earned by foreign corporations in the United States reduces economic profits relative to tax profits. The U.S. profits of foreign corporations have grown over time, increasing from roughly 0.5 percent of GDP to 1.6 percent of GDP over the 1998–2017 period. That growth would push in the direction of narrowing the gap, so it is not discussed in greater detail in this report. In contrast, the treatment of the foreign profits of U.S. corporations tends to cause economic profits to exceed tax profits because the current foreign profits of U.S. corporations tend to exceed their taxable foreign income. That difference has grown over time and is one of the major drivers of conceptual differences.

Before provisions of the 2017 tax act went into effect, the foreign profits of U.S. corporations were statutorily subject to U.S. taxes. However, for some types of foreign

profits, those taxes were not assessed as the profits were earned but instead were due when foreign profits were distributed back to the United States, or repatriated.<sup>14</sup> As a result, some companies did not repatriate foreign profits for many years, meaning that a policy that theoretically created only a timing difference essentially created a permanent difference between economic profits and tax profits as some of those foreign profits were not repatriated during the period analyzed. Consequently, the current foreign profits of U.S. corporations consistently exceeded the taxable foreign profits of U.S. corporations from 2000 onward (see Figure 8).<sup>15</sup> That gap grew from

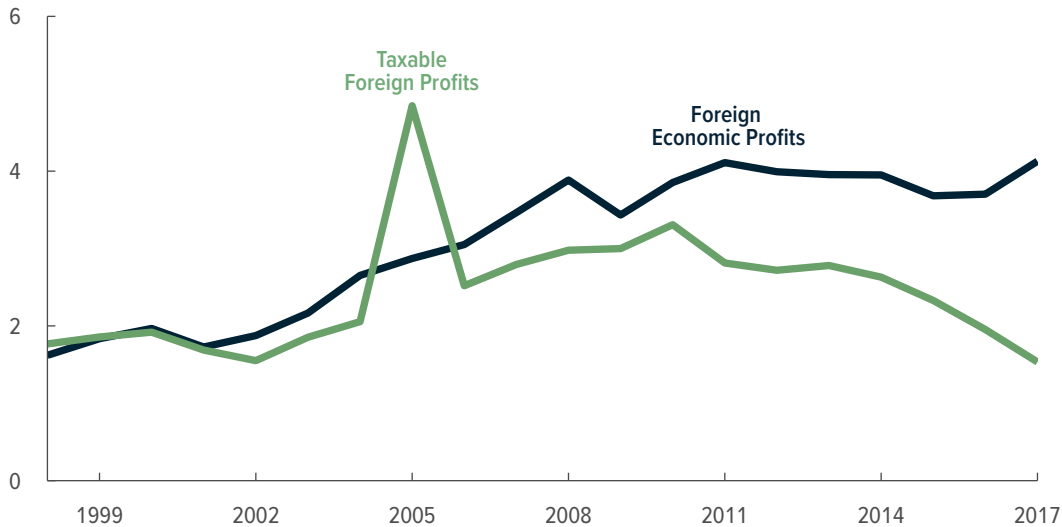
14. Certain types of foreign profits associated with highly mobile activity, sometimes referred to as subpart F income, were taxed as they were earned to limit profit shifting.

15. There was one exception to that general trend. In 2004, the American Jobs Creation Act (P.L. 108-357) implemented a “repatriation holiday,” which allowed companies to pay taxes on repatriated foreign profits at a 5.25 percent rate rather than the statutory rate of 35 percent. That policy resulted in a spike in taxable foreign profits in 2005 as companies repatriated accumulated foreign profits to benefit from the reduced tax rate. That repatriation caused tax profits to exceed economic profits in 2005.

Figure 8.

## A Comparison of Foreign Economic Profits and Taxable Foreign Profits

Percentage of GDP



One important conceptual difference between economic and tax profits is the treatment of the foreign profits of U.S. corporations. Throughout the 2000s, foreign profits included in the measure of economic profits consistently exceeded taxable foreign profits, partially reflecting corporations' increased use of profit-shifting strategies.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are profits from current production.

Tax profits are corporations' net income as defined under tax rules.

Foreign economic profits are the foreign profits that U.S. corporations earn from current production.

Taxable foreign profits are the foreign profits of U.S. corporations that are subject to U.S. corporate taxes in the current year. That measure includes some foreign profits from current production, but also foreign profits from other sources and other years.

GDP = gross domestic product.

about zero in the first few years of the 1998–2017 period to more than 2.5 percent of GDP by 2017.

The growing gap between foreign economic profits and taxable foreign profits occurred during a time when U.S. corporations were increasing their use of tax-minimization strategies to locate profits in low-tax foreign jurisdictions. That profit shifting increased for a variety of reasons, including the growing importance of assets that are hard to value, such as brand-name or intellectual property, and changes to tax rules that made it easier for foreign profits to go untaxed by the United States.<sup>16</sup> Profit shifting increases foreign eco-

omic profits, and the incentive to leave those profits abroad rather than repatriate them to the United States meant that taxable foreign profits did not grow with foreign economic profits.

**Misreporting.** Another difference between economic profits and tax profits is that corporations have an incentive to understate income and overstate expenses for tax purposes to reduce their tax liability. Because BEA's measure of economic profits is based on tax information, that agency uses data on audits from the Internal Revenue Service (IRS) to make an adjustment for the effect that misreporting on tax returns has on tax profits.<sup>17</sup> That adjustment increases economic profits relative to tax profits.

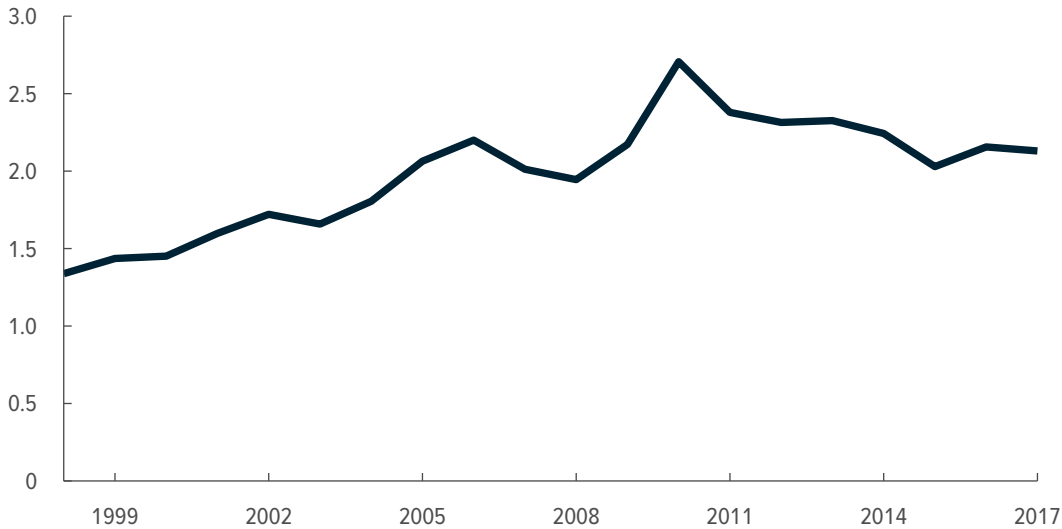
16. In particular, regulations introduced in 1996 made it easier for U.S. corporations to avoid U.S. federal taxation of certain foreign income flows by allowing the corporations to classify foreign subsidiaries as disregarded entities for tax purposes. Those regulations are often referred to as the check-the-box rule. The increase in profit shifting has been documented by many researchers. For example, see Mark P. Keightley, *An Analysis of Where American Companies Report Profits: Indications of Profit Shifting*, Report for Congress R42927, version 4 (Congressional Research Service, January 18, 2013), <https://sgp.fas.org/crs/misc/R42927.pdf>.

17. For a description of BEA's misreporting adjustment, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 13: Corporate Profits, pp. 23–24, <https://tinyurl.com/2p9ajhpp>. The adjustment to profits that is estimated on the basis of audits finalized in a specific year is applied to prior-year economic profits. For years extending beyond the IRS's most recent audit data, the adjustment is based on an extrapolation from the value in the last published year.

Figure 9.

## Effects of the Misreporting Adjustment on the Differences Between Economic Profits and Tax Profits

Percentage of GDP



Economic profits include an adjustment for misreporting on tax returns. That adjustment grew through 2010 and stabilized in more recent years. That pattern is consistent with how the relationship between economic profits and the corporate tax base changed over the 1998–2017 period.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

Tax profits are corporations' net income as defined under tax rules.

The corporate tax base is income that is subject to the corporate tax.

GDP = gross domestic product.

Unlike the measure of the corporate tax base, corporate tax payments do account for some underreporting. Corporate tax payments reflect postaudit tax payments, so they capture the effect of *detected* misreporting. That contrasts with economic profits, which include an adjustment intended to account for *all* underreporting.

Overall, the misreporting adjustment has grown over time, increasing from 1.3 percent of GDP in 1998 to 2.1 percent of GDP in 2017 (see Figure 9). That increase helps explain the growing gap between economic profits and the corporate tax base. Audit adjustments can capture a variety of forms of misreporting. Profit shifting is one example of how corporations may understate the amount of income subject to U.S. taxation. Some of the recent rise in misreporting could be attributable to an increase in audit adjustments that relabel foreign income as U.S. income. Consequently, the inclusion of that income in the misreporting adjustment could result in some double counting of profits in the economic-profits measure because economic profits already include the foreign profits of U.S. corporations. The data available to BEA do not identify the reason for the audit adjustment, so it is not possible to distinguish audit adjustments that

arise from profit shifting from adjustments that arise from other sources.

### Differences in the Patterns of Depreciation

**Deductions.** When a corporation purchases an asset that will generate value over time, it generally calculates economic profits by deducting the cost of the purchase over the expected life of the asset. For the calculation of tax profits, the cost is also generally deducted over time, but tax rules typically allow corporations to accelerate those deductions—that is, to deduct the cost over a shorter period relative to the life of the asset used for economic depreciation. In addition to allowing that general acceleration of deductions, lawmakers have also frequently allowed companies to deduct more of the cost of certain assets in the year of purchase—that is, to take advantage of bonus depreciation.<sup>18</sup>

18. BEA includes an adjustment to eliminate the effects of bonus depreciation. For a description of that adjustment, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 13: Corporate Profits, pp. 4–5, <https://tinyurl.com/2p9ajhpp>.

Figure 10.

## Effects of Tax Depreciation on the Differences Between Economic Profits and Tax Profits

Percentage of GDP



Another important conceptual difference between economic and tax profits is how deductions for the depreciation of assets are calculated. Tax depreciation is generally accelerated relative to economic depreciation—that is, the cost of the asset is deducted over a shorter period. That difference in the timing of deductions tends to reduce tax profits relative to economic profits.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

Tax profits are corporations' net income as defined under tax rules.

Economic depreciation measures the decline in the actual economic value of an asset over time.

Tax depreciation refers to how the tax code allows a business to deduct the cost of an asset over time.

GDP = gross domestic product.

When the tax depreciation of a company's investments is accelerated relative to economic depreciation, that effect tends to reduce tax profits relative to economic profits in the year the investment is made. In later years of the depreciation period, the effects of that accelerated depreciation will increase the company's tax profits relative to economic profits because less of the cost remains to be deducted. Observed total deductions for depreciation in a given year reflect both initial deductions for new investments and deductions for earlier investments. On net, accelerated depreciation tends to reduce tax profits relative to economic profits, partially because, if economywide investment is growing over time, the effects of larger tax deductions for new investment tend to more than offset the effects of smaller tax deductions for earlier investments.

Differences in the patterns of economic depreciation and tax depreciation have frequently caused economic profits to exceed tax profits (see Figure 10).<sup>19</sup> That effect has not

consistently grown over the past two decades, so it does not help explain the general trend in the gap. However, during periods when depreciation differences had a large positive effect—for example, from 2008 to 2011—the gap tended to widen.<sup>20</sup>

**Other Factors.** Other conceptually important differences between economic and tax profits are not emphasized in this report because they did not grow in a way that would help explain the increasing gap between

of the asset, rather than on the purchase price. That difference in the way changes in prices affect economic versus tax profits is considered separately from differences in the patterns of depreciation deductions.

19. One other important difference between economic profits and tax profits is the way depreciation is treated when those measures are calculated: Specifically, when economic profits are calculated, depreciation deductions are based on the current value

20. From 2005 to 2007, bonus depreciation was not an option for most investments, so larger deductions for current-year investments did not push down tax profits. As a result, the adjustment for tax depreciation reflects the effects of bonus depreciation in earlier years. For investments made in those earlier years, the remaining depreciation deductions for tax purposes were smaller than those used for the calculation of economic profits, a difference that elevated tax profits relative to economic profits.

economic profits and the corporate tax base.<sup>21</sup> The total effect of other differences was not large in most years of the 1998–2017 period (see Figure 7 on page 8). However, those factors help explain why the gap between economic profits and tax profits tends to grow during economic downturns. Those factors also contributed to the decrease in the gap between economic and tax profits that was evident starting in 2012.

Among the other important differences between measures of economic profits and tax profits are the way the following types of income and expenses are treated.

- **Capital gains.** Tax profits include capital gains and losses from the sale of property. Because economic profits represent profits from current production, capital gains are excluded from that measure. That treatment of capital gains generally reduces economic profits relative to tax profits. Capital gains tend to be larger during economic expansions and smaller during downturns. As a result, they are one of the factors that cause the gap between economic profits and tax profits to be smaller during economic expansions and larger during economic downturns.
- **Bad debt.** Tax profits allow for the deduction of expenses related to bad debt (debt that is not repaid). Because those expenses are not associated with current production, they are not deducted in the calculation of economic profits. That difference in treatment increases economic profits relative to tax profits. Bad debt—which generally tends to be larger during economic downturns and as the economy emerges from such a downturn—is another

contributor to the larger gap between economic profits and tax profits during those periods.

- **Dividends.** Dividends received by corporations are included in tax profits. Because dividends do not represent profits from current production, they are excluded from economic profits. That treatment of dividends generally reduces economic profits relative to tax profits. Some categories of dividends are not taxed at the statutory rate. Special deductions for those dividends mean that the effect of the inclusion of dividends on the corporate tax base is smaller than the effect on tax profits. (The effect of special deductions is discussed in the section of this report titled “Tax Treatment of Losses and Certain Other Types of Income.”)
- **Income from changes in the prices of retained assets and inventory.** Profits that result from changes in the prices of assets or inventory are excluded from economic profits but included in tax profits. That difference in treatment generally reduces economic profits relative to tax profits.<sup>22</sup>
- **Profits of corporations that do not pay taxes.** Federal Reserve banks, federally sponsored credit agencies (such as Federal Home Loan Banks), and some nonprofits are exempt from federal income taxes.<sup>23</sup> BEA includes the profits of those entities as part of economic profits, but those entities are not included in the measurement of tax profits because they are not subject to taxation. Those entities differ from corporate pass throughs, whose profits are not subject to corporate income taxes but are subject to individual income taxes.

21. As reported in BEA’s reconciliation of economic profits and tax profits, REITs and RICs contribute to some of those other differences. See Bureau of Economic Analysis, “National Data: National Income and Product Accounts,” Table 7.16, <https://tinyurl.com/5b399ekn>. That is likely to be especially true for adjustments related to the treatment of capital gains and dividends. However, because this section examines the difference between the economic profits of all corporations and the tax profits of all corporations except REITs and RICs, those effects are excluded from the “Other Differences” portion of the decomposition of conceptual differences shown in this section. The portion of the foreign income, tax depreciation, and misreporting adjustments that could be attributed to REITs and RICs is probably very small, but any effect they have on those adjustments would lead to a slight misallocation between those adjustments and the “Other Differences” component. As a result, the “Other Differences” component would also pick up slight compositional differences between the measures of economic profits and tax profits.

### The Growing Number of Corporations That Are Not Subject to the Corporate Tax

A corporation is an incorporated business that can act as a legal entity that is separate from its owners. The analysis of conceptual differences described in the previous

- 22. Specifically, BEA makes adjustments that exclude profits arising from changes in the value of capital assets as part of its adjustment for depreciation (CCAdj) and that exclude profits arising from changes in the value of inventory as part of its adjustment for inventory valuation (IVA). There are other ways in which changes in prices affect tax profits and economic profits differently. Those differences—which are considered separately in this report—are reflected in the treatment of capital gains and losses.
- 23. The profits of the Federal Reserve banks, after dividends, are paid as remittances to the U.S. Treasury.



**Box 1.****The Role of Other Types of Pass Throughs**

S corporations are a type of pass-through business, so called because the profits are passed through to the owners of the business rather than being taxed at the entity level. Other types of pass-through businesses are also organized as corporations: real estate investment trusts (REITs) and regulated investment companies (RICs). The income of REITs and RICs is composed almost entirely of income from sources that are excluded from economic profits—namely, interest, dividends, and capital gains. As a result, they have little or even a negative effect on the Bureau of Economic Analysis’s (BEA’s) measure of corporate profits. They are largely set aside for the purposes of this report because their growth would not help explain the growing divergence between economic profits and the corporate tax base.<sup>1</sup>

1. See Robert Kornfeld, *Investment Funds in the U.S. National Accounts*, Working Paper 2019-5 (Bureau of Economic Analysis, July 2019), <https://tinyurl.com/3zf7xzwz> (PDF).

Other types of pass throughs, such as sole proprietorships, limited liability companies, and partnerships, are not organized as corporations. The profits of those businesses are not included in economic profits but instead are included within proprietors’ income in BEA’s national income and product accounts. Because of their inclusion in proprietors’ income, sole proprietorships and partnerships do not contribute to the divergence between economic profits and the corporate tax base. However, the growth of those noncorporate pass throughs means that economic profits capture a smaller portion of business income now than they did in the past.<sup>2</sup>

2. The definition of taxable income varies by organizational form. For a discussion of the growth of pass throughs and how to create a consistent measure of business income, see James Pearce, “Measuring Aggregate Business Income With Tax Data,” *National Tax Journal*, vol. 68, no. 4 (December 2015), pp. 1025–1046, <https://dx.doi.org/10.17310/ntj.2015.4.06>.

section compared economic profits with the tax profits of C corporations and S corporations. C corporations are subject to the corporate income tax. S corporations pass their profits through to the owners of the corporation. Those profits are then subject to the individual income tax rather than the corporate income tax. (For a discussion of other types of pass-through businesses, see Box 1.)

Over time, a growing share of corporations have organized as S corporations rather than C corporations. The increasing number of S corporations contributes to the gap between economic profits, which include the profits of all corporations, and the corporate tax base, which includes only the profits of C corporations. Although that development reduces corporate tax revenues, individual taxes are paid on that income, so the net effect on federal tax collections is smaller than the effect on corporate tax collections.

The effect of S corporations on the gap between economic profits and the corporate tax base grew from 1.4 percent of GDP in 1998 to 2.5 percent of GDP in 2017 (see Figure 11). Over that same period, the gap between economic profits and the corporate tax base grew from 1.6 percent of GDP to 5.8 percent of GDP. As a result, although S corporations are an important

contributor to the gap between economic profits and the corporate tax base, they account for only about a quarter of the recent growth in that gap.<sup>24</sup>

One way to see the growing importance of S corporations is to look at the share of tax profits earned by C corporations. The tax profits of C corporations as a share of the tax profits of C and S corporations combined have fallen over time (see Figure 12).<sup>25</sup> That share

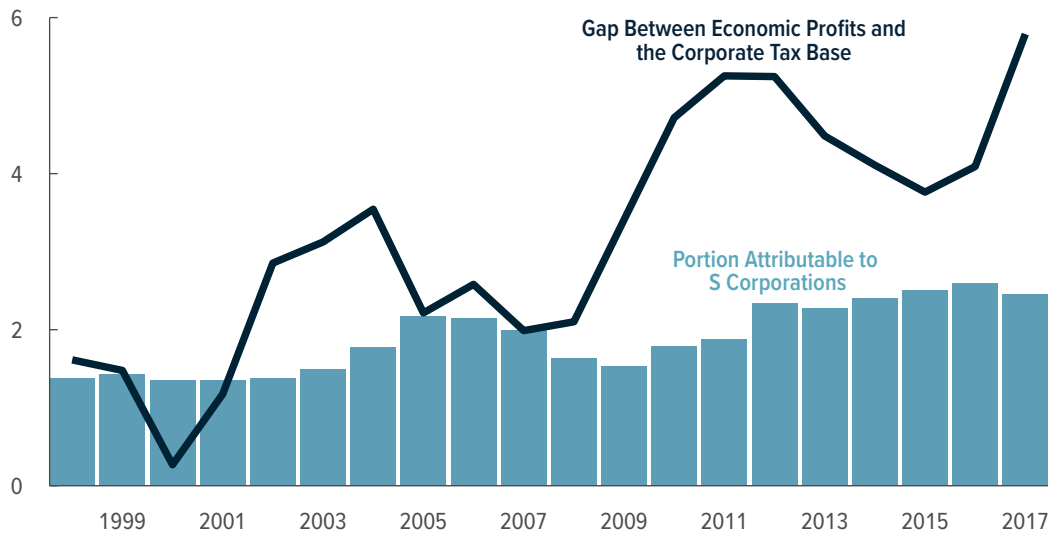
24. One of the challenges in measuring the effects of S corporations on the growing divergence between economic profits and the corporate tax base is that information on income by type of corporation is systematically available only for tax profits, not for economic profits. Recent research by BEA suggests that S corporations earn a slightly larger share of economic profits than tax profits. That would suggest that removing S corporations before considering conceptual differences between economic profits and tax profits would cause the portion of the gap attributed to S corporations to be slightly larger and the portion of the gap attributed to conceptual differences to be slightly smaller. See Howard Krakower and others, *Prototype NIPA Estimates of Profits for S Corporations* (Bureau of Economic Analysis, May 17, 2021), <https://tinyurl.com/5btwwc6r> (PDF).

25. The drop in C corporations’ share in 2017 is probably slightly exaggerated because they had an incentive to shift tax profits from 2017 into 2018. That incentive was more limited for S corporations, so the shifting would show up as a reduction in C corporations’ share in 2017.

Figure 11.

## Contribution of the Growth of S Corporations to the Gap Between Economic Profits and the Corporate Tax Base

Percentage of GDP



The inclusion of S corporations in economic profits consistently has a positive effect on the gap between economic profits and the corporate tax base. However, that effect grew only slightly over the 1998–2017 period. Consequently, it does not appear to be a significant contributor to the growth in the gap.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

S corporations are entities that meet certain qualifications that allow them to pass through their profits to the owners of the corporation.

GDP = gross domestic product.

is especially small during economic downturns because the losses of C corporations tend to be larger during downturns than the losses of S corporations.<sup>26</sup>

The attractiveness of organizing as an S corporation may have increased over time for a number of reasons.<sup>27</sup> One important factor is the difference between individual and

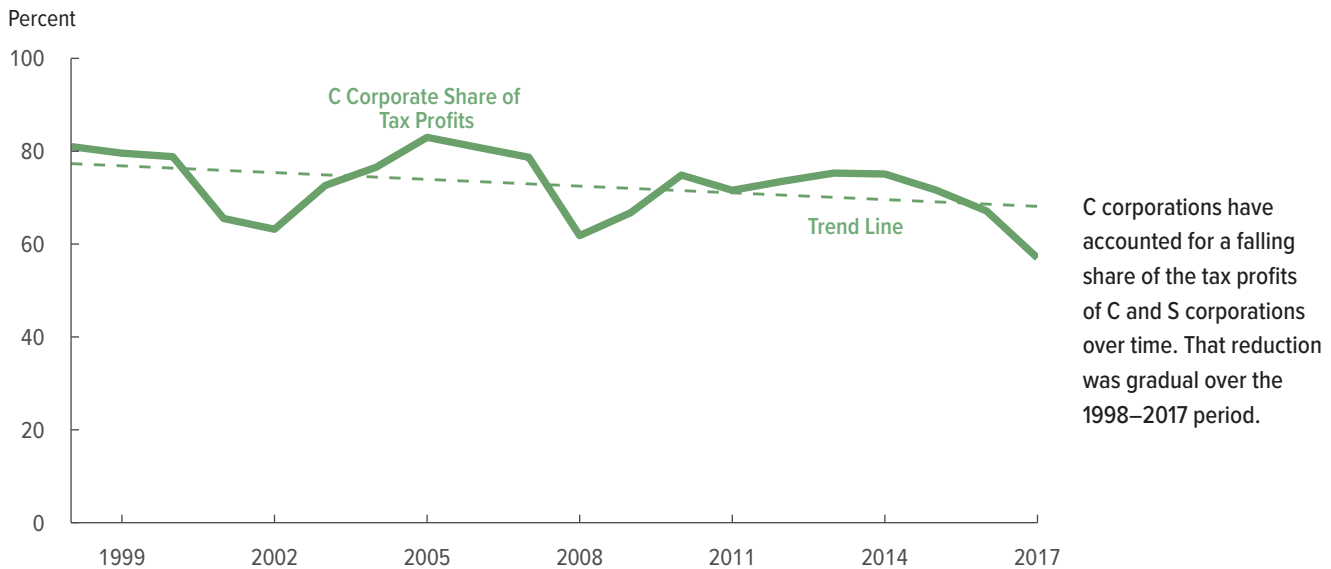
corporate tax rates. The Tax Reform Act of 1986 lowered top marginal individual rates relative to top marginal corporate rates. (The marginal tax rate is the percentage of an additional dollar of income that is paid in taxes.) Another important factor relates to the limitations placed on S corporations. Only businesses that meet certain criteria can organize as S corporations. Those limitations have been relaxed over time. The changing criteria mean that the S corporate form has become an option for a broader set of businesses, although it still is not an option for corporations with significant foreign operations. Finally, C corporations generally have greater access to capital markets than S corporations. As a result, C corporations tend to be more dominant in capital-intensive sectors, such as manufacturing. As the composition of the economy has changed over time and shifted more toward services, which are less capital intensive, that pattern may have contributed to the declining share of tax profits earned by C corporations.

26. That difference partially reflects differences in the concentration of C corporations and S corporations in different sectors of the economy, but the reasons for the difference in the magnitude of losses are not fully understood. This pattern of S corporate losses relative to C corporate losses has been documented in various studies. For example, see Katherine Lim, Elena Patel, and Molly Saunders-Scott, “Examining S-Corporation Losses and How They Are Used,” *National Tax Journal*, vol. 71, no. 4 (December 2018), pp. 661–686, <https://tinyurl.com/3k3syxtr>; and Rosanne Altshuler and others, “Understanding U.S. Corporate Tax Losses,” in Jeffrey R. Brown and James M. Poterba, eds., *Tax Policy and the Economy, Volume 23* (National Bureau of Economic Research, 2009), [www.nber.org/chapters/c10572](http://www.nber.org/chapters/c10572).

27. For a more detailed discussion of those reasons, see Congressional Budget Office, *Taxing Businesses Through the Individual Income Tax* (December 2012), [www.cbo.gov/publication/43750](http://www.cbo.gov/publication/43750).

Figure 12.

## The Tax Profits of C Corporations as a Share of the Tax Profits of C and S Corporations



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Tax profits are corporations' net income as defined under tax rules.

C corporations are labeled as such because they are taxed under subchapter C of the Internal Revenue Code.

S corporations are entities that meet certain qualifications that allow them to pass through their profits to the owners of the corporation.

### Tax Treatment of Losses and Certain Other Types of Income

The final factor that affects the relationship between economic profits and the corporate tax base is how certain types of income are treated by the tax code. That factor can be broken down into three components: the exclusion of current-year losses from the corporate tax base; the inclusion of deductions for past losses in the corporate tax base; and special deductions for certain types of income that are exempted from taxation or taxed at a reduced rate. Of those differences, the tax treatment of current-year losses has the largest effects. On net, those components generally increase the corporate tax base relative to economic profits. Because of the importance of the treatment of losses, the role of those components is highly cyclical and, together, they tend to shrink the gap between economic profits and the corporate tax base by larger amounts during economic downturns (see Figure 13). Those components became less negative between 2001 and 2004 and again between 2008 and 2012, providing a partial explanation for the growth in the gap over those periods.

**Tax Treatment of Current-Year Losses.** Losses do not affect economic profits and the corporate tax base in the

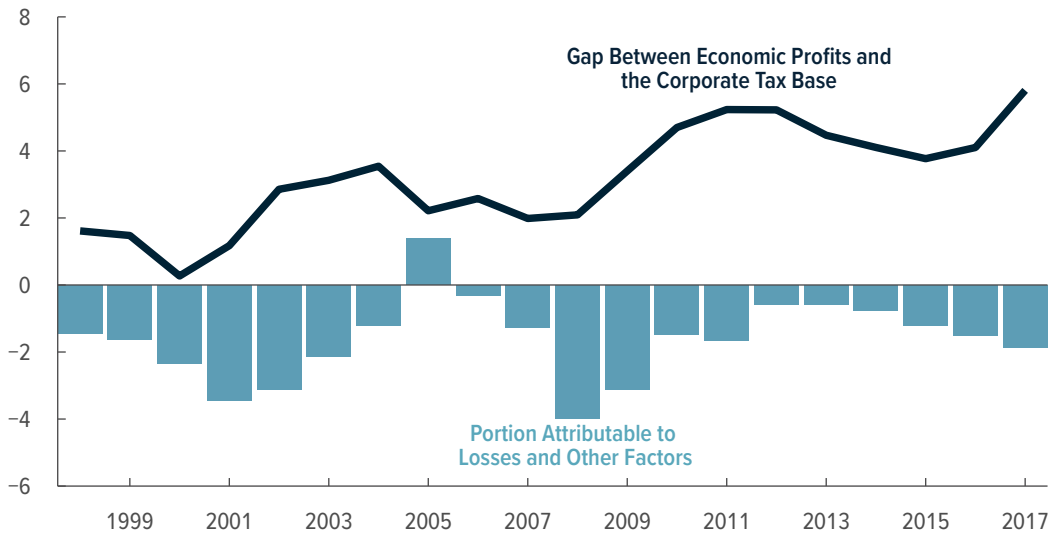
same way. Economic profits are a net concept, meaning they include corporations with both positive profits and losses. In contrast, losses are generally excluded from the corporate tax base in the year they occur, and corporations must carry the value of the loss to another year to offset positive taxable income in that year. As a result, the corporate tax base is more closely related to positive tax profits than to the net concept of tax profits. If losses were immediately realized, they would result in a negative tax liability—that is, an immediate refund—and the corporate tax base would be more closely related to a net concept of profits. Instead, over the years considered in this report, corporations could either carry losses back to a prior period and file for a refund on taxes paid in that period, or they could carry losses forward and use the losses to offset positive tax profits in that future period.<sup>28</sup> Losses that are carried back and applied to a prior year's

28. The number of years that a loss can be carried back or carried forward has varied over time. Over much of the period considered here, the loss carryback period was 2 years, and the loss carryforward period was 20 years. The 2017 tax act eliminated carryback for most losses, although the Coronavirus Aid, Relief, and Economic Security Act of 2020 (P.L. 116-136) included provisions that allowed losses from 2018, 2019, and 2020 to be carried back up to 5 years.

Figure 13.

## Contribution of the Tax Treatment of Losses and Other Types of Income to the Gap Between Economic Profits and the Corporate Tax Base

Percentage of GDP



The special treatment of certain types of income in the calculation of the corporate tax base tends to increase the corporate tax base relative to economic profits. That effect largely reflects the exclusion of current-year losses from the corporate tax base, so the effect is highly cyclical and helps explain the reduction in the gap during economic downturns.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

GDP = gross domestic product.

tax liability generate refunds in the current year that reduce total corporate tax payments but do not affect the current-year corporate tax base.<sup>29</sup> Losses that are carried forward will affect the corporate tax base in the year the loss is used.

**Special Deductions.** There is one significant difference between positive tax profits and the corporate tax base. The tax base includes the effects of a variety of special deductions for certain types of income that are either untaxed or taxed at a reduced rate. Deductions for prior losses are by far the largest component of special deductions for C corporations.<sup>30</sup> Other special deductions are

generally for certain types of dividends received and tend to be very small, although they can have a significant effect in certain years.<sup>31</sup>

**Relative Importance of Losses and Special Deductions.** The exclusion of current losses from the tax base consistently offsets the effects of the conceptual and compositional differences that cause the corporate tax base to be lower than economic profits (see Figure 14). Losses spike during economic downturns and then decrease as the economy emerges from recessions. That tendency helps explain the pattern in the gap between economic profits and the corporate tax base through the 2007–2009 recession, when the gap stabilized as losses grew and then grew rapidly as losses shrank.

29. The share of losses carried back is usually relatively small but varies depending on the number of years included in the carryback window. One study from 2006 indicates that, for losses that occurred between 1993 and 2003, the share carried back averaged about 15 percent and never exceeded 25 percent, even in a period with a 5-year carryback window. See Michael Cooper and Matthew Knittel, “Partial Loss Refundability: How Are Corporate Tax Losses Used?,” *National Tax Journal*, vol. 59, no. 3 (September 2006), pp. 651–663, <https://tinyurl.com/as3dwuba>.

30. Data in a report produced by the IRS indicate that, in most years, deductions for past losses account for at least 90 percent

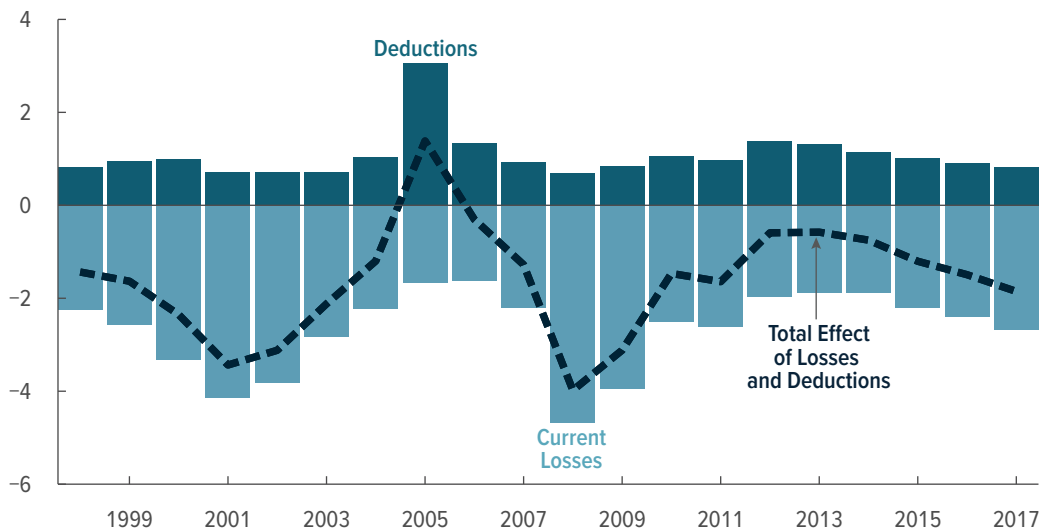
of C corporations’ special deductions. See Internal Revenue Service, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 11 (2014–2017), <https://tinyurl.com/37nccuys>, and Table 20 (earlier years), <https://tinyurl.com/yv8ncptr>.

31. The magnitude of the deduction varies among different types of dividends. Dividends and their associated deductions are reported on Schedule C of IRS Form 1120.

Figure 14.

## The Treatment of Current-Year Losses Relative to Deductions for Net Operating Losses and Special Deductions

Percentage of GDP



The exclusion of current-year losses shrinks the gap between economic profits and the corporate tax base. That effect is cyclical but showed no clear trend over the 1998–2017 period. The effect of the exclusion is only partially offset by deductions for prior losses and special deductions.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

Special deductions that are allowed under the tax code either exempt certain sources of income from taxation or reduce the tax rate on that income.

GDP = gross domestic product.

Special deductions are generally small in magnitude relative to current-year losses, indicating that prior losses used in any given year are quite small relative to current losses. The spike in special deductions in 2005 was a result of the repatriation holiday, during which the reduced tax rate on repatriated foreign income was instituted by allowing a deduction for a portion of the income that was repatriated.

### The Relationship Between Economic Profits and Corporate Tax Payments After 2017

Changes to the tax code can include changes to how income and deductions are defined for tax purposes. Those changes can directly affect the gap between economic profits and the corporate tax base; they can also cause behavioral responses that affect that gap. In recent years, the 2017 tax act has made significant changes to the tax code, altering tax rates and the tax base in ways that continue to affect the gap between economic profits and the corporate tax base (see Table 1). Starting in 2023, there will also be a new minimum tax on corporations that will affect the relationship between economic

profits and corporate tax payments. In addition to those changes, there have been international discussions about changing the taxation of foreign income in ways that would affect the gap.

#### The 2017 Tax Act

The 2017 tax act made significant changes to the tax base that have narrowed conceptual differences between economic and tax profits. It also included changes that have significantly increased special deductions by creating new categories of income that are subject to taxation at reduced statutory rates. The increased special deductions have reduced the corporate tax base, partially offsetting the effects of the narrowing of conceptual differences since 2018. The change in the corporate tax rate may also affect businesses' choices about organizational form in the future.

#### Changes to Conceptual Differences Between

**Economic and Tax Profits.** The 2017 tax act narrowed conceptual differences between economic and tax profits in two major ways. First, the act changed the taxation of foreign income and created a new category of foreign

Table 1.

## How the 2017 Tax Act Has Changed the Components of the Gap Between Economic Profits and the Corporate Tax Base

<p><b>Major changes to conceptual differences in definitions of profits</b></p>	<p>Changes to how income and deductions are defined for tax purposes:</p> <ul style="list-style-type: none"> <li>▪ A new form of foreign taxable income, GILTI, reduces the gap.</li> <li>▪ Reduced deductibility for interest expenses reduces the gap.</li> <li>▪ Modifications to how the cost of capital investments can be deducted, including 100 percent expensing through 2023, increase and then reduce the gap.</li> </ul> <p>Behavioral changes:</p> <ul style="list-style-type: none"> <li>▪ The reduction in the statutory rate lowers misreporting, which reduces the gap.</li> </ul>
<p><b>Changes that could affect choices about organizational form</b></p>	<p>A reduction in the statutory rate increases the attractiveness of organizing as a C corporation rather than as an S corporation, which reduces the gap.</p>
<p><b>Changes to the treatment of losses and special deductions</b></p>	<p>Increased special deductions increase the gap. Those include the following:</p> <ul style="list-style-type: none"> <li>▪ GILTI;</li> <li>▪ FDII; and</li> <li>▪ Foreign dividends.</li> </ul> <p>Limits on loss carryforward deductions reduce the gap.</p>
<p><b>Changes to the relationship between the corporate tax base and tax payments</b></p>	<p>The elimination of loss carrybacks smooths the relationship between the corporate tax base and taxes paid.</p>

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

C corporations are labeled as such because they are taxed under subchapter C of the Internal Revenue Code.

S corporations are entities that meet certain qualifications that allow them to pass through their profits to the owners of the corporation.

FDII = foreign-derived intangible income; GILTI = global intangible low-taxed income.

income—global intangible low-taxed income (GILTI)—that is subject to U.S. federal taxes, at a reduced rate, in the year it is earned. The inclusion of that type of foreign income in tax profits has reduced the gap between taxable foreign profits and current foreign profits. Second, the 2017 tax act disallowed the inclusion of some interest

expenses in the calculation of tax profits. Those expenses are fully deductible for calculating economic profits, so that change has introduced a new conceptual difference that narrows the gap between economic profits and tax profits. Other, smaller changes have also narrowed the gap. For example, the elimination of the deduction

for domestic production activities has reduced the gap between economic profits and tax profits.

Other changes included in the 2017 tax act have affected the timing of when expenses are realized for tax purposes. For example, bonus depreciation tends to widen the gap between economic and tax profits in the years that large tax depreciation deductions are allowed but then temporarily narrows the gap in future years when deductions remain for the calculation of economic profits. The 2017 tax act also increased the ability of some smaller corporations to deduct the full cost of certain investments in the year they are made. That similarly has caused a disconnect between the timing of tax-depreciation deductions and economic-depreciation deductions.

In addition, the amount of income excluded from tax profits because of misreporting may decline because the 2017 tax act reduced the top statutory corporate tax rate from 35 percent to 21 percent.<sup>32</sup> A lower corporate tax rate reduces the incentive for the types of tax avoidance and evasion that are captured by BEA's misreporting adjustment. A reduction in the foreign economic profits earned by U.S. corporations could also occur because the lower statutory rate, the inclusion of GILTI in the tax base, and a new deduction for some U.S. earned income—foreign-derived investment income (FDII)—all reduce the incentives for profit shifting. That reduction would narrow the gap between the economic foreign profits and taxable foreign profits.

**Changes That Could Affect Choices About Organizational Form.** The reduction in the corporate tax rate has the potential to affect the share of tax profits earned by S corporations. That reduction, combined with changes to the individual tax code that reduce taxes on S corporations' income, has not significantly altered the attractiveness of structuring as a C corporation

instead of as an S corporation relative to prior law. However, the changes to the individual income tax code are temporary; so, if many provisions of the 2017 tax act expire, as scheduled, at the end of 2025, the attractiveness of structuring as an S corporation will diminish. As a result, an increasing share of businesses might choose to structure as C corporations rather than as S corporations.

**Changes to the Treatment of Losses and New Special Deductions.** The 2017 tax act also made changes that have had a large effect on the third factor considered in the analysis underlying this report—the tax treatment of losses and other specific income sources. The new category of foreign income created by the 2017 tax act, GILTI, is subject to taxation at a reduced rate, so the act also created a new special deduction for that form of income. Similarly, the 2017 tax act created a 100 percent deduction for some foreign dividends received and a deduction that allows for a reduced tax rate on FDII. Those new deductions associated with foreign-earned income increase the magnitude of special deductions, which has widened the gap between economic profits and the tax base.

Losses will also have a different effect on the corporate tax base in the future because of changes stemming from the 2017 tax act. Those changes include the creation of a new limit on how much income can be offset by losses carried forward to that year, a factor that reduces special deductions, and the elimination of the ability to carry losses back to offset positive taxable income in past years.<sup>33</sup> The elimination of loss carrybacks, and the refunds associated with those carrybacks, has the potential to further smooth the average tax rate, tightening the relationship between corporate tax payments and the corporate tax base.

**The Corporate Tax Base Since 2017.** The 2017 tax act significantly reduced the corporate tax rate but also broadened the tax base. The fact that corporate tax receipts as a share of GDP have remained within

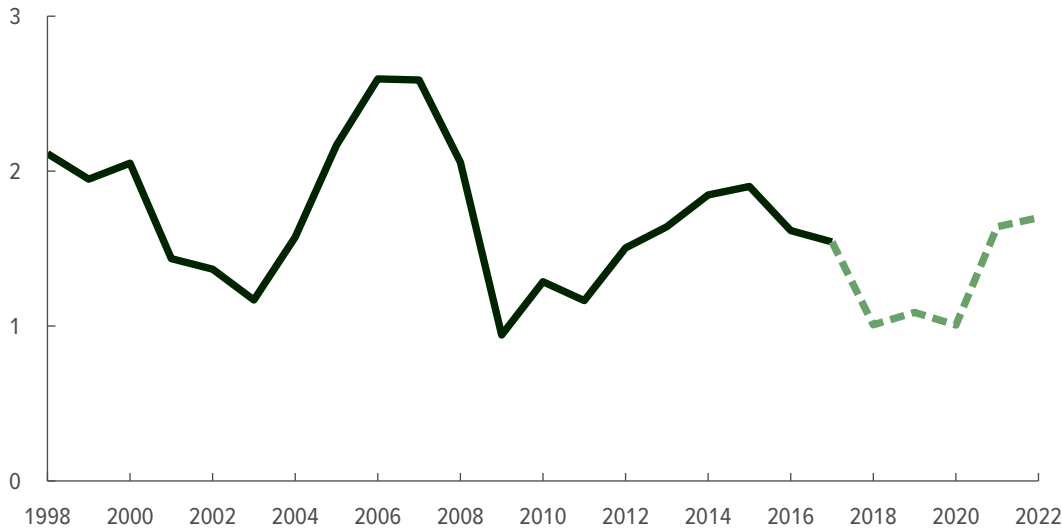
32. The change in the rate created an incentive for taxpayers to shift tax profits from 2017 to 2018 to benefit from the lower rate in 2018. For documentation of that shifting of taxable income, see Timothy Dowd, Christopher P. Giosa, and Thomas Willingham, "Corporate Behavioral Responses to the TCJA for Tax Years 2017–2018," *National Tax Journal*, vol. 73, no. 4 (December 2020), pp. 1109–1134, <https://tinyurl.com/t83s3vw9>. The reduction in tax profits in 2017 meant that the gap between economic profits and tax profits looked especially large in 2017 but much smaller in 2018. Part of that reduction in 2018 was attributable to that onetime behavioral shift rather than the permanent changes that reduced the gap.

33. The Coronavirus Aid, Relief, and Economic Security Act, which was enacted in response to the coronavirus pandemic, made changes to the tax treatment of losses incurred in 2018, 2019, and 2020. Those changes included reinstating loss carrybacks (with a five-year window) and suspending the limitation on loss carryforward deductions.

Figure 15.

## Fiscal Year Corporate Tax Receipts as a Share of GDP Before and After Enactment of the 2017 Tax Act

Percent



The 2017 tax act reduced the statutory corporate tax rate by about 40 percent. However, in the years since 2017, that reduction in the rate has not resulted in a significant reduction in corporate tax receipts as a share of GDP. That relative stability reflects a combination of large profits in recent years and the effects of the base-broadening provisions of the 2017 tax act.

Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

The 2017 tax act refers to Public Law 115-97.

GDP = gross domestic product.

historical bounds in the fiscal years after 2017 illustrates the offsetting effects of those changes (see Figure 15).<sup>34</sup>

One way of understanding the magnitude of the base broadening included in the 2017 tax act is to examine how CBO's projections of the corporate tax base relative to economic profits in the future compare with recent history (see Figure 16). Between 1998 and 2017, the corporate tax base averaged about 70 percent of the value of economic profits. Before the 2017 tax act was enacted, CBO projected that the corporate tax base would remain at a similar percentage relative to economic profits. The agency now projects that, if current law remained

unchanged, the value would average about 87 percent in the coming decade.<sup>35</sup>

### Book Minimum Tax

As of 2023, corporations are subject to a minimum tax that is based on book profits (profits as calculated for the purposes of financial accounting). If 15 percent of a corporation's adjusted book profits exceeds the corporation's normal tax liability, then the corporation will have to pay the difference.<sup>36</sup> Book profits differ from both economic

34. CBO also estimated that the act would increase incentives for investment, resulting in higher projected corporate profits that would partially offset the negative net effect of the legislative changes on corporate tax receipts. For a discussion of the economic effects of the 2017 tax act, see Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028* (April 2018), Appendix B, [www.cbo.gov/publication/53651](http://www.cbo.gov/publication/53651).

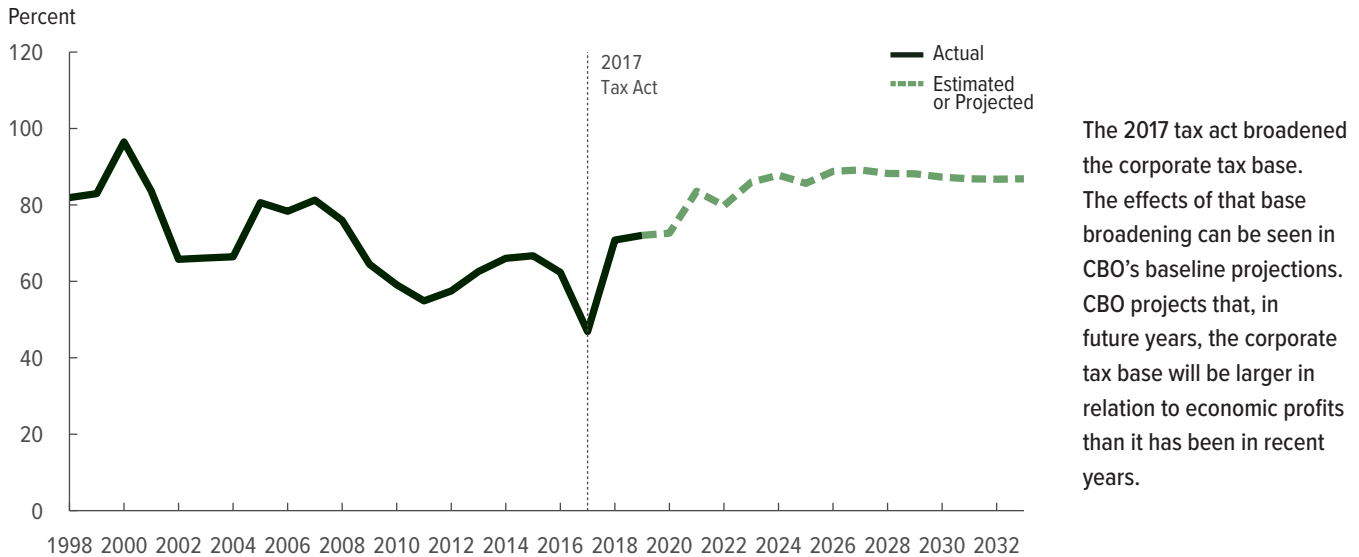
35. The diminishing of the corporate tax base relative to economic profits in 2017 and then the expansion in 2018 were probably a result of the strategies that corporations used to shift tax profits from 2017 to 2018 to benefit from the lower rate in 2018. Some of those strategies did not affect when income was recognized for the purposes of calculating economic profits.

36. The measure of adjusted book profits used for the book minimum tax allows a corporation to use tax-depreciation deductions in the calculation of book profits. Corporations will also be allowed to claim deductions for net operating losses against their book income; the liability associated with the book minimum tax can then be offset with foreign tax credits.



Figure 16.

## The Corporate Tax Base as a Share of Economic Profits Before and After Enactment of the 2017 Tax Act



Data source: Congressional Budget Office. See [www.cbo.gov/publication/58267#data](http://www.cbo.gov/publication/58267#data).

Values from 2020 onward are CBO's estimates. Those estimates are based on the most recent data available when CBO was developing the projections for its February 2023 baseline.

Economic profits are corporate profits from current production.

The corporate tax base is income that is subject to the corporate tax.

The 2017 tax act refers to Public Law 115-97.

profits and tax profits.<sup>37</sup> However, incorporating book profits in the calculation of corporate tax liability will most likely reduce the gap between economic profits and the corporate tax base in the future because the book minimum tax will increase the amount of foreign income subject to corporate taxes. Additionally, because the minimum tax on book profits will reduce or eliminate the benefits of forms of misreporting that reduce tax profits,

while leaving book profits unchanged, misreporting will most likely be reduced.

### Possible Changes in the Future

Recent proposals could further alter the relationship between economic profits and the corporate tax base. Proposals have been made both in the United States and internationally to implement a minimum tax on foreign earnings. Such a tax would expand the scope of earnings subject to the tax on GILTI in the United States and narrow the gap between economic profits and the corporate tax base by including a larger fraction of foreign earnings in the corporate tax base.<sup>38</sup>

37. Extensive research focuses on the “book-tax difference”—that is, the difference between profits recorded for financial-reporting purposes and profits recorded for tax purposes. That literature focuses on both the reasons for differences and the pros and cons of using book income for tax purposes. See, for example, Danielle H. Green and George A. Plesko, “The Relation Between Book and Tax Income Since the Introduction of the Schedule M-3,” *National Tax Journal*, vol. 69, no. 4 (December 2016), pp. 763–784, <https://tinyurl.com/2bhdjvan>; and Michelle Hanlon and Terry Shevlin, “Book-Tax Conformity for Corporate Income: An Introduction to the Issues,” in Robert A. Moffitt, ed., *Tax Policy and the Economy*, vol. 19 (National Bureau of Economic Research, 2005), <https://doi.org/10.1086/tpe.19.20061897>.

38. For a discussion of proposed changes in the United States, see, for example, Department of the Treasury, *General Explanations of the Administration's Fiscal Year 2022 Revenue Proposals* (May 2021), pp. 4–8, <https://tinyurl.com/sf4jmjrv> (PDF). For details on another minimum tax proposal, see Organisation for Economic Co-operation and Development, *Tax Challenges Arising From the Digitalisation of the Economy—Global Anti-Base Erosion Model Rules (Pillar Two)* (December 20, 2021), <https://tinyurl.com/53jr56tw>.



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# Glossary: Key Terms Related to Corporate Economic Profits and Tax Payments

## General Definitions

**corporate tax base.** In this report, the corporate tax base refers to income that is subject to the corporate tax. Unlike both economic profits and tax profits, the corporate tax base is *not* a net concept—that is, it includes positive profits but excludes losses in the current period. The corporate tax base is equivalent to the positive tax profits of C corporations with adjustments for deductions for past losses (specifically, net-operating-loss, or NOL, deductions) and other special deductions. The measure used in this report is equal to the income of C corporations that is subject to taxation as detailed in Statistics of Income (SOI) publications. For example, see Internal Revenue Service, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 2.3, <https://tinyurl.com/3eezcxfw>.

**corporate tax payments.** Corporate tax payments in this report are consistent with what is measured on tax returns for a given calendar year—that is, they measure the tax payments and refunds associated with activity during that year. Those payments and refunds can occur across several fiscal years. That measure is closely connected to the SOI’s measure of tax after credits but includes the effects of audits, renegotiations, and carry-back refunds. For the data series used in this report, see Bureau of Economic Analysis (BEA), “National Data: National Income and Product Accounts,” Table 3.2, row 8, <https://tinyurl.com/472rushh>. For a description of BEA’s measure of corporate tax payments, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 13: Corporate Profits, <https://tinyurl.com/2p9ajhpp>.

**corporate tax receipts.** Corporate tax receipts as shown in the federal budget and in the Congressional Budget Office’s baseline budget projections represent federal corporate tax payments collected in a given fiscal year. (Federal fiscal years run from October 1 to September 30 and are designated by the calendar year in which they

end.) Those collections are heavily influenced by tax profits for that tax year, but some collections are attached to activities in earlier tax years. For example, for tax year 2016, three estimated payments would have been made in fiscal year 2016, with the fourth estimated payment and the final payment occurring in fiscal year 2017. That is, for a taxpayer whose tax year ends in December, estimated payments for tax year 2016 would have been due in April 2016, June 2016, September 2016, and January 2017, with final payments made in April 2017. Filing extensions, amended returns, and audits can further affect the degree to which fiscal year receipts reflect activity in the current tax year versus activity in past years. CBO estimates that 63 percent of the corporate tax receipts in fiscal year 2016 related to activity for tax year 2016; the remainder related to activity in prior years.

**economic profits.** Economic profits in this report refer to corporate profits from current production—sometimes referred to as corporate profits with IVA (the inventory valuation adjustment) and CCAdj (the capital consumption adjustment)—as reported in the U.S. national income and product accounts produced by BEA. For the data series used in this report, see Bureau of Economic Analysis, “National Data: National Income and Product Accounts,” Table 1.13: National Income by Sector, Legal Form of Organization, and Type of Income, row 7, <https://tinyurl.com/4ephyk66>. For a discussion of BEA’s concepts of economic profits and corporate taxes and how they differ from concepts based on tax data, see Bureau of Economic Analysis, *NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts* (December 2020), Chapter 13: Corporate Profits, <https://tinyurl.com/2p9ajhpp>.

**tax profits.** In this report, the term “tax profits” is used to describe corporations’ net income as defined under tax rules. That measure excludes real estate investment trusts (REITs) and regulated investment companies (RICs) but includes both C and S corporations. Tax profits are

a net concept—that is, they include both positive profits and losses—and they do not include deductions for net operating losses or special deductions. The measure used in this report is equal to the Internal Revenue Service’s (IRS’s) measure of the net income (less deficit) of C corporations plus the IRS’s measure of net income (less deficit) of S corporations. See Internal Revenue Service, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 2.3 and Table 2.4, <https://tinyurl.com/37nccuys>.

### Terms Related to Conceptual Differences Between Economic and Tax Profits: Treatment of International Profits

**foreign economic profits.** In this report, foreign economic profits are the profits from current production that are earned overseas by U.S. corporations. Foreign profits are reported by BEA. See Bureau of Economic Analysis, “National Data: National Income and Product Accounts,” Table 6.16D, row 6, <https://tinyurl.com/yckvdd29>.

**international profits.** International profits are the difference between the current foreign economic profits of U.S. corporations and the current U.S. profits of foreign corporations. International profits are reported by BEA. See Bureau of Economic Analysis, “National Data: National Income and Product Accounts,” Table 6.16D, row 5, <https://tinyurl.com/yckvdd29>.

**taxable foreign profits.** Taxable foreign profits are the foreign profits of U.S. corporations that are subject to U.S. corporate taxes in the current year. That measure includes some foreign profits from current production, as well as foreign profits from other sources and other years. The measure of taxable profits is equal to the sum of foreign income brought back to the United States as reported by BEA (income on equities in foreign corporations and branches) and constructive taxable foreign income reported by the IRS. See Bureau of Economic Analysis, “National Data: National Income and Product Accounts,” Table 7.16, row 17, <https://tinyurl.com/37m2hemu>; and Internal Revenue Service, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 2.1, row 73, <https://tinyurl.com/37nccuys>.

### Terms Related to Conceptual Differences Between Economic and Tax Profits: Treatment of Depreciation

**accelerated depreciation.** Depreciation is said to be accelerated when deductions for the depreciation of an asset are larger in earlier years or are allowed over a shorter period than the actual economic depreciation of the asset.

**bonus depreciation.** Bonus depreciation refers to a tax policy that allows an additional portion of the cost of an asset to be deducted in the year that the asset is purchased.

**economic depreciation.** Economic depreciation measures the decline in the actual economic value of an asset over time. It also accounts for differences in the current value of an asset in relation to its historical cost.

**tax depreciation.** Tax depreciation refers to how the tax code allows a business to deduct the cost of an asset over time. It is generally accelerated relative to economic depreciation and is typically based on the historical cost of acquiring an asset. (See Internal Revenue Service, “How to Depreciate Property,” Publication 946, [www.irs.gov/pub/irs-pdf/p946.pdf](http://www.irs.gov/pub/irs-pdf/p946.pdf).) Tax depreciation usually includes the effects of both the deductions allowed under the Modified Accelerated Cost Recovery System and special depreciation allowances such as bonus depreciation.

### Types of Businesses

**C corporation.** A C corporation, so called because it is taxed under subchapter C of the Internal Revenue Code, is a corporation that is taxed separately from its owners. Profits are taxed at the entity level under the corporate tax. Profits distributed as dividends or realized as capital gains are also subject to the individual income tax.

**pass-through business.** A pass-through business is a business that passes its income through to its owners rather than having that income be subject to a tax at the entity level. That income is included as part of the individual income tax base rather than as part of the corporate income tax base. S corporations and partnerships are common types of pass-through businesses.

**REIT.** A real estate investment trust is a type of pass-through business. REITs are funds used to invest in real estate properties. Those funds allow individuals to pool resources to invest in such properties without having to directly purchase a commercial real estate property. Although REITs are considered corporations, almost all of their income is distributed to their investors and taxed under the individual income tax. REITs earn limited economic profits, so they have little to no effect on measures of economic profits; and because dividends paid out to shareholders are exempt from the corporate tax, REITs rarely pay corporate taxes.

**RIC.** A regulated investment company is a type of pass-through business. RICs are investment funds—for example, mutual funds—that pass their income through to shareholders. RICs are corporations, but they do not earn economic profits, so they have little to no effect on economic profits. Because income paid out as dividends to shareholders is exempt from the corporate tax, RICs rarely pay corporate taxes.

**S corporation.** An S corporation is a type of pass-through business that meets the requirements to be taxed under subchapter S of the Internal Revenue Code. S corporations pass their income, losses, deductions, and credits through to their shareholders, and the shareholders

report that income and those losses on their individual income tax returns.

## Losses and Special Deductions

**losses.** As used in this report, losses refer to the sum of negative profits. Current losses of C corporations as shown in this report are reported by the IRS. See Internal Revenue Service, *SOI Tax Stats—Integrated Business Data*, Table 1, row 27, <https://tinyurl.com/yye2vjrf>.

**special deductions.** Certain types of income are allowed a special deduction that either exempts that income from taxation or reduces the tax rate on that income. Special deductions are reported on IRS Form 1120 (in recent years, on line 29b). As shown in this report, the special deductions of C corporations with positive tax profits are calculated as the difference between the positive tax profits of C corporations as reported by the IRS and the income of C corporations that is subject to taxation as reported by IRS. See Internal Revenue Service, *SOI Tax Stats—Integrated Business Data*, Table 1, row 26, <https://tinyurl.com/yye2vjrf>; and, *SOI Tax Stats—Corporation Income Tax Returns Complete Report*, Publication 16, Table 2.3, <https://tinyurl.com/37nccuys>.

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# About This Document

This report, which is part of the Congressional Budget Office’s continuing efforts to make its work transparent, supplies information on the historical relationship between economic profits and the corporate tax base, which is an important factor in CBO’s projections of corporate income tax receipts. In keeping with CBO’s mandate to provide objective, impartial analysis, the report makes no recommendations.

Molly Saunders-Scott prepared the report with guidance from John McClelland and Joseph Rosenberg. Christine Ostrowski, James Pearce, Jeffrey Schafer, and Jennifer Shand offered comments.

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CBO seeks feedback to make its work as useful as possible. Please send comments to [communications@cbo.gov](mailto:communications@cbo.gov).



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