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Federal Tax Compliance Research:

Tax Gap Projections for Tax Years

2020 & 2021

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Federal Tax Compliance Research: Tax Gap Projections for Tax Years 2020 and 2021

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Executive Summary

This report presents projections of the tax gap for the Tax Years (TY) 2020 and 2021. It also provides revised projections for the TY 2017–2019 time frame that incorporates data that were not yet available when the projections were initially released. The tax gap is a measure of the level of overall noncompliance, in the context of Internal Revenue Code provisions in effect at the time. The estimates provide the Internal Revenue Service (IRS) with periodic appraisals of the nature and extent of noncompliance for use in formulating tax administration strategies. The word “tax” in the phrase “tax gap” is used broadly to encompass both tax and refundable and nonrefundable tax credits.

TY 2021 Tax Gap Projection

- Gross Tax Gap: $688B
- Voluntary Compliance Rate: 84.9%
- Enforced & Other Late Payments: $63B
- Net Tax Gap: $625B
- Net Compliance Rate: 86.3%

The gross tax gap is the amount of true tax liability that is not paid voluntarily and timely. **The projected annual gross tax gap for TY 2021 is $688 billion** (Figure 1). The voluntary compliance rate (VCR) is a ratio measure of relative compliance and is defined as the amount of “tax paid voluntarily and timely” divided by “total true tax,” expressed as a percentage. **The projected VCR is 84.9 percent**.

The TY 2021 gross tax gap comprises three components:

- Nonfiling (tax not paid on time by those who do not file on time, $77 billion),
- Underreporting (tax understated on timely filed returns, $542 billion), and
- Underpayment (tax that was reported on time, but not paid on time, $68 billion).

The net tax gap is the gross tax gap less tax that subsequently will be paid, either voluntarily but late or collected through IRS administrative and enforcement activities. The net tax gap is the portion of the gross tax gap that will not be paid. **A projected $63 billion of the gross tax gap eventually will be paid, resulting in a TY 2021 net tax gap of $625 billion**. The net compliance rate (NCR) is defined as the sum of “tax paid voluntarily and timely” and “enforced and other late payments” divided by “total true tax,” expressed as a percentage. **The projected NCR is 86.3 percent**.

The tax gap projections are also segmented by type of tax. Figure 1 shows that individual income tax makes up the largest components of the tax gap, contributing $520 billion to the gross tax gap and $475 billion to the net tax gap for TY 2021. The second and third largest components involve the employment tax, which includes self-employment, and the corporation income tax.

Comparison with Previous Projections

Many factors contribute to differences over time in both the gross tax gap and the VCR. These include factors such as the overall level of economic activity, changes in the composition of economic activity, for example shifts toward those activities with higher or lower compliance rates, changes in tax law and tax administration practices, updated data and improved methodologies, and changes in underlying compliance behavior on the part of taxpayers, tax preparers, and other tax advisors.

The TY 2021 projected gross tax gap increased even though the Voluntary Compliance Rate of 84.9% is the same as the revised TY 2017–2019 projection.

The projected VCR for TY 2021 (84.9 percent) is the same as the revised TY 2017–2019 projection, (Table 1). This finding is largely expected since the projection methodology assumes

that reporting compliance behavior has not changed since the TY 2014–2016 time frame. However, the TY 2021 gross and net tax gap projections of $688 billion and $625 billion, respectively, are higher than their respective revised TY 2017–2019 projections by $138 billion (gross) and by $144 billion (net). These increases of 25 percent (gross) and 30 percent (net) are similar to the more than 25 percent increase in true tax liability shown in the table. For comparison, the Gross Domestic Product (GDP) grew by 14 percent from the 2017–2019 time frame to 2021.

- Tax gap analysis consistently shows that compliance is higher when there is third-party information reporting and withholding.
- TY 2014–2016 tax gap analysis shows that misreporting of wages, which is subject to substantial information and withholding, is 1 percent compared to 55 percent for nonfarm proprietor income, which is subject to little or no information reporting.

The Effect of Information Reporting on Tax Compliance

Findings from tax gap analyses have consistently shown that compliance is higher when amounts are subject to information reporting and even higher when also subject to withholding. The extent of coverage by information reporting and/or withholding is called "visibility" because incomes that are reported to the IRS are more "visible" to both the IRS and taxpayers. Tax gap analysis for the TY 2014–2016 time frame shows that misreporting of income amounts subject to substantial information reporting and withholding is 1 percent of income. For amounts subject to substantial information reporting but not withholding, it is 6 percent; and for income amounts subject to little or no information reporting, such as nonfarm sole proprietor income, it is 55 percent. (See Figure 4.)

Methodology

A particular challenge for tax gap estimation is the time it takes to collect certain compliance data, especially data on underreporting that come from completed examinations. Waiting for the data to become available allows the estimates to reflect the compliance behavior for the years of the estimates, but by then the time frame of the estimates can be several years prior to the year of the tax gap release. To address this issue, the current release includes tax gap projections for TY 2020 and 2021 as a bridge between the competing priorities of the need for more contemporaneous tax gap estimates and having tax gap estimates based on compliance data for the time frame of the estimates.

The estimation methods used to produce the tax gap estimates and the projections vary by the tax gap component, reflecting the timing in which compliance data become available for use in estimation. For example, the projections of the underreporting tax gap generally assume that compliance behavior has not changed from the TY 2014–2016 time frame and that the tax gap grew at the same rate as the growth in reported tax.[1] Conversely, the individual nonfiling tax gap projections are based on analysis of IRS administrative data. The projections will be annually updated as additional compliance data become available and improvements are made to the methodologies.

Data and Modeling Limitations

Given the complexity of the tax system and available data, no single approach can be used for estimating each component of the tax gap. Each approach is subject to measurement or nonsampling error; the component estimates that are based on samples are also subject to sampling error. For the individual income tax underreporting tax gap, Detection Controlled Estimation (DCE) is used to adjust for measurement errors that result when some existing noncompliance is not detected during an audit.[2] Other statistical techniques are used to control for bias in estimates based on operational audit data. Due to the heterogenous nature of the estimation methodology, no standard errors are reported, however the user should be mindful of these limitations when using these estimates. Since the underreporting projections in this report are projections assuming compliance rates have not changed from prior tax gap estimates, they are subject to the same data limitations as the tax gap estimates.

The projections do not fully represent noncompliance in some components of the tax system, particularly as relates to corporation income tax, income from flow-through entities, foreign or illegal activities, digital assets, and pandemic credits, because data are lacking. In general, the estimates and projections are subject to various types of error. There is sampling error, measurement error, estimation error, coverage error and projection error. Section 4 provides additional detail on these sources of error.

Overview of Report Sections

The next section of the report presents an overview of the tax gap concepts and projections. It contains an updated schematic representation of the projections, known as the tax gap "map" and a "visibility" figure displaying the relationship between individual income tax reporting compliance and third-party information reporting and withholding. Section 3 includes a general summary of the projection methods for each of the three primary sources of noncompliance—nonfiling, underreporting, and underpayment. Section 4 includes additional discussion on data limitations.

[1] The individual income tax underreporting tax gap is assumed to grow at the same rate as the growth in the reported amounts for the line items on the individual income tax return for which tax gap estimates and projections are produced.

[2] Detection Controlled Estimation is an econometric technique used to estimate unreported income that was not detected on the examinations used to estimate the individual income tax underreporting tax gap.

Tax Gap Projections For Tax Years 2020 and 2021

The primary focus of tax gap estimation is to measure tax compliance behavior. The tax gap concept translates noncompliant behavior into measures that reflect tax not paid voluntarily and/or timely as a result of the noncompliant behavior. The concepts and measures are defined on a tax year basis.

Tax Gap Concepts: Dollar Measures

Tax gap dollar concepts are measures of the extent of noncompliance. The gross tax gap is defined as the dollar amount of true tax that is not paid on time. The gross tax gap measure is defined and estimated at an aggregate level that incorporates all types of tax and all sources of noncompliance. The gross tax gap measure is also defined and estimated by type of tax, the three primary sources of noncompliance, and other subcomponents.

Enforced and other late payments are defined as the amount of the gross tax gap that eventually will be paid. This report presents projections of the payments at an aggregate level and by type of tax.

The **net tax gap** is defined as the gross tax gap less enforced and other late payments. It is the amount of the gross tax gap that will not be paid. After subtracting projections of enforced and other late payments for each type of tax, this report presents net tax gap projections by type of tax. The use of the word "net" in this context reflects the subtraction of enforced and other late payments from the gross tax gap.

The **net misreported amount (NMA)** is a concept associated with the underreporting tax gap. The NMA is the dollar amount of misreporting associated with a particular tax return or schedule line item. Although most often an NMA reflects an amount of income, expense, or similar line item that has been misreported, the NMA is also defined for the total amount of tax misreported. Since amounts reported on tax return and schedule lines can be either positive or negative and can be overstated or understated, the actual computation depends on whether the line item is an income item or an offset item (such as a deduction, expense, or credit). For an income item, the NMA is calculated as the sum of all amounts understated minus the sum of all amounts overstated. In general, income items are underreported in the aggregate, so the NMA for income items generally is positive. For an offset item, the NMA is calculated as the sum of all amounts overstated minus the sum of all amounts understated. In general, offset items are overstated in the aggregate, so the NMA for offsets typically is positive. For this concept, the word "net" refers to the offsetting of overstated and understated amounts and not the subtraction of enforced and other late payments.

Tax Gap Concepts: Ratio Measures

Tax gap concepts include several ratio measures expressed as rates or percentages. The purpose of these measures is to provide a relative measure of compliance or noncompliance. These measures are ratios of dollar amounts in the aggregate.[3]

The **voluntary compliance rate (VCR)** is defined as the amount of tax paid voluntarily and timely divided by total true tax, expressed as a percentage. The VCR is a complement to the gross tax gap.

The **net compliance rate (NCR)** is defined as the sum of all timely and enforced and other late payments divided by total true tax, expressed as a percentage. The NCR is a complement to the net tax gap. It is also equal to one minus the ratio of the net tax gap to total true tax.

Two other measures are used only for the underreporting tax gap. The **net misreporting percentage (NMP)** for a given line item is the NMA divided by the sum of the absolute values of the amounts that should have been reported. For most return or schedule line items, amounts that should have been reported can be positive only. However, amounts can be either positive or negative for business-related net income and certain other lines. So, for those line items where amounts can be negative, the denominator of the NMP is not the net of positive and negative amounts, but instead it is the total of all the amounts disregarding the sign in the calculation—that is, it is the sum of the absolute values. The NMP is a complement to the NMA.

The **voluntary reporting rate (VRR)** is another underreporting tax gap measure. It is a measure of the overall extent of reporting compliance for a particular type of tax. It is defined as the amount of reported tax divided by the amount of tax that should have been reported. It reflects reporting compliance on timely filed returns and is a complement to the underreporting tax gap for a particular type of tax.

Significant Tax Law and Other Changes Since Tax Years 2014–2016

Tax law and the level of economic activity can affect the tax gap. Legislation enacted in December 2017 and known as the Tax Cuts and Jobs Act (TCJA) made permanent changes to the corporation income tax and temporary changes to the individual income tax. The TCJA reduced the top corporate income tax rate from 35 percent to 21 percent. The corporation Alternative Minimum Tax was eliminated and there were rule changes for businesses regarding deductions, depreciation, expensing, credits, treatment of foreign source income, cost recovery, and accounting methods. Changes to the individual income tax made by TCJA included a general lowering of

[3] At a tax return level, these ratios may be undefined or have limited meaning because the numerator, denominator, or both may be zero.

income tax rates, repeal of personal and dependent exemptions, increases in the standard deductions, elimination of or limits on certain itemized deductions, expansion of the child tax credit, and a new deduction related to pass-through business income.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020, the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) of 2021, and the American Rescue Plan Act of 2021 introduced temporary relief in response to the Coronavirus (COVID-19) pandemic. Given the temporary nature of these provisions and the lack of historical compliance data, the projections do not fully account for noncompliance associated with this relief. The Data and Modeling Limitations section has more detail.

The IRS funding in real (inflation-adjusted) dollars declined from FY 2011 through FY 2019. That trend changed as funding increased from FY 2020 through FY 2022. The Inflation Reduction Act (IRA) of 2022 provided expanded, long-term funding for the IRS. These increases in funding have the potential to impact voluntary compliance (and hence the gross tax gap) through improved services and enhanced enforcement efforts. Enhanced enforcement also has the potential to reduce the net tax gap through increased enforcement revenue. The current projections do not reflect the potential impact of changes in IRS funding, however, this funding could impact future projections and estimates.

Projections for Tax Years 2020 and 2021

The projections in this report are presented separately for Tax Years 2020 and 2021. The approaches used to project the various tax gap components generally follow the methods used for the previous projections.[4] The methods for each component are described later in the report.

A few differences from previous projections are worth highlighting. The individual income tax and self-employment tax nonfiling tax gap projection methodologies are based on growth in the absolute value of the line items used for tax gap estimation. For line items that can include losses, the growth in absolute value may provide a better projection of the tax gap. The underpayment tax gap and enforced and other late payment methodologies are based on patterns observed in the historical administrative data for the TY 2017–2019 time frame, rather than administrative data for the tax years estimated. The administrative data needed for the estimates were not available when the projections were developed.[5]

Overall Gross and Net Tax Gap

The tax gap map schematics (Figures 1 and 2) on the following pages show the gross tax gap, enforced and other late payments, and net tax gap for all types of taxes and components combined and also by type of tax and component separately. The projected annual gross tax gap for the TY 2021 is $688 billion. A projected $63 billion of the gross tax gap eventually will be paid resulting in a net tax gap of $625 billion. The projected TY 2021 voluntary compliance rate (VCR) is 84.9 percent. The projected net compliance rate (NCR) is 86.3 percent. The projected annual gross tax gap for TY 2020 is $601 billion. A projected $63 billion of the gross tax gap eventually will be paid resulting in a projected net tax gap of $539 billion. The projected TY 2020 VCR is 84.6 percent. The projected NCR is 86.2 percent.

Table 1 reports the TY 2020 and TY 2021 tax gap projections for the major components, along with the previously published and revised TY 2017–2019 projections and the TY 2014–2016 tax gap estimates on which many of the projections are based. The revisions to the TY 2017–2019 projections reflect new data that were available and modifications to the individual underreporting tax gap projections methodology. The revised TY 2017–2019 gross tax gap projection is $550 billion or about $10 billion higher than the prior projection of $540 billion. The revised TY 2017–2019 VCR projection is 84.9 percent or about 0.2 percentage points lower than the prior projection of 85.1 percent.

Many factors contribute to differences over time in both the gross tax gap and the VCR. These include factors such as the overall level of economic activity, changes in the composition of economic activity with shifts toward those with higher or lower compliance rates, changes in tax law and administration, updated data and improved methodologies, and changes in underlying compliance behavior on the part of taxpayers, tax preparers, and other tax advisors. Figure 3 shows the gross tax gap and VCR estimates and projections for TY 2001 and later. During the TY 2014–2016 time frame, the economic expansion and recovery from the Great Recession continued. The impact of the Great Recession is reflected in estimated gross tax gaps for TY 2008–2010 and TY 2011–2013 that are lower than for TY 2006. Figure 3 shows the continued growth in projections of the gross tax gap, while the projected VCR remains relatively stable since the TY 2014–2016 time frame. Given many of the projections assumed constant compliance since TY 2014–2016, the overall stability in the projected VCR is expected. The stability of the VCR despite the projected growth in the gross tax gap demonstrates the impact of the overall level of economic activity on the gross tax gap, generally holding compliance rates constant.

[4] Refer to: Internal Revenue Service. Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016, IRS Publication 1415 (Rev. 10-2022), Washington, D.C. 2022.

[5] The revised TY 2017–2019 projections are based on administrative data and using the same methodologies that were used for the TY 2014–2016 tax gap estimates. The administrative data needed for those tax years were available.

Figure 1. TY 2021 Projected Tax Gap Map

Tax Gap Projections for Tax Year 2021

(Money amounts are in billions of dollars. These figures will be updated as more complete compliance data become available.)

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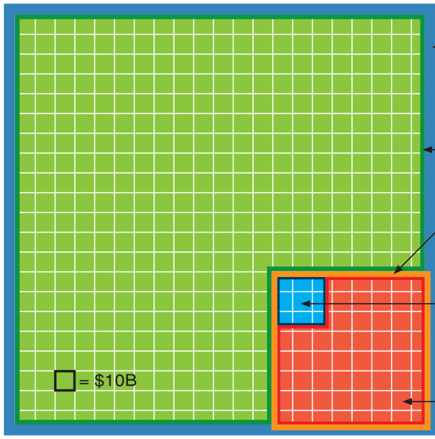

Estimated Total True Tax Liability*
$4,565B

Tax Paid Voluntarily & Timely
$3,877B **84.9%** Voluntary Compliance Rate (VCR)

Gross Tax Gap
$688B

Enforced & Other Late Payments
$63B

Net Tax Gap (Tax Not Collected)
$625B **86.3%** Net Compliance Rate (NCR)

Calculating the Net Tax Gap

Nonfiling
Underreporting
\+ Underpayment

Gross Tax Gap
– Enforced & Other Late Payments

Net Tax Gap

Total True Tax Liability	**Tax Paid Voluntarily & Timely**	**Gross Tax Gap:** Nonfiling	Underreporting	Under-payment	**Gross Tax Gap**	**Enforced & Other Late Payments**	**Net Tax Gap (Tax Not Collected)**
$4,565	**$3,877**	**$77**	**+ $542**	**+ $68**	**= $688**	**– $63**	**= $625**
By Type of Tax							
Individual Income Tax **$2,721**	Individual Income Tax **$2,201**	Individual Income Tax **$67**	Individual Income Tax **+ $396**	Individual Income Tax **+ $57**	Individual Income Tax **= $520**	Individual Income Tax **– $45**	Individual Income Tax **= $475**
			Business Income **$182**; Non-Business Income **$110**; Credits **$51**; Income Offsets [1] **$26**; Filing Status **$8**; Other Taxes [2] **$5**; Unallocated Marginal Effects [3] **$15**				
Corporation Income Tax **$304**	Corporation Income Tax **$259**	Corporation Income Tax **#**	Corporation Income Tax **+ $40**	Corporation Income Tax **+ $5**	Corporation Income Tax **= $45**	Corporation Income Tax **– $8**	Corporation Income Tax **= $37**
			Large Corpo-rations **$19**; Small Corpo-rations **$21**				
Employment Tax **$1,455**	Employment Tax **$1,337**	Employment Tax [4] **$9**	Employment Tax **+ $105**	Employment Tax **+ $4**	Employment Tax **= $118**	Employment Tax **– $6**	Employment Tax **= $112**
			Self-Employ-ment Tax **$68**; FICA & Uncollected FICA TAX **$36**; FUTA **$1**				
Estate Tax **$21**	Estate Tax **$17**	Estate Tax **$2**	Estate Tax **+ $1**	Estate Tax **+ $2**	Estate Tax **= $4**	Estate Tax **– $3**	Estate Tax **= $1**

NOTES:

* Totals include Excise Tax.

#—No estimate.

Detail may not add to totals due to rounding.

[1] Includes adjustments, deductions, and exemptions.

[2] Includes the Alternative Minimum Tax and taxes reported in the "Other Taxes" section of the Form 1040 except for self-employment tax and unreported Social Security and Medicare taxes (which are included in the employment tax gap estimates).

[3] Is the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be differences if the marginal tax rates are different in these two situations.

[4] Self-employment tax only.

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Tax Gap Projections for Tax Year 2020

(Money amounts are in billions of dollars. These figures will be updated as more complete compliance data become available.)

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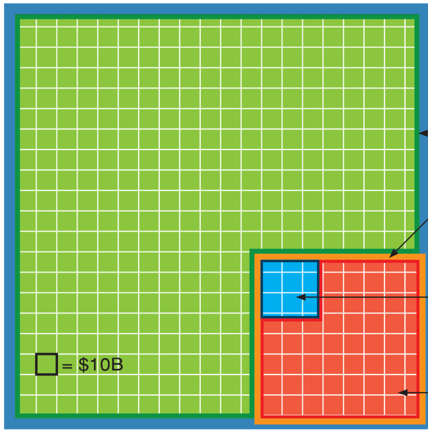


Estimated Total True Tax Liability*
$3,902B

Tax Paid Voluntarily & Timely
$3,301B **84.6%** Voluntary Compliance Rate (VCR)

Gross Tax Gap
$601B

Enforced & Other Late Payments
$63B

Net Tax Gap (Tax Not Collected)
$539B **86.2%** Net Compliance Rate (NCR)

Calculating the Net Tax Gap

Nonfiling
Underreporting
\+ Underpayment

Gross Tax Gap
– **Enforced & Other Late Payments**

Net Tax Gap

Total True Tax Liability	Tax Paid Voluntarily & Timely	Gross Tax Gap				Enforced & Other Late Payments	Net Tax Gap (Tax Not Collected)
		Nonfiling	Underreporting	Under-payment	Gross Tax Gap		
$3,902	$3,301	$52	+ $480	+ $69	= $601	– $63	= $539
By Type of Tax							
Individual Income Tax $2,148	Individual Income Tax $1,700	Individual Income Tax $42	Individual Income Tax + $348	Individual Income Tax + $58	Individual Income Tax = $448	Individual Income Tax – $45	Individual Income Tax = $403
			Business Income $158; Non-Business Income $94; Credits $47; Income Offsets [1] $27; Filing Status $7; Other Taxes [2] $3; Unallocated Marginal Effects [3] $14				
Corporation Income Tax $326	Corporation Income Tax $283	Corporation Income Tax #	Corporation Income Tax + $38	Corporation Income Tax + $6	Corporation Income Tax = $44	Corporation Income Tax – $8	Corporation Income Tax = $35
			Large Corpo-rations $21; Small Corpo-rations $17				
Employment Tax $1,343	Employment Tax $1,238	Employment Tax [4] $7	Employment Tax + $93	Employment Tax + $4	Employment Tax = $105	Employment Tax – $6	Employment Tax = $99
			Self-Employ-ment Tax $59; FICA & Uncollected FICA TAX $34; FUTA $1				
Estate Tax $24	Estate Tax $20	Estate Tax $2	Estate Tax + $1	Estate Tax + $1	Estate Tax = $4	Estate Tax – $3	Estate Tax = $2

NOTES:

* Totals include Excise Tax.

\#—No estimate.

Detail may not add to totals due to rounding.

[1] Includes adjustments, deductions, and exemptions.

[2] Includes the Alternative Minimum Tax and taxes reported in the "Other Taxes" section of the Form 1040 except for self-employment tax and unreported Social Security and Medicare taxes (which are included in the employment tax gap estimates).

[3] Is the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be differences if the marginal tax rates are different in these two situations.

[4] Self-employment tax only.

Revised 10/2023

Table 1. Tax Gap Estimates for Tax Years 2014–2016 and Projections for Tax Years 2017–2019, 2020 and 2021

[Money amounts are in billions of dollars]

Tax Gap Component	TY 2014–2016 [2]	Projections[1]			
		TY 2017–2019 [2]	TY 2017–2019 [2] Revised	TY 2020	TY 2021
Estimated Total True Tax	**$3,307**	**$3,621**	**$3,645**	**$3,902**	**$4,565**
Gross Tax Gap	**$496**	**$540**	**$550**	**$601**	**$688**
Nonfiling Tax Gap	$39	$41	$41	$52	$77
Underreporting Gap	$398	$433	$445	$480	$542
Underpayment Gap	$59	$66	$64	$69	$68
Voluntary Compliance Rate	**85.0%**	**85.1%**	**84.9%**	**84.6%**	**84.9%**
Enforced and Other Late Payments	**$68**	**$70**	**$70**	**$63**	**$63**
Net Tax Gap [3]	**$428**	**$470**	**$481**	**$539**	**$625**
Net Compliance Rate	**87.0%**	**87.0%**	**86.8%**	**86.2%**	**86.3%**

[1] These figures will be updated as more complete compliance data become available.

[2] The estimates and projections are the annual averages for the covered timeframe.

[3] The net tax gap is the gross tax gap reduced by the amount of enforced and other late payments that will eventually be paid.

Detail may not add to total due to rounding.

Table 2 provides additional breakout of the projected nonfiling, underreporting, and underpayment tax gaps into major subcomponents. Growth in the projected gross tax gap from TY 2014–2016 to TY 2020 is primarily driven by growth in the projected individual income tax nonfiling and underreporting tax gaps. These tax gap components are also the primary drivers in the growth in the projections from TY 2020 to TY 2021, along with the self-employment tax underreporting tax gap.

Table 3 provides additional detail on the TY 2020 and TY 2021 tax gap projections by major component along with shares of the gross tax gap. Underreporting accounts for the majority of the projected gross tax gap for TY 2020 and TY 2021, about 80 percent and 79 percent respectively. Within the underreporting tax gap, individual income tax underreporting is projected to contribute the most to the gross tax gap at 58 percent in both TY 2020 and TY 2021. Business income is projected to be the largest contributor within the individual underreporting tax gap, contributing 26 percent to the gross tax gap in TY 2020 and TY 2021. The nonfiling tax gap is projected to account for 9 percent of the gross tax gap in TY 2020 and 11 percent in TY 2021. The underpayment tax gap is projected to account for around 11 percent of the gross tax gap in TY 2020 and 10 percent in TY 2021.

Nonfiling Tax Gap

Sufficiently reliable information exists for developing estimates and projections of the nonfiling tax gap for three types of tax: individual income tax, self-employment tax, and estate tax. The nonfiling tax gap is the tax gap associated with required tax returns that were not filed at all or were filed after the filing deadline or valid extension date.

As shown in Table 3, the nonfiling tax gap is projected to account for about 9 percent of the gross tax gap in TY 2020 and 11 percent in TY 2021. The projected nonfiling tax gap is $52 billion for TY 2020 and $77 billion for TY 2021.

The individual income tax nonfiling tax gap is projected to be $42 billion for TY 2020, which is about 7 percent of the gross tax gap. It is projected to be $67 billion for TY 2021, about 10 percent of the gross tax gap. The self-employment tax nonfiling tax gap is projected to be $7 billion in TY 2020, which is about 1 percent of the gross tax gap. It is projected to be $9 billion in TY 2021, which is about 1 percent of the gross tax gap. The estate tax nonfiling tax gap is projected to be less than $0.5 billion and less than one half of one percent of the gross tax gap in both TY 2020 and TY 2021.

Underreporting Tax Gap

As shown in Table 3, of the projected $601 billion gross tax gap for TY 2020, $480 billion (approximately 80 percent) is projected to result from the underreporting of true tax on timely filed returns. For TY 2021, approximately $542 billon (about 79 percent) of the projected $688 billion gross tax gap is from the underreporting tax gap.

The individual income tax underreporting tax gap is $348 billion (58 percent) of the projected TY 2020 gross tax gap and $396 billion (58 percent) of the projected TY 2021 gross tax gap. The corporation income tax underreporting tax gap, the employment tax underreporting tax gap, and the estate tax underreporting tax gap are projected to be 6 percent, 15 percent, and less than one half of one percent of the gross tax gap, respectively, in both TY 2020 and TY 2021.

Tables 4 and 5 show additional information on the individual income tax underreporting tax gap projections for TY 2021 and TY 2020, respectively. The projections provide a breakdown of the components of the individual income tax underreporting

Figure 3. Tax Gap and Voluntary Compliance Rate Estimates and Projections: TY 2001, TY 2006, TY 2008–2010 (Annual Average), TY 2011–2013 (Annual Average), TY 2014–2016 (Annual Average), TY 2017–2019 (Annual Average), TY 2020 and TY 2021

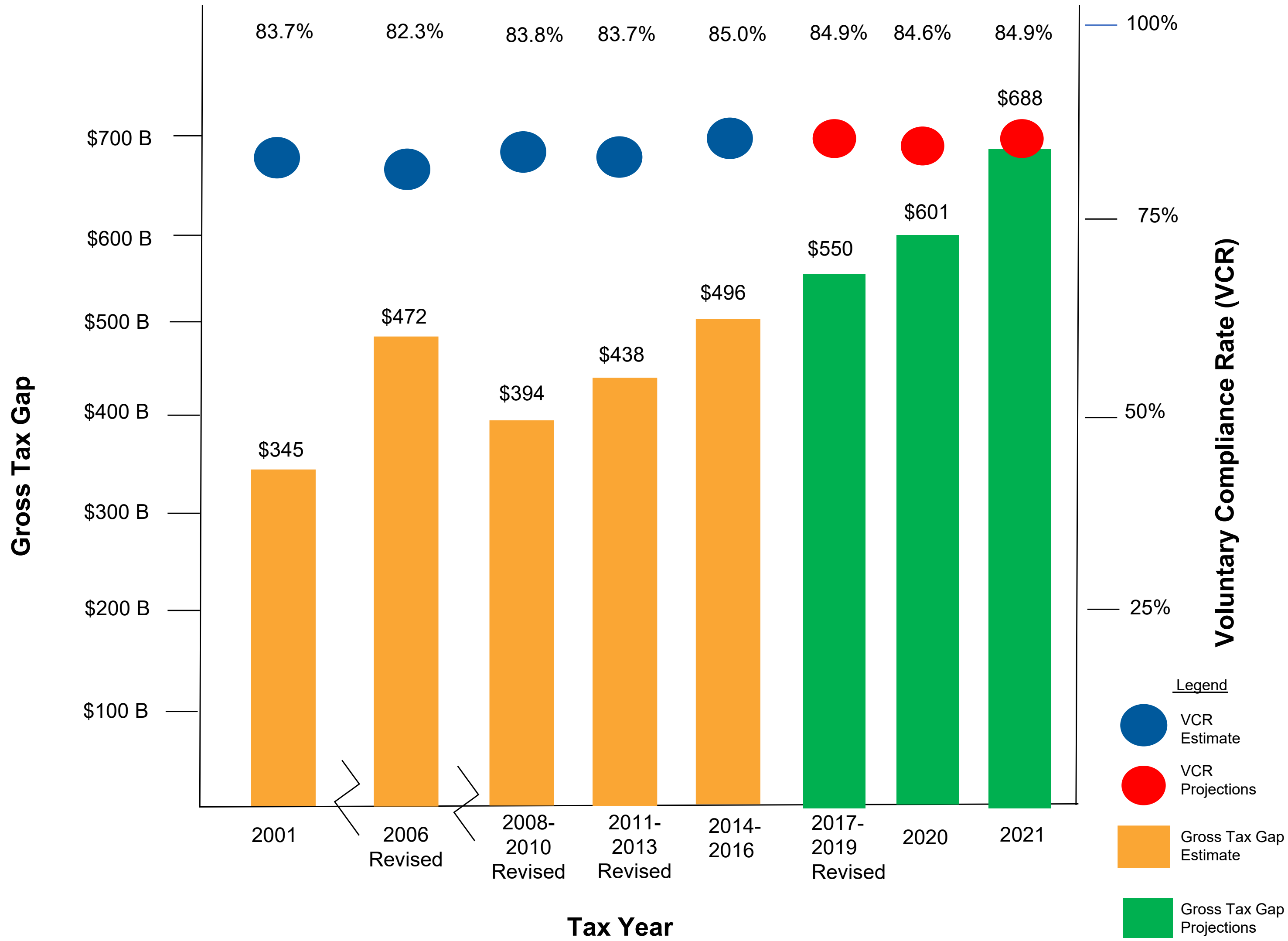


Table 2. Tax Gap Estimates for TY 2014–2016 and Projections for Tax Years 2017–2019, 2020 and 2021 [1]

[Money amounts are in billions of dollars]

Tax Gap Component	TY 2014–2016 [1]	Projections [1]		
		TY 2017–2019 Revised [2]	TY 2020	TY 2021
Estimated Total True Tax	**$3,307**	**$3,645**	**$3,902**	**$4,565**
Gross Tax Gap	**$496**	**$550**	**$601**	**$688**
Voluntary Compliance Rate	*85.0%*	*84.9%*	*84.6%*	*84.9%*
Enforced and Other Late Payments	**$68**	**$70**	**$63**	**$63**
Net Tax Gap	**$428**	**$481**	**$539**	**$625**
Net Compliance Rate	*87.0%*	*86.8%*	*86.2%*	*86.3%*
Nonfiling Tax Gap	**$39**	**$41**	**$52**	**$77**
Individual Income Tax	$32	$33	$42	$67
Self-Employment Tax	$7	$7	$7	$9
Estate Tax	[3]	[3]	[3]	[3]
Underreporting Tax Gap	**$398**	**$445**	**$480**	**$542**
Individual Income Tax	**$278**	**$311**	**$348**	**$396**
Corporation Income Tax	**$37**	**$42**	**$38**	**$40**
Small Corporations (assets under $10M)	$14	$19	$17	$21
Large Corporations (assets of $10M or more)	$23	$23	$21	$19
Employment Tax	**$82**	**$91**	**$93**	**$105**
Self-Employment Tax	$53	$58	$59	$68
Uncollected Social Security and Medicare Tax	[3]	[3]	[3]	[3]
FICA and FUTA Tax	$29	$32	$34	$36
Estate Tax	**$1**	**$1**	**$1**	**$1**
Underpayment Tax Gap	**$59**	**$64**	**$69**	**$68**
Individual Income Tax	$47	$53	$58	$57
Corporation Income Tax	$4	$6	$6	$5
Employment Tax	$5	$4	$4	$4
Estate Tax	$3	$1	$1	$2
Excise Tax	[3]	[3]	[3]	[3]

[1] These figures will be updated as more complete compliance data become available.
[2] These estimates and projections are annual averages for the tax year timeframes.
[3] Less than $0.5 billion.
Detail may not add to total due to rounding.

tax gap grouped by the "visibility" categories also shown in Figures 4 and 5. For each component, the table shows the component's share of the individual income tax underreporting tax gap. The table also shows each component's share of the gross tax gap. Items subject to little or no information include nonfarm proprietor income, farm income, rents and royalties, Form 4797 income and other income. This visibility category contributes the most to the gross tax gap, accounting for $157 billion (26 percent) of the TY 2020 gross tax gap and $167 billion (24 percent) of the TY 2021 gross tax gap. The TY 2014–2016 tax gap estimates show that 55 percent of income subject to little or no information reporting is misreported.

Underpayment Tax Gap

About 11 percent of the gross tax gap for TY 2020 and 10 percent for TY 2021 results from taxpayers not timely paying in full the tax they report on timely filed returns. The projected underpayment tax gap is $69 billion for TY 2020 and $68 billion for TY 2021.

About 10 percent of the projected gross tax gap for TY 2020 (about $58 billion) and 8 percent (about $57 billion) for TY 2021 is from underpayment of individual income tax. Underpayment of corporation income taxes accounts for 1 percent of the gross tax gap. Underpayment of employment taxes (Federal Insurance Contributions Act, Federal Unemployment Tax Act, Self-Employment Contributions Act, and the railroad retirement tax) accounts for 1 percent of the gross tax gap. Underpayment of estate tax and excise tax each account for less than 0.5 percent of the gross tax gap.

Enforced and Other Late Payments

Some of the gross tax gap is collected through IRS enforcement and administrative efforts and some is paid late without any IRS action taken. The total amount of enforced and other late payments is projected to be $63 billion for both TY 2020 and TY 2021. About 71 percent of the projected total, or $45 billion, is associated with individual income tax in each year. About 13 percent of the total, or $8 billion, is associated with corporation income tax enforced and other late payments. Employment tax enforced and other late payments are 10 percent of the total or $6 billion. Estate tax enforced and other late payments are projected to be $3 billion or about 5 percent of the total in both TY 2020 and TY 2021. Excise tax enforced and other late payments account for less than one-half of 1 percent of all enforced and other late payments.

Table 3. Tax Gap Projections for Tax Years 2020 and 2021 [1]

[Money amounts are in billions of dollars]

Tax Gap Component	TY 2020	Share of Gross Tax Gap	TY 2021	Share of Gross Tax Gap
Estimated Total True Tax	**$3,902**		**$4,565**	
Gross Tax Gap	**$601**	**100%**	**$688**	**100%**
Voluntary Compliance Rate	*84.6%*		*84.9%*	
Enforced and Other Late Payments	**$63**		**$63**	
Net Tax Gap	**$539**		**$625**	
Net Compliance Rate	*86.2%*		*86.3%*	
Nonfiling Tax Gap	**$52**	**9%**	**$77**	**11%**
Individual Income Tax	$42	7%	$67	10%
Self-Employment Tax	$7	1%	$9	1%
Estate Tax	[3]	[2]	[3]	[2]
Underreporting Tax Gap	**$480**	**80%**	**$542**	**79%**
Individual Income Tax	**$348**	**58%**	**$396**	**58%**
Non-Business Income	$94	16%	$110	16%
Business Income	$158	26%	$182	26%
Adjustments, Deductions, Exemptions	$27	4%	$26	4%
Filing Status	$7	1%	$8	1%
Other Taxes [4]	$3	1%	$5	1%
Unallocated Marginal Effects [5]	$14	2%	$15	2%
Credits	$47	8%	$51	7%
Corporation Income Tax	**$38**	**6%**	**$40**	**6%**
Small Corporations (assets under $10M)	$17	3%	$21	3%
Large Corporations (assets of $10M or more)	$21	3%	$19	3%
Employment Tax	**$93**	**15%**	**$105**	**15%**
Self-Employment Tax	$59	10%	$68	10%
Uncollected Social Security and Medicare Tax	[3]	[2]	[3]	[2]
FICA and FUTA Tax	$34	6%	$36	5%
Estate Tax	**$1**	**[2]**	**$1**	**[2]**
Underpayment Tax Gap	**$69**	**11%**	**$68**	**10%**
Individual Income Tax	$58	10%	$57	8%
Corporation Income Tax	$6	1%	$5	1%
Employment Tax	$4	1%	$4	1%
Estate Tax	$1	[2]	$2	[2]
Excise Tax	[3]	[2]	[3]	[2]

[1] These figures will be updated as more complete compliance data become available.

[2] Less than 0.5 percent.

[3] Less than $0.5 billion.

[4] The *Other taxes* component includes the Alternative Minimum Tax, Excess APTC Repayment, and taxes reported in the "Other Taxes" section of the Form 1040 except for self-employment tax and unreported Social Security and Medicare tax (which are included in the employment tax gap estimates).

[5] The *Unallocated marginal effects* component reflects the difference between (1) the estimate of the individual income tax underreporting tax gap where underreported tax is calculated based on all misreporting combined and (2) the estimate of the individual income tax underreporting tax gap based on the sum of the tax gaps associated with each line item where the line item tax gap is calculated based on the misreporting of that item only. There may be a difference whenever more than one line item has been misreported on the same return and the combined misreporting results in a higher marginal tax rate than when the tax on the misreported amounts is calculated separately.

Detail may not add to total due to rounding.

Table 4. Individual Income Tax Underreporting Tax Gap Projections by Source: Tax Year 2021 [1]

[Money amounts are in billions of dollars]

Tax Return Line Items	Tax Gap	Share of Gross Tax Gap	Share of Individual Income Tax Underreporting Tax Gap
Gross Tax Gap	**$688**	**100%**	**N/A**
Individual Income Tax Underreporting Tax Gap	**$396**	**58%**	**100%**
Items Subject to Substantial Information Reporting and Withholding	**$9**	**1%**	**2%**
Wages, salaries, tips	$9	1%	2%
Items Subject to Substantial Information Reporting	**$22**	**3%**	**6%**
Interest income	$1	[2]	[2]
Dividend income	$2	[2]	[2]
State income tax refunds	[2]	[2]	[2]
Pensions & annuities	$9	1%	2%
Unemployment Compensation	$2	[2]	1%
Taxable Social Security benefits	$9	1%	2%
Items Subject to Some Information Reporting	**$94**	**14%**	**24%**
Partnership, S-Corp, Estate & Trust, etc.	$41	6%	10%
Alimony income	[2]	[2]	[2]
Capital gains	$53	8%	13%
Items Subject to Little or No Information Reporting	**$167**	**24%**	**42%**
Form 4797 income	$6	1%	2%
Other income	$20	3%	5%
Nonfarm proprietor income	$110	16%	28%
Farm income	$6	1%	2%
Rents & royalties	$25	4%	6%
Total Credits	**$51**	**7%**	**13%**
Child Tax Credit and Additional Child Tax Credit	$18	3%	5%
EITC	$27	4%	7%
Education Credits	$3	[2]	1%
All Other Credits	$2	[2]	1%
Other Taxes	**$5**	**1%**	**1%**
Unallocated Marginal Effects	**$15**	**2%**	**4%**
Income Offsets (Adjustments, Deductions, Exemptions)	**$26**	**4%**	**7%**
Filing Status	**$8**	**1%**	**2%**

N/A—Not applicable.

[1] These figures will be updated as more complete compliance data become available.

[2] Less than 0.5 percent or $0.5 billion.

Table 5. Individual Income Tax Underreporting Tax Gap Projections by Source: Tax Year 2020 [1]

[Money amounts are in billions of dollars]

Tax Return Line Items	Tax Gap	Share of Gross Tax Gap	Share of Individual Income Tax Underreporting Tax Gap
Gross Tax Gap	**$601**	**100%**	**N/A**
Individual Income Tax Underreporting Tax Gap	**$348**	**58%**	**100%**
Items Subject to Substantial Information Reporting and Withholding	**$8**	**1%**	**2%**
Wages, salaries, tips	$8	1%	2%
Items Subject to Substantial Information Reporting	**$23**	**4%**	**7%**
Interest income	$1	[2]	[2]
Dividend income	$1	[2]	[2]
State income tax refunds	[2]	[2]	[2]
Pensions & annuities	$8	1%	2%
Unemployment Compensation	$5	1%	1%
Taxable Social Security benefits	$8	1%	2%
Items Subject to Some Information Reporting	**$64**	**11%**	**18%**
Partnership, S-Corp, Estate & Trust, etc.	$34	6%	10%
Alimony income	[2]	[2]	[2]
Capital gains	$30	5%	9%
Items Subject to Little or No Information Reporting	**$157**	**26%**	**45%**
Form 4797 income	$6	1%	2%
Other income	$27	5%	8%
Nonfarm proprietor income	$96	16%	28%
Farm income	$6	1%	2%
Rents & royalties	$22	4%	6%
Total Credits	**$47**	**8%**	**13%**
Child Tax Credit and Additional Child Tax Credit	$17	3%	5%
EITC	$24	4%	7%
Education Credits	$3	1%	1%
All Other Credits	$2	[2]	1%
Other Taxes	**$3**	**1%**	**1%**
Unallocated Marginal Effects	**$14**	**2%**	**4%**
Income Offsets (Adjustments, Deductions, Exemptions)	**$27**	**4%**	**8%**
Filing Status	**$7**	**1%**	**2%**

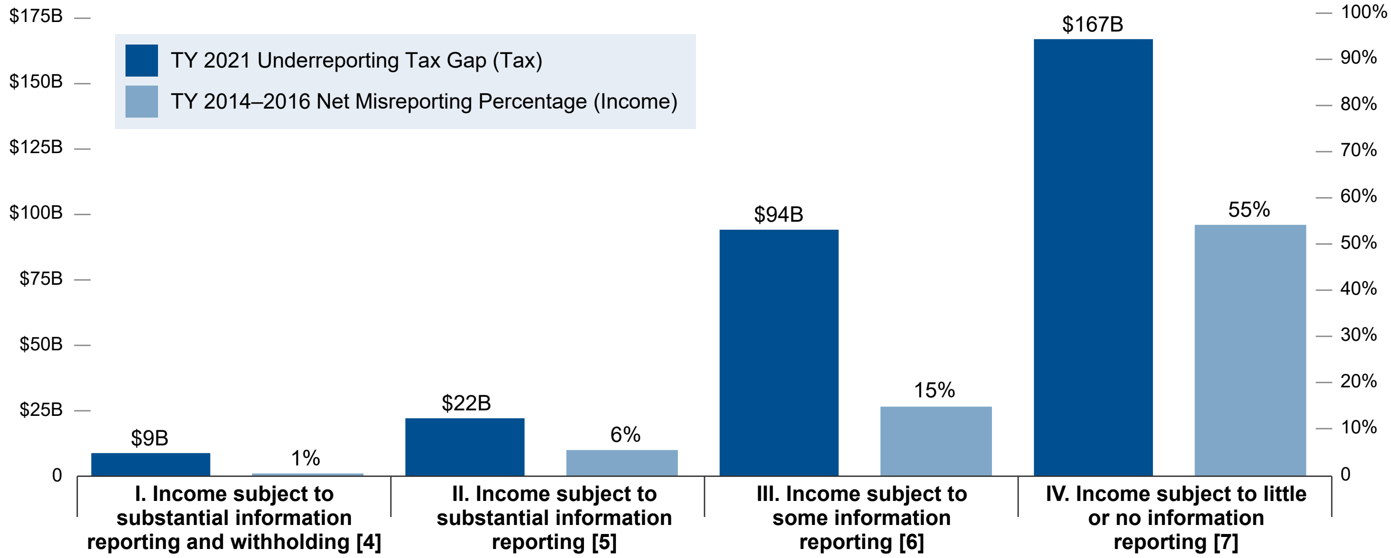
N/A—Not applicable.

[1] These figures will be updated as more complete compliance data become available.

[2] Less than 0.5 percent or $0.5 billion.

Figure 4. Effect of Information Reporting on Individual Income Tax Reporting Compliance, Tax Years 2014–2016 NMP Estimates and TY 2021 Projections

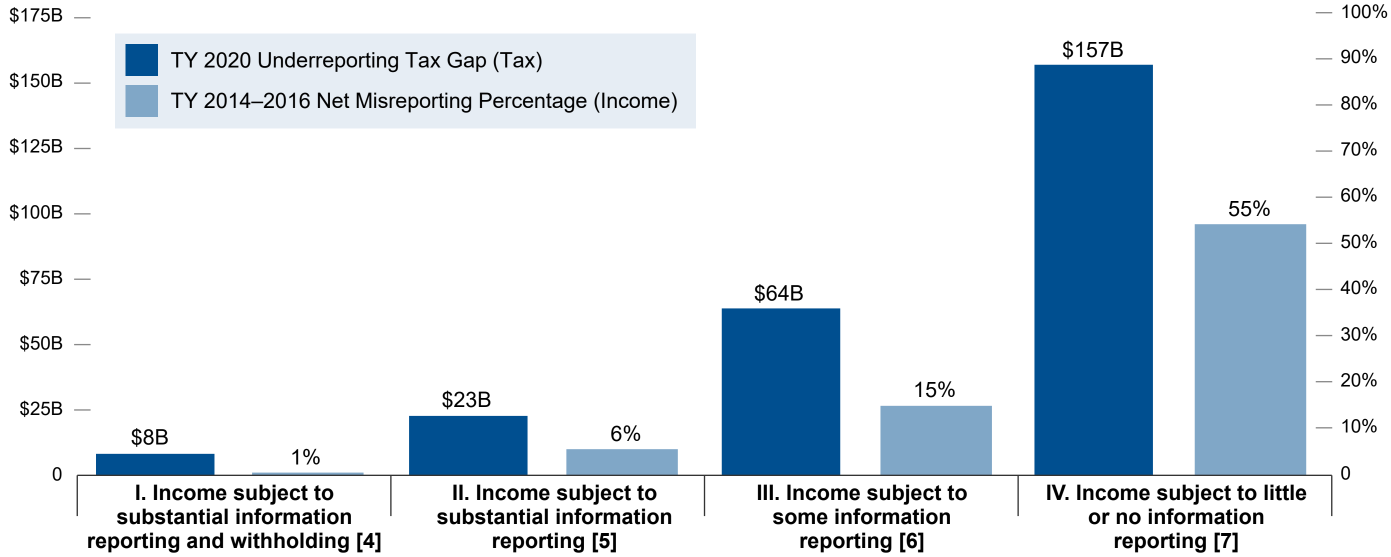
"Visibilty" Chart: Tax Year 2021 [1] Individual Income Tax Underreporting Tax Gap Projections and Tax Year 2014–2016 [2] Net Misreporting Percentage [3] Estimates by "Visibility" Category of Income Items



[1] These figures will be updated as more complete compliance data become available.
[2] The TY 2014–2016 estimate is the annual average for the TY 2014, 2015, and 2016 timeframe. This chart displays the tax gap attributable to the underreported income category and the rate at which that income is misreported as measured by the Net Misreporting Percentage.
[3] The Net Misreporting Percentage is the ratio of the net misreported amount to the sum of the absolute values of the amounts that should have been reported, expressed as a percentage. For categories I–IV, the net misreported amount is understatements of income less overstatements of income. On net, income is understated for these categories.
[4] Includes wages & salaries.
[5] Includes pensions & annuities, unemployment compensation, dividend income, interest income, taxable Social Security benefits.
[6] Includes partnership/S corp. income, capital gains, alimony income.
[7] Includes nonfarm proprietor income, other income, rents and royalties, farm income, Form 4797 income.

Figure 5. Effect of Information Reporting on Individual Income Tax Reporting Compliance, Tax Years 2014–2016 NMP Estimates and TY 2020 Projections

"Visibilty" Chart: Tax Year 2020 [1] Individual Income Tax Underreporting Tax Gap Projections and Tax Year 2014–2016 [2] Net Misreporting Percentage [3] Estimates by "Visibility" Category of Income Items



[1] These figures will be updated as more complete compliance data become available.
[2] The TY 2014–2016 estimate is the annual average for the TY 2014, 2015, and 2016 timeframe. This chart displays the tax gap attributable to the underreported income category and the rate at which that income is misreported as measured by the Net Misreporting Percentage.
[3] The Net Misreporting Percentage is the ratio of the net misreported amount to the sum of the absolute values of the amounts that should have been reported, expressed as a percentage. For categories I–IV, the net misreported amount is understatements of income less overstatements of income. On net, income is understated for these categories.
[4] Includes wages & salaries.
[5] Includes pensions & annuities, unemployment compensation, dividend income, interest income, taxable Social Security benefits.
[6] Includes partnership/S corp. income, capital gains, alimony income.
[7] Includes nonfarm proprietor income, other income, rents and royalties, farm income, Form 4797 income.

Table 6. Voluntary Compliance Rate Projections by Type Of Tax, Tax Years 2017–2019, 2020 and 2021 [1]

Tax Gap Component	Voluntary Compliance Rates			Distribution of Liability		
	TY2017–TY2019 Revised [2]	TY 2020	TY 2021	TY2017–TY2019 Revised [2]	TY 2020	TY 2021
Overall (all taxes combined)	**85%**	**85%**	**85%**	**100%**	**100%**	**100%**
Individual Income Tax	79%	79%	81%	53%	55%	60%
Corporation Income Tax	87%	87%	85%	10%	8%	7%
Employment Tax	92%	92%	92%	35%	34%	32%
Estate Tax	86%	82%	80%	1%	1%	[3]
Excise Tax	N/A	N/A	N/A	1%	2%	1%

N/A—Not applicable.

[1] These figures will be updated as more complete compliance data become available.

[2] The projections are the annual averages for the covered time frame.

[3] Less than 0.5 percent.

Net Tax Gap by Type of Tax

Projections of enforced and other late payments by type of tax are subtracted from the respective gross tax gap projections to obtain the net tax gap projections by type of tax. As shown on the Tax Gap Maps (Figures 1 and 2), the net tax gap for individual income tax is projected to be $403 billion for TY 2020 and $475 billion for TY 2021. The net tax gap for corporation income tax is projected to be $35 billion for TY 2020 and $37 billion for TY 2021. The net tax gap for employment taxes is projected to be $99 billion for TY 2020 and $112 billion for TY 2021. The estate tax net tax gap is projected to be $2 billion for TY 2020 and $1 billion for TY 2021. The excise tax net tax gap is projected to be less than $0.5 billion for TY 2020 and TY 2021.[6]

Voluntary Compliance Rates by Type of Tax

Table 6 shows the VCRs by type of tax along with their distributions of tax liability. The VCR projections remain largely unchanged when compared with the revised TY 2017–2019 projections. Individual income tax is projected to account for a larger share of tax liability in TY 2020 and TY 2021.

Data and Methodology

This report includes tax gap projections for TY 2020 and 2021. These figures are called projections instead of estimates to highlight the differences between the projection and estimation methodologies. The methods and data are different enough that the numbers have different interpretations. The differences vary by tax gap component and reflect the timing in which compliance data become available for use in estimation. For the largest components of the tax gap, compliance data for the projection years are not yet available. The projections for those components were developed to capture the growth in the reported tax or the reported amount of each line item, under assumptions of constant compliance. Thus, the projections reflect the level of the tax gap assuming compliance behavior has not changed from prior years. The prior TY 2014–2016 estimates for those components, however, are based on actual compliance data for the years of the estimates and are a measurement of compliance behavior.[7] The projections will be updated as additional compliance data become available and as the methodologies improve.

The primary focus of tax gap estimation is to measure compliance behavior as manifested in tax paid voluntarily and timely. To be most informative—and consistent with tax gap concepts and objectives—the methodology for measuring the tax gap should be grounded in data on actual compliance behavior for the years being estimated. For the tax gap estimates, with the exception of the large corporation income tax and the FICA and FUTA tax underreporting tax gap estimates, the estimation methodologies for all major tax gap components are based on data for the tax years being estimated.

The extent of the differences between the tax gap projection methodologies and the tax gap estimation methodologies varies by tax gap component. For the small corporation income tax underreporting tax gap and the estate tax underreporting tax gap, the projections are developed by applying the TY 2014–2016 estimated overall compliance rates for those components to the associated reported tax for TY 2020 and 2021; this is equivalent to growing the TY 2014–2016 tax gap estimates by the growth in reported tax. Thus, the projections reflect a tax gap under the assumption that overall compliance rates for TY 2020 and TY 2021 are the same as those estimated for TY 2014–2016. For the individual income tax underreporting tax gap and self-employment tax underreporting tax gap, the projections are done at the line-item level and then summed under the assumption that the estimated compliance rates and average marginal tax rates at the line-item level are applicable to the associated TY 2020 and TY 2021 line items. The result of the

[6] The excise tax gap is included in the total tax gap numbers but is not shown separately in the tax gap map.

[7] One exception is the large corporation underreporting tax gap for which sufficiently complete examination data are not yet available. For more detail on the TY 2014–2016 tax gap estimates and methodology, refer to: Internal Revenue Service. Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016, IRS Publication 1415 (Rev. 10-2022), Washington, D.C. 2022.

assumptions is that the tax gap for a line item grows at the same rate as the growth in the absolute value of the reported amount for the line item.[8]

The TY 2014–2016 FICA and FUTA underreporting tax gap estimates themselves are projections based on applying the compliance rates from the National Research Program (NRP) TY 2008–2010 study to reported data for TY 2014–2016. The TY 2020 and 2021 projections use the same compliance rates applied to TY 2020 and TY 2021 reported data. The projection for the large corporation income tax underreporting tax gap uses the estimated compliance rate developed for the TY 2014–2016 estimate. That rate was estimated from TY 2005–2011 compliance data for the largest corporations. This rate is applied to reported tax data for TY 2014–2016 and for TY 2020 and TY 2021 to develop the estimates and projections. Thus, the large corporation income tax underreporting tax gap estimate and projection use the same compliance rate assumption.

The individual income tax and self-employment tax nonfiling tax gap projections use a different method than the one used for the TY 2014–2016 estimation. Specifically, the projections use the "Administrative Data Method" instead of the "Census Method" as used for the TY 2014–2016 estimation because Census data were not available for all of the projected years. However, the Administrative Data Method has consistently provided similar estimates to the Census Method over time. The estate tax nonfiling tax gap projection uses the same methodology that was used for the TY 2014–2016 tax gap estimate.

The enforced and other late payments projections use the same approach as the TY 2014–2016 tax gap estimates, but the projections have fewer years of actual payments than the estimates and so they include more years that are forecasts of eventual payments.

Table 7 presents an overview of the data and methods used for the TY 2020 and TY 2021 tax gap projections. Table 8 provides a similar overview for the TY 2014–2016 tax gap estimates on which many of the projections are based.

Data and Modeling Limitations

Given the complexity of the tax system and available data, no single approach can be used for estimating each component of the tax gap. Each approach is subject to measurement or nonsampling error; the component estimates that are based on samples are also subject to sampling error. Due to the heterogenous nature of the estimation methodology, no standard errors are reported; however, the user should be mindful of these limitations when using these estimates. Since the underreporting projections in this report are projections assuming compliance rates have not changed from prior tax gap estimates, they are subject to the same data limitations as the tax gap estimates.

For the individual income tax underreporting tax gap, DCE is used to adjust for measurement errors that result when some existing noncompliance is not detected during an audit.[9] The individual income tax underreporting tax gap estimates are the only estimates in which adjustments are made for this type of measurement error. All of the estimates based on audits, including cases where taxpayers did not respond to the audit, assume that the examiner recommended adjustments do not *overstate* the true amount of underreporting. The final amount of tax assessed after appeals and any potential litigation may be less than the examiner recommended amount; in particular for large corporations and higher income taxpayers. Other statistical techniques are used to control for statistical bias in estimates based on operational audit data; there would be estimation error associated with these methods.[10]

Given available data and current methods, these are the best possible projections of the tax gap components presented. However, the projections cannot fully represent noncompliance in some components of the tax system, particularly as relates to corporation income tax, income from flow-through entities, foreign or illegal activities, and digital assets. For example, the IRS does not have a reliable method for estimating the corporation income tax nonfiling tax gap, the excise tax underreporting and nonfiling tax gap and the estate tax nonfiling tax gap.[11] Some return types are also not captured by the current estimates. For example, the individual underreporting tax gap estimates do include the tax gap associated with international returns and the corporation income tax underreporting tax gap estimates only reflect Form 1120, U.S. Corporation Income Tax Return, and Form 1120-L, U.S. Life Insurance Company Income Tax Return.

The tax gap associated with illegal activities has been outside the scope of tax gap estimation. With respect to noncompliance associated with digital assets and other emerging issues, it takes time to develop the expertise to uncover associated noncompliance and for examinations to be completed that can be used to measure the extent of that noncompliance. The IRS is actively working on new methods for estimating and projecting the tax gap to better reflect changes in taxpayer behavior as they emerge.

[8] As mentioned earlier, this a different projection methodology from the prior tax gap release in which the tax gap for each line item was assumed to grow with the growth in the net amount reported for each line item.

[9] Detection Controlled Estimation is an econometric technique used to estimate unreported income that was not detected on the examinations used to estimate the individual income tax underreporting tax gap.

[10] Operational audits are selected based on compliance risk; therefore, operational audits tend to reflect more noncompliance than the overall population. Statistical methods are needed to "control" for this statistical bias so that estimates based on operational data better reflect the compliance of the overall population.

[11] The current estimates and projections for the estate tax nonfiling tax gap only reflect late filed returns; they do not include the tax gap associated with estate tax returns that are never filed.

Table 7. TY 2020 and 2021 Tax Gap Projection Data and Methodology Summary

Tax Gap Component		TY 2020 and 2021 Tax Gap Projection Approach	
Nonfiling Tax Gap	Individual Income Tax & Self-employment Tax	Data	• IRS administrative data for TY 2020 and 2021
		Method	• Administrative Data Method: Use IRS administrative data (information documents) for income and impute demographics (based on aggregate Census data) for those who did not file on time • Subtract tax that was timely paid when calculating the tax gap
	Estate Tax	Data	• IRS administrative data for TY 2020 and 2021
		Method	**Late Filers** • Reported tax liability on late filed returns minus tax that was timely paid
Underreporting Tax Gap	Individual Income Tax & Self-employment Tax	Data	• TY 2020 and 2021 IRTF data
		Method	• Assumes line-item compliance rates and average marginal tax rates are constant • Assumes that the TY 2014–2016 tax gap for a line item grew at the rate of growth in the absolute value of the reported amount for the line item.
	Corporation Income Tax	Data	• BRTF data for TY 2020 and 2021
		Method	**Small (assets < $10 million):** • Assumes VRR from small corporation TY 2014–2016 estimate, which is an estimate from 2009–2016 compliance data, applies to TY 2020 and 2021. This is equivalent to assuming the TY 2014–2016 tax gap grew at the rate of growth in reported tax.
			Large (assets ≥: $10 million): • Assumes VRR from large corporation TY 2014–2016 estimate, which is an estimate from 2005–2011 compliance data, applies to TY 2020 and 2021. This is equivalent to assuming the TY 2014–2016 tax gap grew at the rate of growth in reported tax.
	FICA & FUTA Tax	Data	• TY 2020 and 2021 BRTF data
		Method	• VRR estimated for TY 2014–2016 from compliance data for TY 2008–2010 applied to TY 2020 and 2021 reported tax liability. This is equivalent to assuming the tax gap grew at the rate of growth in reported tax.
	Estate Tax	Data	• TY 2020 and 2021 BRTF data
		Method	• Assumes VRR from estate tax TY 2014–2016 estimate applies to TY 2020 and 2021. This is equivalent to assuming the TY 2014–2016 tax gap grew at the rate of growth in reported tax.
Underpayment Tax Gap	All	Data	• TY 2017–2019 IRS administrative data
		Method	• Historical compliance rate from TY 2017–2019 was applied to TY 2020 and TY 2021 administrative data.
Enforced & Other Late Payments	All	Data	• FY 1995–2020 IRS administrative data: IRS Master File tabulations including all late payments by type of tax, tax year of liability, and fiscal year of payment
		Method	• Projection of future payments for a given TY was based on the average historical flow of TY payments across successive FYs.

Notes:
BRTF—Business Returns Transaction File: IRS administrative data containing return information for originally filed business returns
NRP—National Research Program
IRTF—Individual Returns Transaction File: IRS administrative data containing return information for originally filed individual income tax returns
VRR—Voluntary Reporting Rate

Individual Income Tax Underreporting Tax Gap Data and Modeling Limitations

The individual income tax underreporting tax gap makes up the largest component of the gross tax gap at 58 percent for TY 2020 and 2021. Its estimates and projections are subject to various types of error, like all estimates. This section provides details on the sampling error, measurement error, estimation error, and coverage error associated with this tax gap component.

Sampling Error

Since the individual income tax underreporting tax gap estimates are based on stratified random samples, there is sampling error. Sampling error occurs whenever the measure of interest for the sample differs from the true measure in the population. In particular, sampling error may arise from small sample sizes among the very high income (reported TPI greater than or equal to $5 million) possibly understating the tax gap associated with those subpopulations. Irrespective of the challenges of detecting noncompliance on complex issues, if the distribution of the noncompliance is highly skewed among the very high income, then a small sample may not select any of the relatively small number of very large noncompliant returns.

Measurement Error

Measurement error with respect to the individual income tax underreporting tax gap estimates typically refers to the correctness and completeness of the examiner's determination of what should have been reported. Tax gap estimation assumes that the recommended adjustments made by the examiners are correct and appropriate, meaning that the examiner did not make adjustments that should not have been made during the examination. Tax gap estimates, however, do assume that there may be income that examiners did not detect that impacts the completeness of the examiner's determination.

Table 8. TY 2014–2016 Tax Gap Estimation Data and Methodology Summary

Tax Gap Component		TY 2014–2016 Tax Gap Estimation Approach	
Nonfiling Tax Gap	Individual Income Tax & Self-employment Tax	**Data**	• Census survey data linked to expanded IRS data for TY 2014–2016
		Method	• Improved Census Method: Use IRS administrative data (information documents) for income and Census data for demographics for those who did not file on time • Subtract tax that was timely paid when calculating the tax gap
	Estate Tax	**Data**	• IRS administrative data for TY 2014–2016 • National Center for Health Statistics (NCHS) and University of Michigan Health and Retirement Survey (HRS) data from 2014–2016.
		Method	**Late Filers** • Reported tax liability on late filed returns minus tax that was timely paid **Nonfilers** • Wealth adjusted mortality curves; NCHS and HRS data did not support an estimate due to the increased estate tax filing thresholds
Underreporting Tax Gap	Individual Income Tax & Self-employment Tax	**Data**	• TY 2014–2016 NRP data with pooled TY 2011–2015 NRP data used to estimate DCE (Detection Controlled Estimation) • TY 2016 NRP study was limited to returns that claimed certain tax credits
		Method	• NRP individual income tax reporting compliance sample data weighted to population estimates and adjusted for non-detection measurement error through DCE • Line-item DCE estimates • Tax calculator (recomputes tax with DCE adjustment and determines underreporting tax gap for total and by line item)
	Corporation Income Tax	**Data**	• AIMS closed case audit data & tax return data for TY 2005–2016
		Method	**Small (assets < $10 million):** • Econometric model using audit & tax return data from TY 2009–2016 to calculate a VRR which is applied to TY 2014–2016 BRTF reported tax
			Large (assets ≥: $10 million): • Extreme value VRR from Large Corps; uses audit data from TY 2005–2011 to estimate a VRR which is applied to TY 2014–2016 BRTF reported tax
	FICA & FUTA Tax	**Data**	• NRP Employment Tax Study for TY 2008–2010 and TY 2014–2016 BRTF data
		Method	• VRR estimated from NRP for TY 2008–2010 and applied to TY 2014–2016 BRTF reported tax liability
	Estate Tax	**Data**	• Operational audit data for TY 2014–2016.
		Method	• Econometric model used to calculate voluntary reporting rate which is applied to TY 2014–2016 BRTF reported tax
Underpayment Tax Gap	All	**Data**	• TY 2014–2016 IRS administrative data
		Method	• Actual amounts calculated from IRS tax modules
Enforced & Other Late Payments	All	**Data**	• IRS administrative data—IRS Master File tabulations including all late payments by type of tax, tax year of liability, and fiscal year of payment
		Method	• Estimate for a given type of tax & tax year is the sum of late payments to date plus a projection of future late payments based on payment patterns observed for earlier tax years

Notes:
AIMS–Audit Information Management System: IRS administrative data containing information on audits
BRTF–Business Returns Transaction File: IRS administrative data containing return information for originally filed business returns
NRP–National Research Program
IRTF–Individual Returns Transaction File: IRS administrative data containing return information for originally filed individual income tax returns
VRR–Voluntary Reporting Rate

In order to address the measurement error introduced by the possibility of undetected income, tax gap estimation uses the DCE methodology. The DCE methodology produces micro-level estimates that are added to the examiner recommended adjustment that then become the final data used to estimate the individual income tax underreporting tax gap. The final estimates with undetected income range from two to four times as large as estimates based solely on what the examiner determined.

The tax gap estimates may be understated with respect to flow-through income (S corporation and partnership income) and income from offshore accounts because of the difficulty in detecting sophisticated forms of noncompliance by NRP examinations. If examinations fail to provide adequate information about these forms of noncompliance, one might expect that there are other complex issues or types of noncompliance that are yet to be identified. If top examiners detect these forms of noncompliance (DCE estimates depend heavily on what top examiners can detect and how that differs from other examiners), it's possible that the current estimates reasonably account for misreported income from these sources. However, the complex nature of these issues and the resources required to examine them suggests that even the top examiners might not be able to consistently detect all noncompliance.

Estimation Error

The adjustments made to correct for measurement error may introduce estimation error, where the adjustment does not reflect the true measurement error. For example, the specific implementation of the DCE methodology used to adjust for measurement error could understate noncompliance at the top of the income distribution. If detection and noncompliance are heteroskedastic, for example, and the variance increases with income, then the DCE estimation could result in undetected income estimates that are biased downwards.

Coverage Error

The tax gap estimates might not sufficiently cover certain issues or types of noncompliance. The question as to whether specific issues or types of noncompliance are "included" in the individual income tax underreporting tax gap estimates does not always have a simple answer. The fact that a separate tax gap estimate of a specific issue is not possible or not currently available does not necessarily mean that the tax gap related to that issue is not accounted for in the estimates. In some situations, the data are not collected at the level of detail necessary for reporting on an issue. In other situations, the issue may be rare and therefore there may not be sufficient data to provide an estimate with an acceptable level of precision. Some complex issues that are covered by the tax gap estimates may only be partially accounted for due to the earlier discussed measurement error.

Emerging issues is one area where there might be coverage error with respect to projections of the tax gap. For example, digital assets experienced significant growth, in terms of both the market capitalization and transaction volume. Until third-party information reporting on digital asset transactions is fully available, it is challenging to assess the amount of taxable income that is derived by a taxpayer from transactions of digital assets.

Illegally sourced income is generally outside the scope of the tax gap estimates, primarily because the overall goal of the government is to stop the illegal activity, not to tax it. However, some portion of the tax gap likely includes misreporting associated with illegal activities because taxpayers who engage in illegal activities potentially comingle their illegal activities with their legal activities.[12] Although income generated by illegal activities is generally outside the scope of the tax gap estimates, it is plausible that some illegal activity is reflected in the tax gap estimates.

The TY 2020 and TY 2021 projections in this release do not reflect noncompliance associated with certain temporary refundable tax credits that were introduced to provide income support in response to the COVID-19 pandemic. The IRS does not have compliance data on which to base any projections related to these refundable tax credits. Refundable tax credits not covered by these projections include the Recovery Rebate Credit (RRC) for TY 2020 and TY 2021, Qualified Sick and Family Leave Credits for TY 2020 and TY 2021 and the TY 2021 Refundable Child Care Credit. Advance payments of the Child Tax Credit for TY 2021 and Economic Impact Payments (EIP) that are advance payments of the RRC for TY 2020 and TY 2021 are also not included in these projections.

Projection Error

There are several sources of potential error with respect to the projections and estimates that are themselves projections. If the compliance rate for the projection year is different than the estimated historical compliance rate on which the underreporting tax gap projections are based, then underreporting tax gap projections will differ from the final estimates based on contemporaneous compliance data for the projected tax year.

For the individual income tax underreporting tax gap, the projections are at the line item level. The tax gap associated with each line item is assumed to grow at the same rate as the growth in the absolute value of the amounts reported for that line item. For line items that could be positive or negative, the sum of the absolute values of the reported amounts may differ substantially from the sum of the net amounts reported for those lines. If the tax gap for each line item grew at the same rate as the growth in the net amounts, then the individual income tax underreporting tax gap projections would be $3 billion higher for TY 2020 and $20 billion lower for TY 2021.

For Tax Year 2021, there is additional projection error related to the projected tax base. Not all TY 2021 tax returns, including timely filed returns, have been filed and processed at the time these estimates were produced. These current projections do not adjust the underreporting tax gap estimates for returns that had not yet been filed. Historically for the individual income tax and self-employment tax, about 99.8 percent of tax reported on timely filed returns would have been filed and processed when these projections were developed.[13] However, the historical pattern of return filing and processing was affected by the COVID-19 pandemic.[14] For the TY 2012 to 2016 time period, about 94 percent of tax reported on small corporation income tax returns would have been processed and about 88 percent of tax reported on large corporation income tax returns. Those shares increased and fluctuated in recent years. The TY 2021 individual income tax underreporting tax gap could be between $1 billion to $8 billion higher than the current projections depending on the TY 2021 return processing rate. If the historical return processing rate is still applicable to TY 2021 for corporation income tax returns, then the corporation income tax underreporting tax gap projections could be $2 billion higher for small corporations and $3 billion higher for large corporations.

[12] An individual or business could be engaged in illegal activities and use the legal aspects of the business to launder a portion of illegally sourced income.

[13] Processed tax return data was available through the 17th processing cycle of calendar year 2023 (the second processing year for TY 2021) when these projections were developed.

[14] For TY 2019 and TY 2020, about 98% of tax reported on timely filed individual income tax returns had been processed through the 17th processing week of the second processing year.

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