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July 2023

# TAX ENFORCEMENT

## IRS Audit Processes Can Be Strengthened to Address a Growing Number of Large, Complex Partnerships

# GAO Highlights

Highlights of [GAO-23-106020](#), a report to the Chairman, Committee on Finance, U.S. Senate

## Why GAO Did This Study

Business activity has increasingly shifted toward legal structures known as partnerships and away from C corporations subject to the corporate income tax. A partnership is generally an unincorporated organization with two or more members that conducts a business and divides profits. Partnerships usually do not pay income taxes as entities but pass the net income or losses to partners, such as individuals or corporations, who then report the income and pay any applicable taxes.

GAO was asked to examine trends in large partnerships and IRS auditing of them. This report (1) summarizes the number and characteristics of large partnerships; (2) describes the resources used and results of audits of large partnerships; and (3) assesses IRS's efforts to identify potential noncompliance risks in large partnerships. For purposes of this report, large partnerships are defined as having \$100 million or more in assets and 100 or more total partners.

GAO analyzed IRS data pertaining to business and audit activity for tax years 2002 through 2019, the most recent year for which complete data were available; compared IRS statistical models to relevant statistical modeling standards; interviewed agency officials; and held discussion groups with IRS staff.

## What GAO Recommends

GAO is making four recommendations to IRS, including improving the design of its models as well as developing guidance to define and measures to track large and complex partnership audits. IRS agreed with GAO's recommendations.

View [GAO-23-106020](#). For more information, contact James R. McTigue, Jr. at (202) 512-6806 or [mctiguej@gao.gov](mailto:mctiguej@gao.gov).

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### IRS Audit Processes Can Be Strengthened to Address a Growing Number of Large, Complex Partnerships

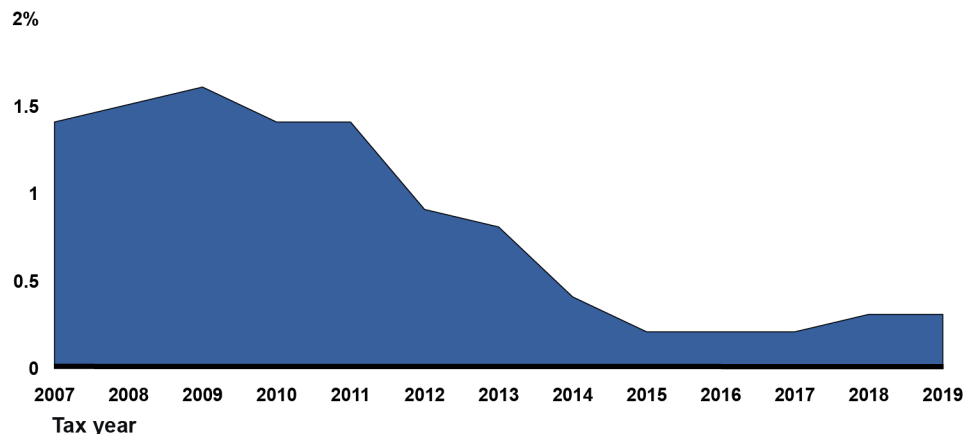
## What GAO Found

In tax year 2019, there were 20,052 large partnerships, increasing nearly 600 percent since tax year 2002. Eighty-four percent of large partnerships reported providing finance and insurance services or real estate and rental leasing. Large partnerships can be complex with income or business expenses passing through multiple levels such that a partnership could be a partner in another partnership.

The Internal Revenue Service (IRS) audits few large partnerships—54 in tax year 2019—and the audit rate has declined since 2007. More than 80 percent of the audits resulted in no change to the return on average from tax years 2010 to 2018, double the rate of large corporate audits. For those that did change, the average adjustment was negative \$264,000. IRS officials attributed the declining audit rate to resource constraints. The Inflation Reduction Act of 2022 (IRA) provided IRS with \$45.6 billion for enforcement activities through the end of fiscal year 2031, and in response IRS identified large partnerships as an enforcement priority. About \$1.4 billion of this funding was rescinded in 2023 with a White House briefing reporting an agreement to reduce future funding by \$20 billion.

**Audit Rate for Large Partnerships, 2007–2019**

Audit rate (percentage)



Source: GAO analysis of Internal Revenue Service data. | [GAO-23-106020](#)

As part of its audit selection process, IRS uses statistical models to help review partnership returns for potential noncompliance, but the models were developed without using representative samples of returns and with untested assumptions. Additionally, IRS has not developed a plan to incorporate feedback from audit results into the models. Addressing these modeling issues could improve IRS's ability to better identify and audit noncompliant partnerships.

IRS planning documents state that it will expand enforcement efforts related to large, complex partnerships using IRA funding. However, IRS has not defined complexity or size in terms specific enough to guide enforcement efforts. IRS also has not developed measures to ensure that additional audits focus on these entities. Developing such a definition and specific outcome measures would help IRS develop plans, track resources used, and assess the results of these new investments in large partnership audits.

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## Abbreviations

AI	artificial intelligence
BBA	Bipartisan Budget Act of 2015
FTE	full-time equivalent
LB&I	Large Business & International division
IRA	Inflation Reduction Act of 2022
IRS	Internal Revenue Service
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982

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July 27, 2023

The Honorable Ron Wyden  
Chairman  
Committee on Finance  
United States Senate

Dear Chairman Wyden:

In recent decades, American businesses have made dramatic shifts in the way they organize and pay taxes. Businesses have shifted toward organizing as legal structures known as pass-through entities, such as partnerships, and away from organizing as C corporations, which are subject to the corporate income tax. Partnerships do not generally pay income taxes. Rather, they pass their income and losses through to their partners who report them on their individual income tax returns and make any associated tax payments.

Our prior work conducted almost a decade ago found that the Internal Revenue Service (IRS) audited few large partnerships and most audits resulted in no change to the income and expenses reported on the partnership's return.<sup>1</sup> We also found that IRS faced a number of challenges in administering procedures for auditing large, complex partnerships that were established by a 1982 law.<sup>2</sup> The challenges included identifying a partner to represent the partnership in the audit and passing through any tax adjustments resulting from the audit to a large number of partners. This made the process time and labor intensive. Our work contributed to Congress establishing new audit procedures that became effective in 2018.<sup>3</sup>

In August 2022, the Inflation Reduction Act of 2022 (IRA) became law, which included a number of provisions related to taxes, energy, and

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<sup>1</sup>GAO, *Large Partnerships: With Growing Number of Partnerships, IRS Needs to Improve Audit Efficiency*, [GAO-14-732](#) (Washington, D.C.: Sept. 18, 2014).

<sup>2</sup>Pub. L. No. 97-248, §§ 401–407, 96 Stat. 324, 648–671 (1982).

<sup>3</sup>Bipartisan Budget Act of 2015, Pub. L. No. 114-74 § 1101, 129 Stat. 584, 625–638 (2015), *codified at* 26 U.S.C. §§ 6221–6223, 6225–6227, 6231–6235, 6241.

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health care.<sup>4</sup> The IRA gave IRS \$45.6 billion through fiscal year 2031 for tax enforcement activities, such as hiring more enforcement agents.<sup>5</sup> In April 2023, IRS released its strategic operating plan outlining how the IRS plans to use the resources provided by the IRA. One of the key priorities outlined in the plan is to increase enforcement activities over large partnerships. In June 2023, the Fiscal Responsibility Act of 2023 rescinded about \$1.4 billion of amounts appropriated for the IRS by IRA.<sup>6</sup> In addition, according to a transcript of a White House briefing with journalists, the President and House leadership agreed to reduce further IRS funding in each of fiscal years 2024 and 2025 by \$10 billion.<sup>7</sup>

You asked us to review the characteristics and trends of large partnerships, the resources used and results of large partnership audits, and IRS's implementation of the new procedures to audit partnerships. Additionally, the IRA included a provision for us to review the distribution and use of funds appropriated by the act and whether the economic, social, and environmental impacts of the funds were equitable.<sup>8</sup> This report is part of a body of work in response to this provision.

This report (1) summarizes what is known about the number and characteristics of large partnerships; (2) describes the resources used and results of audits of large partnerships; and (3) assesses IRS's efforts to identify potential noncompliance risks in large partnerships. For purposes of this report, we define large partnerships as having \$100 million or more in assets and 100 or more total partners. We selected this definition for consistency with an IRS study and the methodology used in our prior work.<sup>9</sup> We generally focused on large partnership tax return filing data from tax years 2002 to 2019, large partnership audit data from tax

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<sup>4</sup>Pub. L. No. 117-169, 136 Stat. 1818 (2022).

<sup>5</sup>Pub. L. No. 117-169, § 10301(1)(A)(ii), 136 Stat. at 1831. This \$45.6 billion is part of a total of \$79.4 billion in appropriations for IRS.

<sup>6</sup>Pub. L. No. 118-5, § 251, 137 Stat. 10, 30 (2023).

<sup>7</sup>Congressional Research Service, *Changes to IRS Funding in the Debt Limit Deal*, IN12172 (Washington, D.C.: June 6, 2023) and the White House, *Background Press Call on the Bipartisan Budget Agreement* (<https://www.whitehouse.gov/briefing-room/press-briefings/2023/05/28/background-press-call-on-the-bipartisan-budget-agreement/> accessed July 19, 2023).

<sup>8</sup>Pub. L. No. 117-169, § 70004, 136 Stat. at 2087.

<sup>9</sup>GAO-14-732. The \$100 million threshold is in nominal dollars. See, IRS Statistics of Income, *Partnership Returns, 2011* (Washington, D.C.: Fall 2013).

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years 2007 to 2019, and corporate audit data from tax years 2010 to 2019. We selected these periods for two reasons: it allows some data to be checked against the results presented in our prior report and they include the most recent tax years available with complete audit results.

To summarize the number and characteristics of large partnerships, we obtained data from IRS from tax returns (Form 1065s) filed by partnerships with 100 or more total partners and \$100 million or more in assets. We obtained data for tax years 2002 to 2021 from two databases and reported most data through tax year 2019 as they were the most complete:

1. The Compliance Data Warehouse database, which contains data on flow through relationships created by partnerships, trusts, and S corporations based on amounts reported on Schedule K-1s sent to partners. These data can be used to infer the ownership structures of partnerships and trace allocations of income and losses through to the ultimate taxpayers.<sup>10</sup>
2. The Business Return Transaction File, which includes information reported on the Form 1065 filed by partnerships.

We merged the Schedule K-1 data with data from the Business Return Transaction File to analyze the total number of partnerships by asset size, industry group, and number of levels or “tiers.” We also reviewed data IRS publishes on total business returns filed, obtained additional data from IRS officials regarding the reported assets and ownership of the larger population of partnerships, and interviewed IRS officials. We assessed the reliability of the IRS data by reviewing documentation, testing the data such as looking for outliers, interviewing officials, and comparing the results for tax years 2002 through 2011 to the results presented in our prior work. We determined the data were sufficiently reliable for describing the numbers and characteristics of large partnerships.

To describe the resources used and results of audits of large partnerships, we merged the Schedule K-1/Business Return Transaction File dataset with IRS’s Audit Information Management System-

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<sup>10</sup>The tax forms are the *Form 1065: U.S. Return of Partnership Income* and the *Schedule K-1 (Form 1065)* providing information about each partner. For this report, IRS traced the ownership structure of a partnership to all ultimate taxpayers regardless of number of levels (i.e., tier depth) or ownership percentage, which was a different methodology than the one used for our 2014 report.

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Centralized Information System for tax years 2007 to 2021 to identify the audited population of large partnership returns. We only reported those audits that were traditional IRS field audits (in which IRS audited the books and records of a large partnership return). We generally focused on tax years 2007 to 2019 for which sufficient data exist to aggregate results and thereby protect individual taxpayer's information.

We analyzed these data for the following measures:

- Audit coverage rate (partnership returns subject to audit as a percentage of the total partnership return population).
- No change rate (those audits that resulted in no change to the tax return from the audit).
- Average audit adjustment to income or tax liability.
- The hours and days spent on large partnership audits, which provided information on some of the resources used for these audits.<sup>11</sup>

We also compared IRS data on audits of large corporations (defined as \$100 million or more in assets) to data on large partnerships. Specifically, we compared the number of audits, audit rate, and percentage of audits resulting in no change. We assessed the reliability of IRS data by reviewing IRS documentation, testing the data such as looking for outliers, and interviewing officials. We determined the data were sufficiently reliable for our purpose. Further, we reviewed IRS's implementation of the new audit procedures enacted in 2015 and effective in 2018 by reviewing IRS documentation and available data and interviewing IRS officials.

To assess IRS's efforts to identify potential noncompliance risks in large partnerships, we reviewed IRS documentation and interviewed IRS officials to understand the process of reviewing partnership returns and assessing their risk for noncompliance. Through these reviews and discussions, we identified and analyzed three statistical models IRS has used to help identify noncompliance in partnership returns and consider them for potential audit.<sup>12</sup> For each model, we reviewed information about its design and development, including the type of information drawn from

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<sup>11</sup>Audit hours do not represent all resources used for the audit, such as time and resources required to select a return for audit.

<sup>12</sup>Since one of these models is no longer in use, we focused our discussion on the model IRS is currently using and a newly developed model it plans to begin using in 2023.



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partnership tax returns and the type of analyses performed by the models using that information. We supplemented our review of documentation with interviews with IRS officials as well as the contractors involved in developing the most recent model. We compared these statistical models IRS uses to leading practices for such models as well as internal control principles.<sup>13</sup>

We also compared IRS's efforts to measure progress toward recent strategic goals for expanding partnership audits against relevant internal control principles and IRS goals for expanding the use of data analytics. We supplemented this information through interviews with IRS officials.

In addition, we held four virtual discussion groups. Two of the groups were with IRS managers who oversee partnership audits and two were with classifiers who identify potential issues to audit on partnership returns.<sup>14</sup> We asked a standard set of questions tailored to the audit managers and classifiers. The purpose of these groups was to understand the overall process IRS uses to select partnership returns for audit, the types of challenges IRS employees face auditing partnership returns, and the tools and resources IRS uses during audits. We also asked questions to determine the types of information IRS employees received about returns while reviewing them, such as output from the models that assess partnership returns for compliance risk. We analyzed the data we collected from these discussion groups to identify themes in conjunction with the other analysis previously described. We designed our discussion groups to gather information on the experiences and perspectives of the partnership audit managers and classifiers. Findings from these groups reflect the perspectives of those participating in our discussions and do not necessarily represent the official viewpoint of IRS.

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<sup>13</sup>GAO, *Artificial Intelligence: An Accountability Framework for Federal Agencies and Other Entities*, [GAO-21-519SP](#) (Washington D.C.: June 30, 2021); Trevor Hastie, Robert Tibshirani, and Jerome Friedman, *The Elements of Statistical Learning: Data Mining, Inference, and Prediction*, 2d ed. (New York: Springer, 2009), 219-237; Gareth James, et al., *An Introduction to Statistical Learning: with Applications in R*, 2d ed. (New York: Springer, 2021), 29-37; and GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

<sup>14</sup>The discussion groups comprised between four to six IRS participants. To identify potential participants, we obtained a list of audit managers and classifiers from IRS's Large Business & International division who had experience working on partnership returns and randomly selected them for the discussion groups. Classifiers and managers participating in our groups had varying levels of experience working on partnership audits.

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We conducted this performance audit from April 2022 to July 2023 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

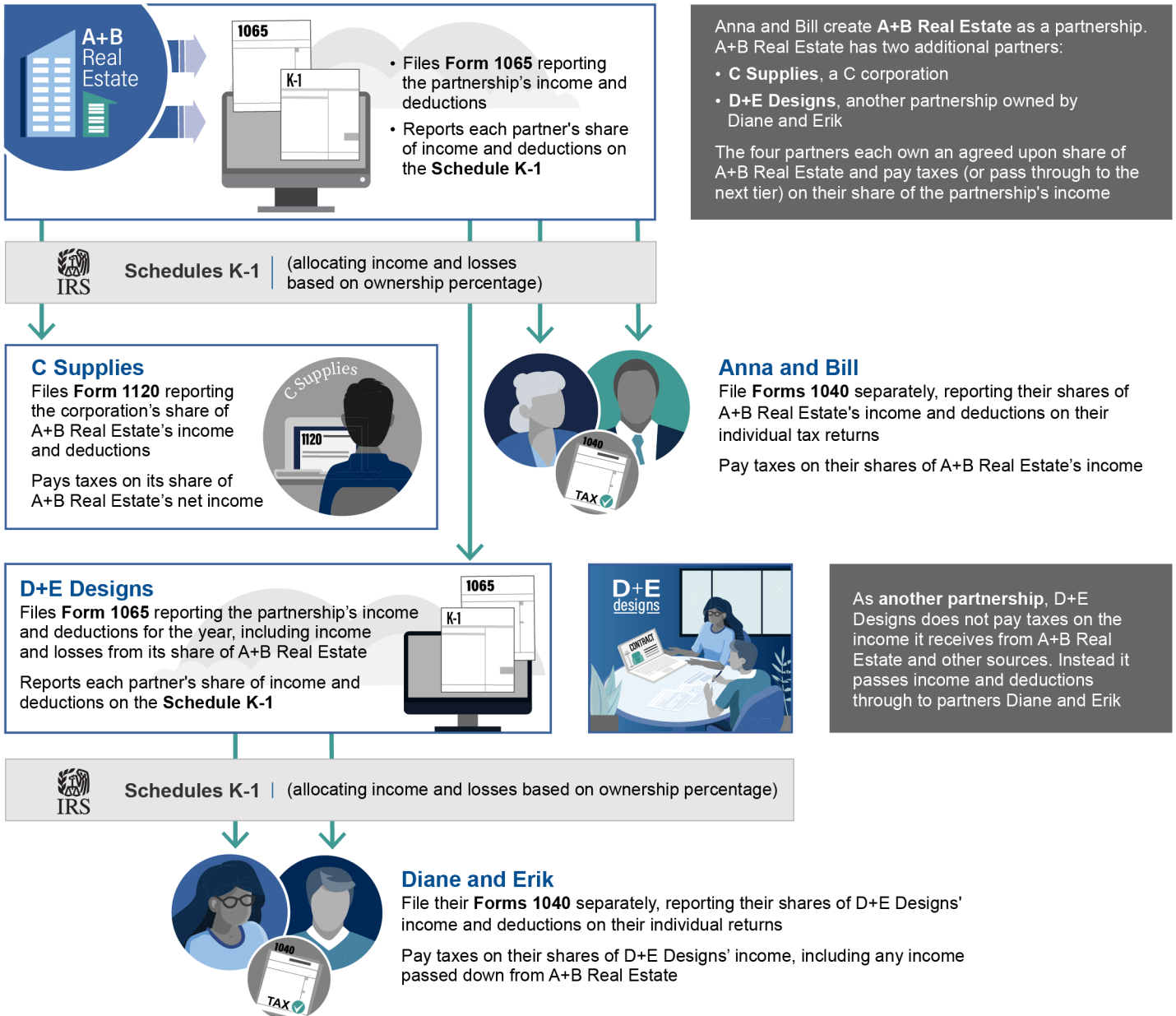
For tax purposes, a partnership is generally an unincorporated organization with two or more members that conducts business and divides profits.<sup>15</sup> Partnerships usually do not pay income taxes as entities but pass—or allocate—the net income or losses to partners, who pay any applicable taxes.

Partners own an interest in a partnership. The partners can be individuals, corporations, other partnerships, or other entities. An individual or corporate partner will generally be a taxable partner. A partnership owning a share of another partnership will generally be a nontaxable partner, meaning that the income or losses flow through to that second partnership's partners. Figure 1 provides an illustrative example focusing on a smaller partnership with fewer than 100 partners.

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<sup>15</sup>Department of the Treasury, Internal Revenue Service, *Partnerships*, Publication 541 (Washington D.C.: March 2022) and [GAO-14-732](#).

**Figure 1: Illustrative Example of a Partnership and Internal Revenue Service Reporting Requirements for Participating Taxpayers**



Source: GAO. Image created by GAO using files from Rudzhan/stock.adobe.com. | GAO-23-106020

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The Bipartisan Budget Act of 2015 (BBA) established new procedures for auditing partnerships. These new partnership audit procedures became generally effective for returns filed for tax years beginning after December 31, 2017.<sup>16</sup> The BBA made two key changes to the previous audit procedures established in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA): (1) IRS generally assesses adjustments and tax assessments at the partnership level and (2) the partnership representative for the audit has sole authority to act on behalf of the partnership for purposes of the audit. This centralized audit regime applies to all partnerships.

Partnerships with 100 or fewer partners can elect out of the audit procedures if all partners are eligible partners such as individuals, C corporations, and S corporations.<sup>17</sup> However, electing out of the new procedures does not mean a partnership can avoid an IRS audit. In tax year 2021, about 99.7 percent of partnerships reported on their Form 1065 having less than 100 partners. Partnerships are not eligible to elect out of the procedures if they have partners that are partnerships, trusts or estates of individuals other than deceased partners, among other types of entities.

IRS uses different methods to assess partnership returns for compliance risk and consider which ones to potentially select for audit. One such method employs statistical models to weigh various characteristics of returns to assess overall noncompliance risk. After the model flags a return, IRS classifiers undertake an initial review of a subset of the flagged returns based on how many audits are planned. Classifiers provide input on whether the return should be audited (and if so whether it should be done in person or through correspondence) as well as identify specific potential noncompliance issues for audit consideration.

This report evaluates IRS's statistical models. However, statistical models are not the only method IRS has for assessing risk. IRS also has compliance campaigns that focus on specific issues, such as identifying taxpayers who do not report the sale of a partnership interest or do not

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<sup>16</sup>Pub. L. No. 114-74, § 1101, 129 Stat. at 625–638. IRS has published guidance for taxpayers explaining the new audit procedures. IRS has a website with links to regulations and other guidance. See, <https://www.irs.gov/businesses/partnerships/bba-centralized-partnership-audit-regime> (accessed May 31, 2023).

<sup>17</sup>S corporations, a type of pass through entity, elect to pass corporate income, losses, deductions, and credits through to their shareholders for federal tax purposes.

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report the gain or loss from such a sale correctly. Campaigns are not always solely focused on enforcement and may also seek to educate taxpayers about tax law. IRS may also come across potential noncompliance in a partnership's return through other means (e.g., an audit of a high income individual who may be a partner in a partnership). IRS audit managers work with other management officials to determine how many partnership returns can be audited based on available resources. These audit managers decide whether an audit should be opened for a particular return and, if so, assign it to an examiner for examination.<sup>18</sup>

Several IRS offices have responsibilities for assisting in large partnership audits. IRS's Large Business & International division (LB&I) oversees partnerships with greater than \$10 million in assets. Within LB&I, the Pass-Through Entities practice area is responsible for developing the audit strategy for these entities. This practice area is also responsible for providing assistance to audit staff across IRS on partnership taxation issues and procedures.<sup>19</sup> Also within LB&I, the Assistant Deputy Commissioner for Compliance Integration works with Pass-Through Entities to develop and update statistical models intended to help IRS assess potential noncompliance risk and identify partnership returns for possible audit.<sup>20</sup> Outside of LB&I, the Research, Applied Analytics, and Statistics division provides tools to help classifiers and examiners review partnership returns and compiles statistics and other research on partnerships.

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<sup>18</sup>For consistency, this report uses the term audit to refer to IRS inspections of a partnership's records for compliance with tax law and regulations. IRS sometimes uses the term examination. We refer to IRS employees who do this work as examiners.

<sup>19</sup>Internal Revenue Service, *Internal Revenue Manual* § 1.1.24.3.1.

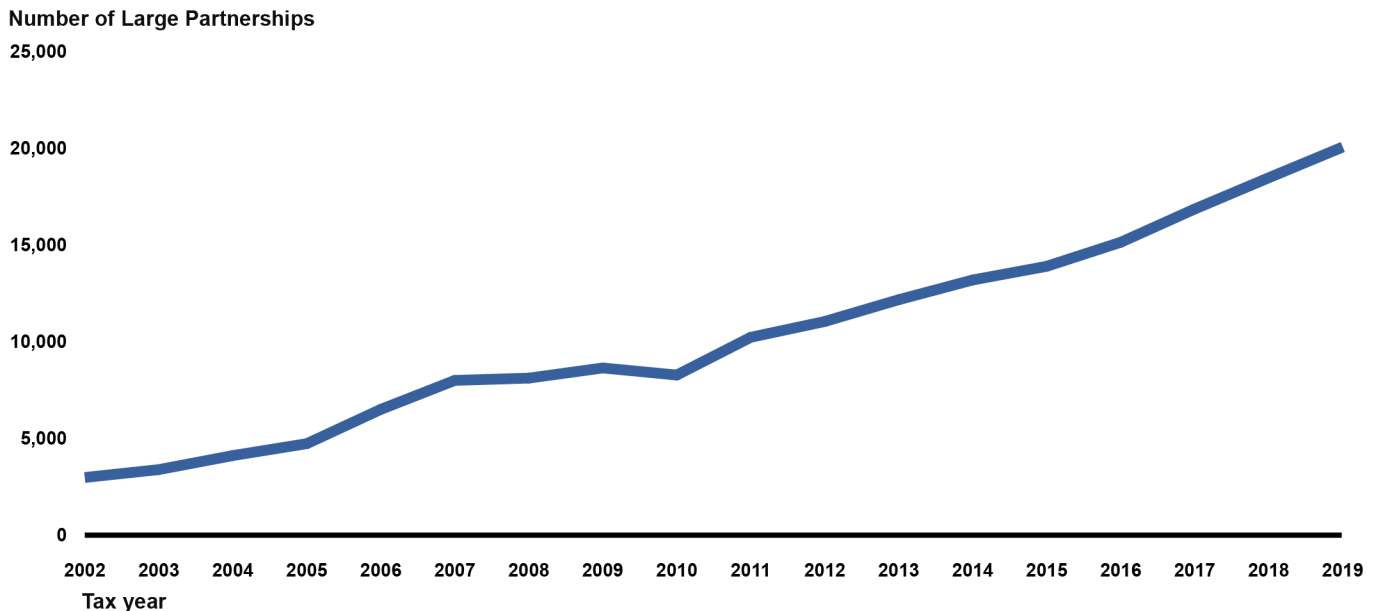
<sup>20</sup>The Assistant Deputy Commissioner for Compliance Integration has a number of other responsibilities including improving the accessibility, reliability, usability, and measurability of data, and ensuring the alignment of operations to LB&I's strategic policies, goals, and objectives.

## Large Partnerships Continue to Grow in Number and Complexity

Business Activity Has Increasingly Shifted to Partnerships and Other Pass-Through Entities

Less than 1 percent of all partnerships in tax year 2019 met our definition of a large partnership having \$100 million or more in assets and 100 or more total partners (20,052 large partnerships out of 3.8 million total partnerships). However, that number reflects an increase of nearly 600 percent between tax years 2002 and 2019, as shown in figure 2.

Figure 2: Number of Large Partnerships, Tax Years 2002 to 2019



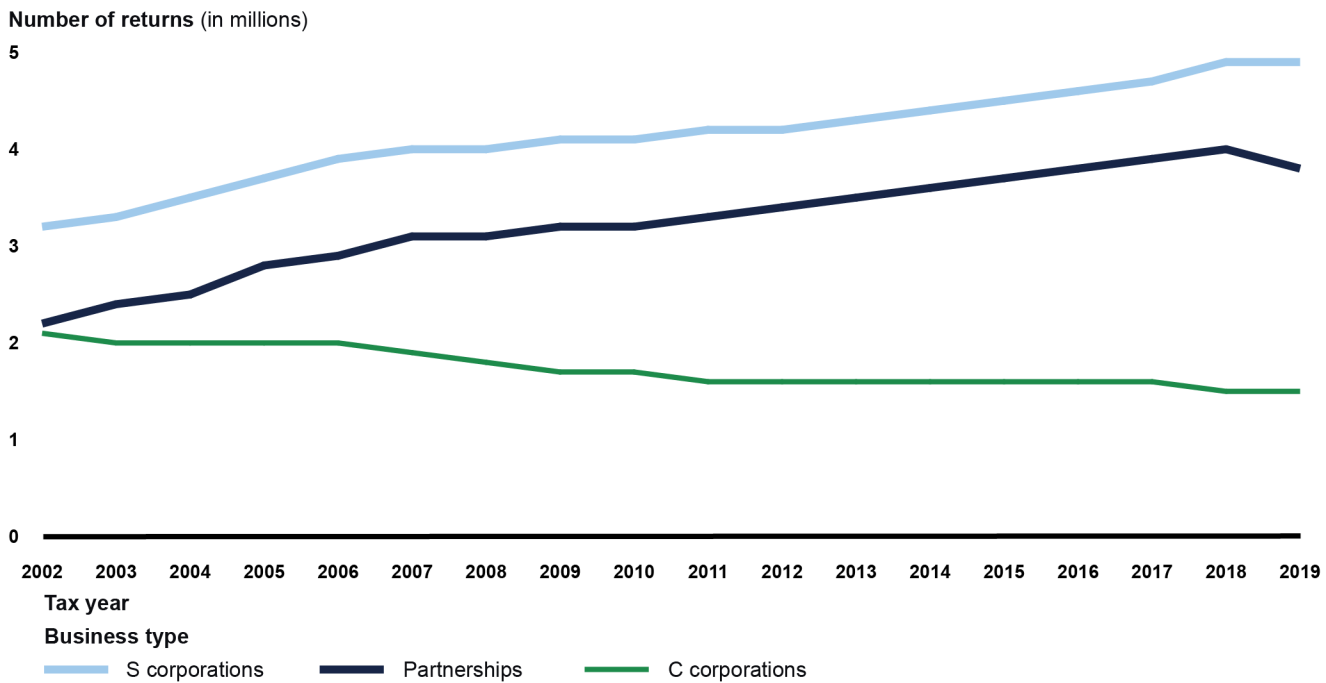
Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Notes: For purposes of this report, large partnerships are those having \$100 million or more in assets (in nominal dollars) and 100 or more total partners.

The growth in large partnerships coincides with the overall shift in business activity to partnerships and another type of pass-through entity known as an S corporation. As shown in figure 3, more businesses have

organized as partnerships or as S corporations and fewer as C corporations from tax years 2002 to 2019.<sup>21</sup>

**Figure 3: Number of Returns by Form of Business, Tax Years 2002 to 2019**



Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Notes: 1) S corporations are a type of pass-through entity that elect to pass income, losses, deductions, and credits through to shareholders for federal tax purposes. S corporations are limited to having no more than 100 shareholders. 2) Partnerships are defined as two or more individuals who engage in a trade or business. Partnerships pass profits or losses to the partners who report their share on their individual tax returns. 3) C corporations are separate taxable entities for federal tax purposes. C corporations conduct business, realize net income or loss, pay taxes, and distribute profits to shareholders. Profits of C corporations are taxed and paid by the corporation; in general, only income distributed in the form of dividends are taxed on individual shareholders' tax returns.

IRS officials said businesses may choose to organize as a partnership for flexibility in how the partners agree on their ownership and tax considerations, among other reasons. For example, a partnership is not subject to the corporate income tax, while C corporations pay the

<sup>21</sup>S corporations, another type of pass-through entity, elect to pass income, losses, deductions, and credits through to their shareholders for federal tax purposes. Shareholders of S corporations report the flow-through of income and losses on their personal tax returns and are taxed at the individual income tax rates. S corporations are limited to having no more than 100 shareholders.

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corporate income tax on their net income and shareholders pay income tax on dividends they may receive.<sup>22</sup> Further, partnership losses can be passed on to partners who can use the losses to offset other income to reduce their tax liability, while losses of C corporations cannot be passed on to shareholders. However as noted above, partners pay taxes on partnership income and the actual tax burden will depend on various factors, such as the partners' marginal tax rates. IRS officials said they generally do not examine the rationale for why a business is organized as a particular entity. However, officials noted they have authority to address a potential situation in which they believe that an organizational form may be used for an abusive tax purpose.

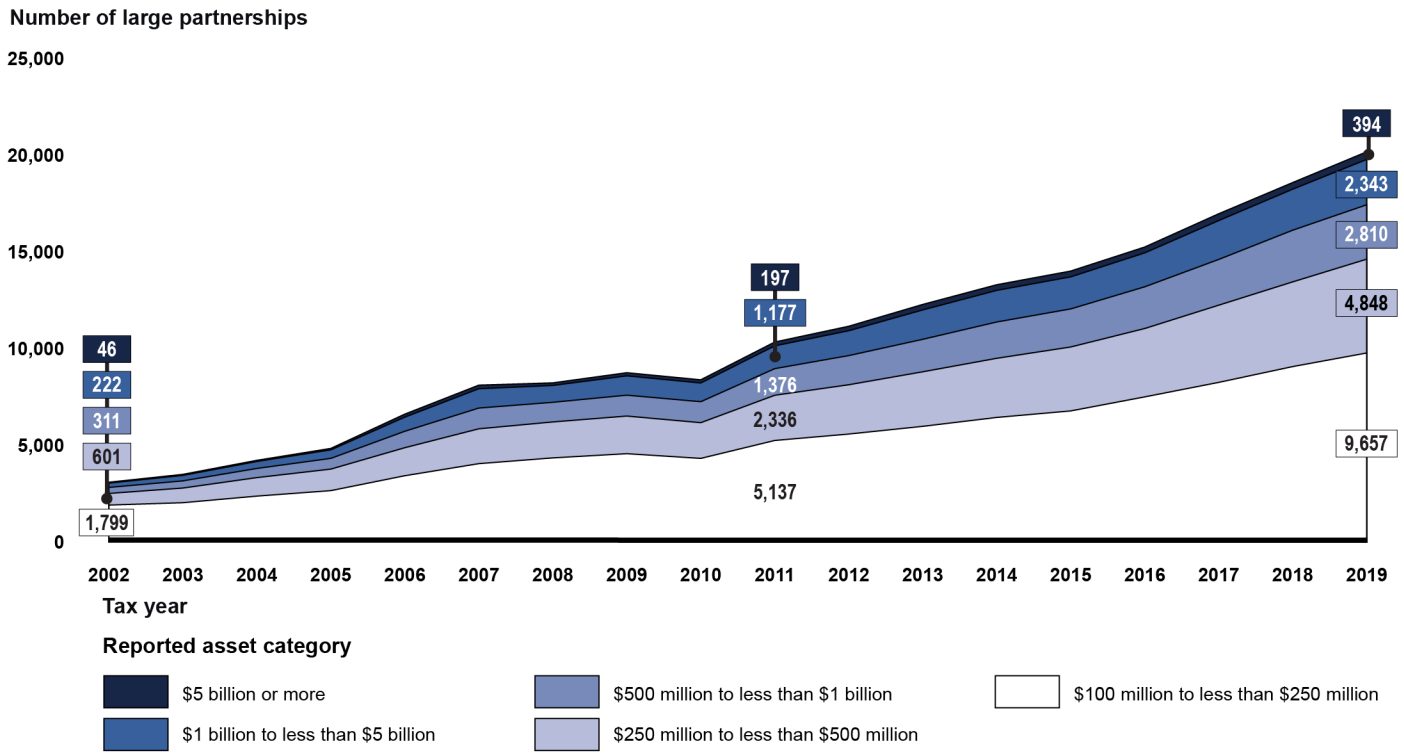
Figure 4 shows the number of large partnerships by asset size. As of 2019, large partnerships held an average of \$818 million in assets.

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<sup>22</sup>Department of the Treasury, Internal Revenue Service, *Starting a Business and Keeping Records*, Publication 583 (Washington, D.C.: January 2021).



**Figure 4: Number of Large Partnerships by Asset Size, Tax Years 2002 to 2019**



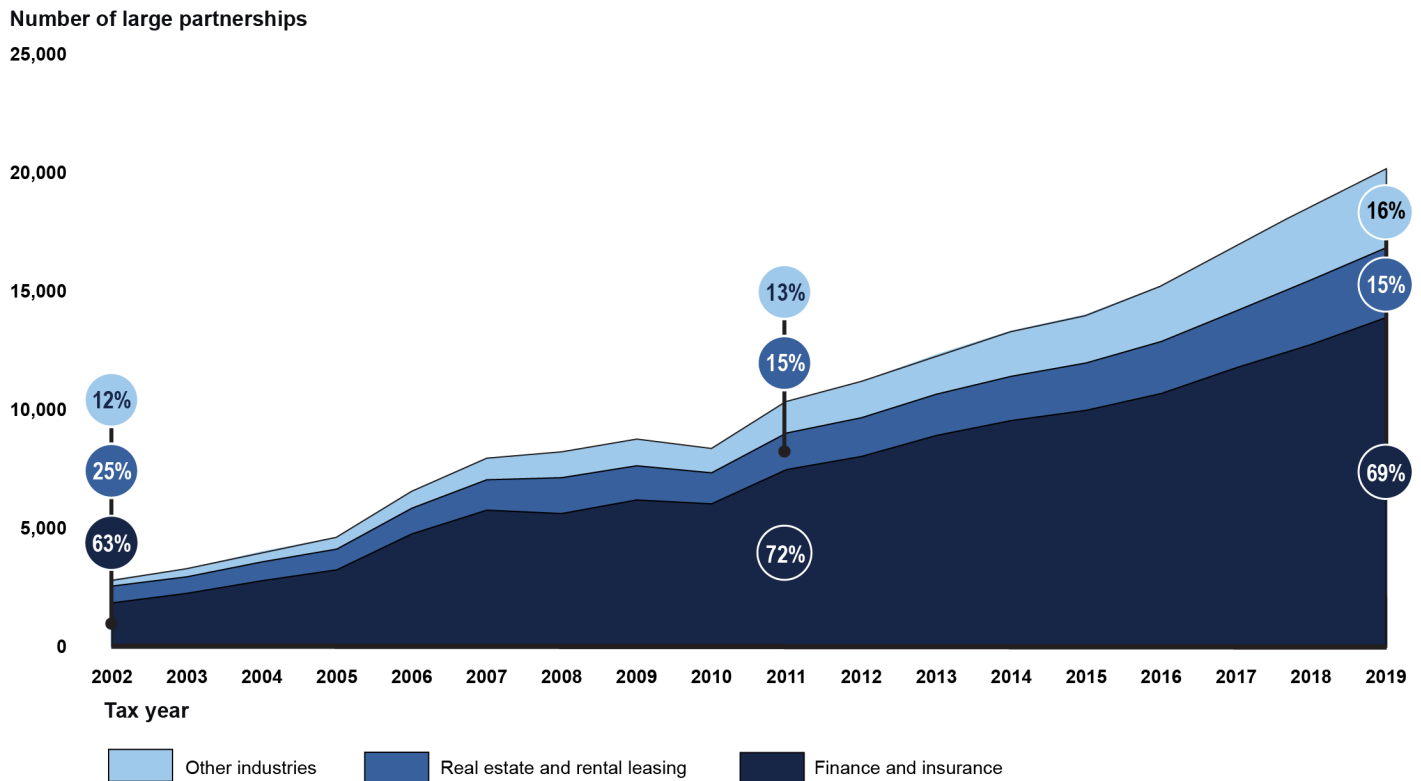
Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Note: Asset categories have not been adjusted for inflation.

The majority of large partnerships reported providing finance and insurance services, generally followed by real estate and rental leasing, which together made up 84 percent of large partnerships in 2019, as shown in figure 5.<sup>23</sup>

<sup>23</sup>IRS requires partnerships to identify their principal business activity on the Form 1065 by selecting codes based on the North American Industry Classification System.

**Figure 5: Number of Large Partnerships by Industry and Share of Total, Tax Years 2002 to 2019**



Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

## Many Large Partnerships Have Circular Relationships, Multiple Levels, and Complex Structures

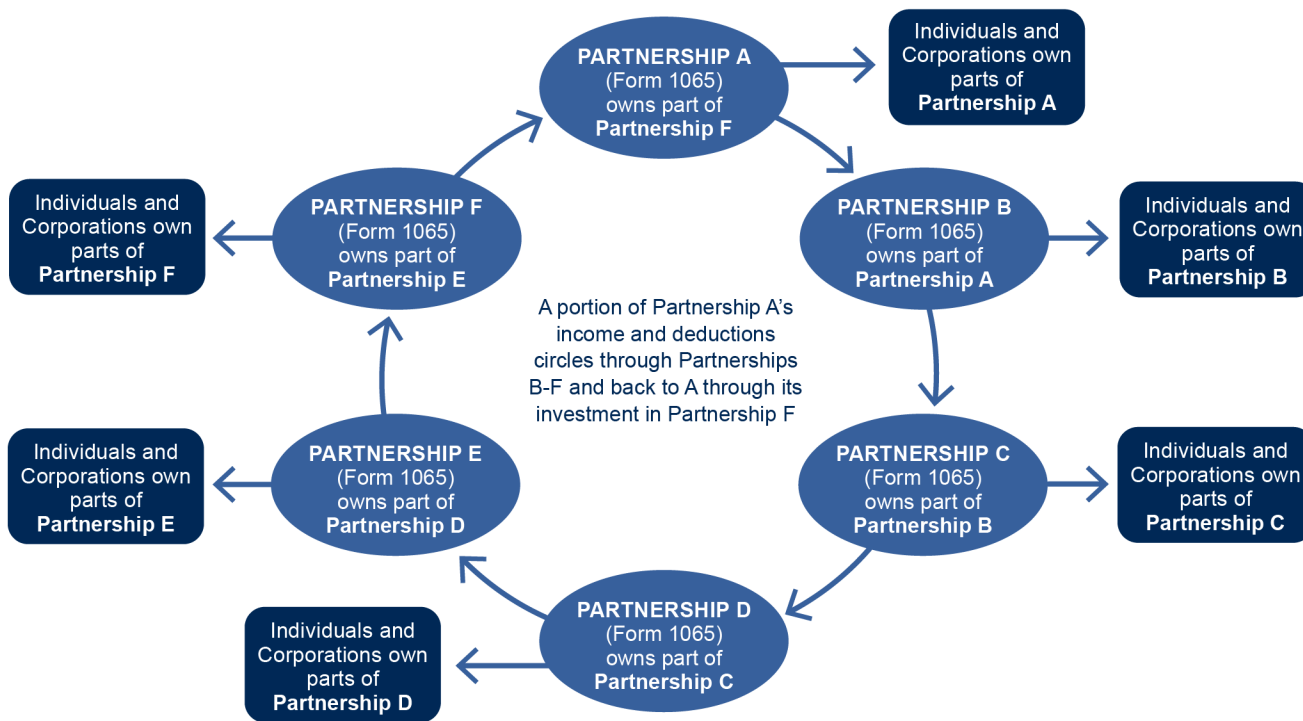
Large partnerships are growing in number and complexity. Many large partnerships have multiple levels or tiers of partnerships with hundreds of thousands of partners. Tiered large partnerships are challenging for IRS to audit because tracing transactions through the tiers to the ultimate partners is complex.

In addition to tiers, IRS provided examples of partnerships that are connected in a circular or spiral fashion, so income and business expenses from a partnership might loop back through its structure or even into a different tax year as shown in figure 6, below.<sup>24</sup> In this example, each partnership receives a Schedule K-1 documenting its income and

<sup>24</sup>We use the term “circular” for these types of relationships. IRS officials prefer the term “cycle” which they define as a path following the Schedule K-1 that links from the partnership back to itself.

business expenses. However, officials said that in some instances the amount of money passed to individual partners is defined as immaterial. The *Internal Revenue Manual* identifies a threshold for materiality, which IRS considers sensitive information. IRS enforcement officials added that an examiner would request the taxpayer to provide more information if a circular structure was found. Further, officials believe IRS has the legal authority to combat potential abuse if a circular partnership is used in an attempt to avoid taxation.

**Figure 6: Illustrative Example of a Circular Partnership Structure**



- Individual and corporate taxpayers**  
File Forms 1040 and 1120 and pay taxes on their share of the partnership's income and deductions
- Partnership**  
Files Form 1065 and passes through income and deductions to partners according to their share of ownership
- Schedule K-1**  
Form allocating the partner's share of income and deductions

Source: GAO analysis of Internal Revenue Service documentation. | GAO-23-106020

Circular partnership structures are one reason why it is difficult to estimate the total number of partners in large partnerships. Our analysis found the average partner count was volatile. IRS research officials

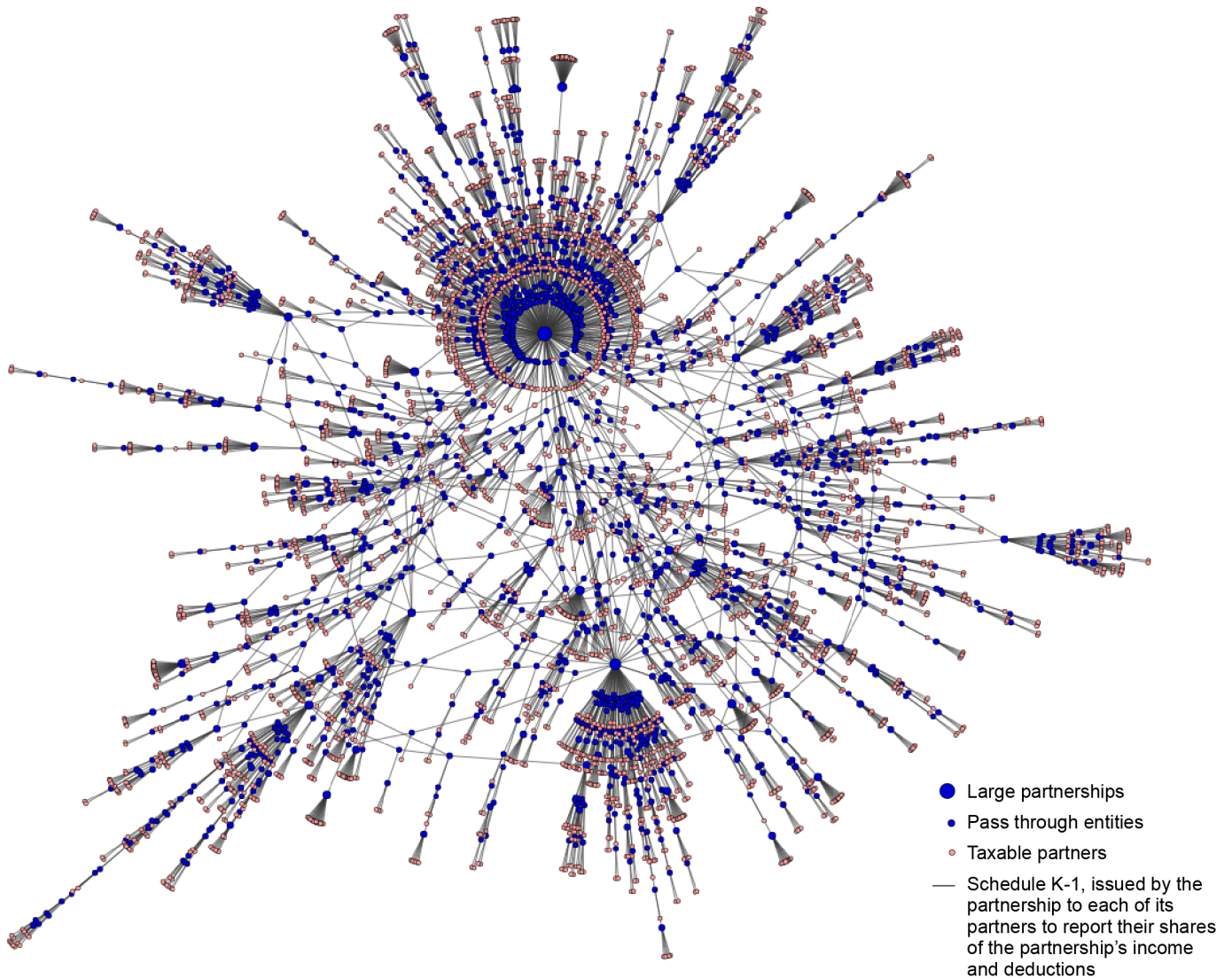
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attribute this volatility in the partner count to pass-through entities investing and divesting in other pass-through entities from one year to the next. For example, in tax year 2011, large partnerships had on average about 56,000 partners at all levels of the partnership. In tax year 2012, this average increased nearly tenfold to 530,000 total partners.

According to IRS officials, the formation of a large, circular relationship among pass-through entities between the years 2011 and 2012 contributed significantly to this rise in the average number of partners. However, these analytical challenges do not necessarily apply to all partnerships. IRS data showed that nearly half of all 3.8 million partnerships that filed a return in tax year 2019 had two partners.

IRS officials generated an example showing how complex large partnerships can be when they have a large number of partners and levels or “tiers” through which income or business expenses are passed, as shown in figure 7. The figure shows a theoretical example of partnerships (blue dots) connected to taxable partners (red dots), such as individuals or C corporations, based on Schedule K-1 forms that report each partner’s share of income and deductions. IRS officials explained that while these data are illustrative, the figure resembles real-world large partnerships that they see in practice.

Figure 7: Illustrative Example of a Complex Ownership Structure for a Large Partnership



Source: Internal Revenue Service. | GAO-23-106020

Our analysis found that the number of large partnerships with 20 or more tiers has increased since 2002 when 36 large partnerships had 20 or more tiers (1.2 percent of large partnerships). By 2019, more than 6,000 large partnerships had 20 or more tiers (31.1 percent of large partnerships). IRS officials said partnerships with 20 or more tiers will look significantly more complex than the example above. In all four of our discussion groups with IRS staff, they noted that partnerships can have a

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high level of complexity in their structures which could include multiple tiers.

IRS officials have developed several software tools intended to help classifiers and examiners trace ownership in large, complex partnerships, i.e., network analysis. For example, the yK-1 system is intended to provide a visual representation of the partnership structure. The Tier Structure Tool supplements the yK-1 and traces relationships through several levels to identify partners. In three of our four discussion groups with IRS staff, they said that they generally found the yK-1 tool helpful, and said the same about the Tier Structure Tool in two of four discussion groups. They noted that the tools were helpful because of their ability to show relationships between entities within a partnership structure.

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## IRS Audits Few Large Partnerships

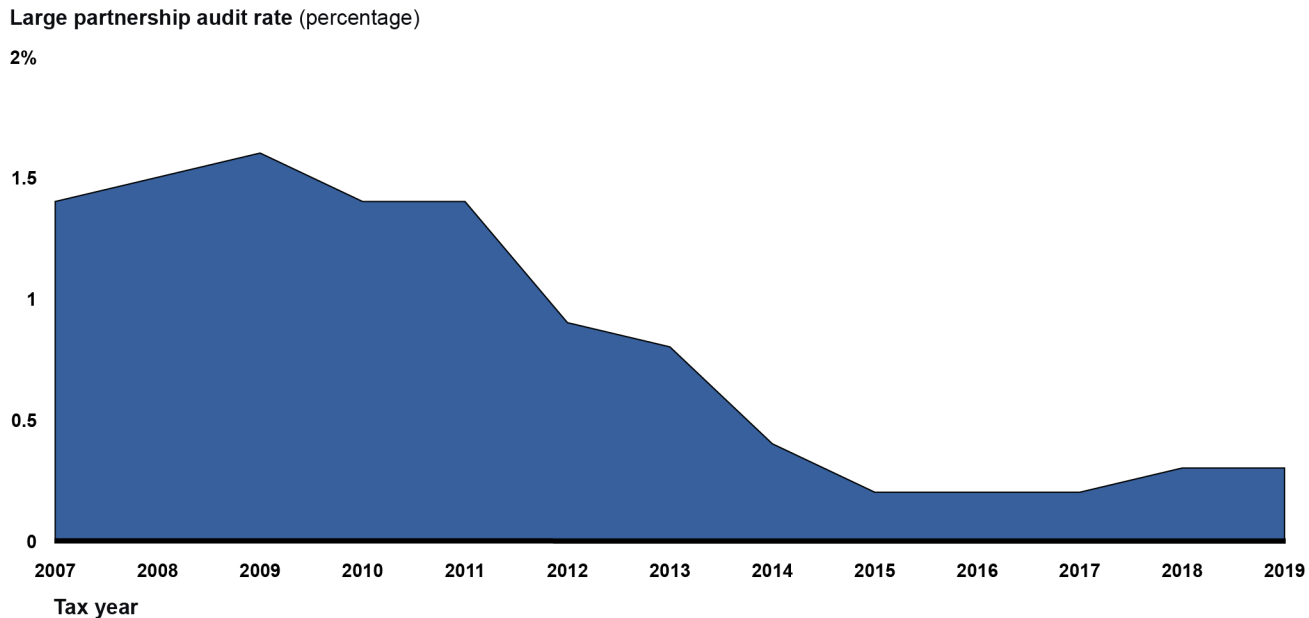
### Audits of Large Partnerships Have Declined Since 2007

Our analysis found that IRS audited 54 large partnerships out of more than 20,000 that filed tax returns in 2019 (an audit rate of 0.3 percent). By contrast, in tax year 2007, IRS audited 109 large partnerships out of 7,865 that filed a return, a rate of 1.4 percent of large partnerships, as shown in figure 8.<sup>25</sup>

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<sup>25</sup>To calculate the audit rate by tax year, IRS divides the total number of closed and open audits for a tax year by the number of tax returns filed for that tax year. Our analysis computed the audit rate based on the total number of field audits, which are detailed examinations of the partnership's tax return. Prior to BBA, IRS also completed campus audits that were extensions of field exams. These campus audits were used to link the audited partnership's return to the partners' returns for purposes of passing through audit adjustments under the prior TEFRA requirements.

**Figure 8: Large Partnership Audit Rate, Tax Years 2007 to 2019**



Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Note: Our analysis computed the audit rate based on the total number of field audits, which are detailed examinations of the partnership's tax return and supporting books and records to determine whether income and losses are properly reported.

Between tax years 2007 and 2018, 1,090 days (or 2.99 years) on average passed from the filing of a large partnership's return to the conclusion of an audit of the large partnership. This amount of time is just under the 3-year period of limitations for IRS to assess taxes on (or adjustments to) a taxpayer.<sup>26</sup> Less than one percent of these audits had an extension of the period of limitations approved by the taxpayer after receiving a request from IRS. IRS does not track if a partnership audit was closed because the period of limitations was expiring and the taxpayer did not agree to an extension.<sup>27</sup> IRS spent on average 614 days (or about 1.7 years) to complete a large partnership audit and IRS examiners charged on average 345 hours to complete each large partnership audit.

<sup>26</sup>The 3-year period begins on the due date of the return or the date on which it was filed, whichever is later. 26 U.S.C. §§ 6501, 6235.

<sup>27</sup>IRS may request an extension to the period of limitations for a number of reasons, such as insufficient time to complete the audit, the audit is going to IRS appeals, or IRS's criminal investigation unit is investigating the taxpayer under audit.

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IRS does not begin an audit immediately after a return is filed because officials must narrow the pool of tax returns for audit consideration. To this end, IRS employs selection methods that include statistical models and filters to identify tax returns that IRS believes are more likely to have noncompliance issues. For example, IRS runs its statistical models to assess the risk of partnership returns twice a calendar year and occasionally may do ad-hoc runs of the models if there is a need to increase the inventory of potential returns to audit. LB&I classifiers assess whether the return merits an audit as well as identify specific potential noncompliance issues for audit consideration. This portion of the process is focused on identifying returns that are considered at risk for noncompliance based on how the statistical model scores the return. Following these steps, the returns are placed in a queue for audit managers to assign to examiners.

IRS officials said budget constraints caused the decline in large partnership audit rates. In fiscal year 2007, IRS's annual appropriations were \$14.4 billion (adjusted for inflation to 2022 dollars). This decreased to just under \$12.7 billion in fiscal year 2019 (adjusted for inflation to 2022 dollars). IRS officials said the budget constraints prevented the agency from back filling audit staff who left the agency. For example, in fiscal year 2007, IRS had 42,334 full-time equivalents (FTE) devoted to examination and collection work. By fiscal year 2019, that number had decreased almost 30 percent to 29,701 FTEs.

Overall, IRS audit rates and enforcement activities have declined since 2010, not only among large partnerships. For example, we previously reported that from tax years 2010 to 2019, audit rates of individual tax returns decreased for all income levels.<sup>28</sup> In addition, audit rates for large C corporations have declined since 2010. In its fiscal year 2024 budget justification and IRS's IRA strategic operating plan, IRS identifies ensuring tax compliance among complex, large partnerships as a priority.

IRS officials said that to counter the declining audit rate they created the Large Partnership Compliance Program in October 2021, which identifies the largest of the large partnerships using various measures on the partnerships' returns. As a result of the program, IRS started 50 audits of

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<sup>28</sup>GAO, *Tax Compliance: Trends of IRS Audit Rates and Results for Individual Taxpayers by Income*, [GAO-22-104960](#) (Washington, D.C.: May 17, 2022).



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partnership returns filed for tax year 2019.<sup>29</sup> Officials reported in June 2023 that they are working on developing an audit plan for tax year 2021 returns contingent upon hiring and training efforts related to IRA. In the past, IRS officials also said they made audit selection decisions to focus on issue-specific audits, known as campaigns, as well as high wealth individuals instead of large partnership audits. In response to the funding provided by the IRA, IRS decided to focus enforcement efforts on large corporations, high wealth individuals, and large, complex partnerships. The IRS planning documents were published prior to the Fiscal Responsibility Act of 2023 rescinding some of this funding in June 2023.

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## Large Partnerships Are Audited at Lower Rates than Large Corporations and Have Fewer Audit Adjustments

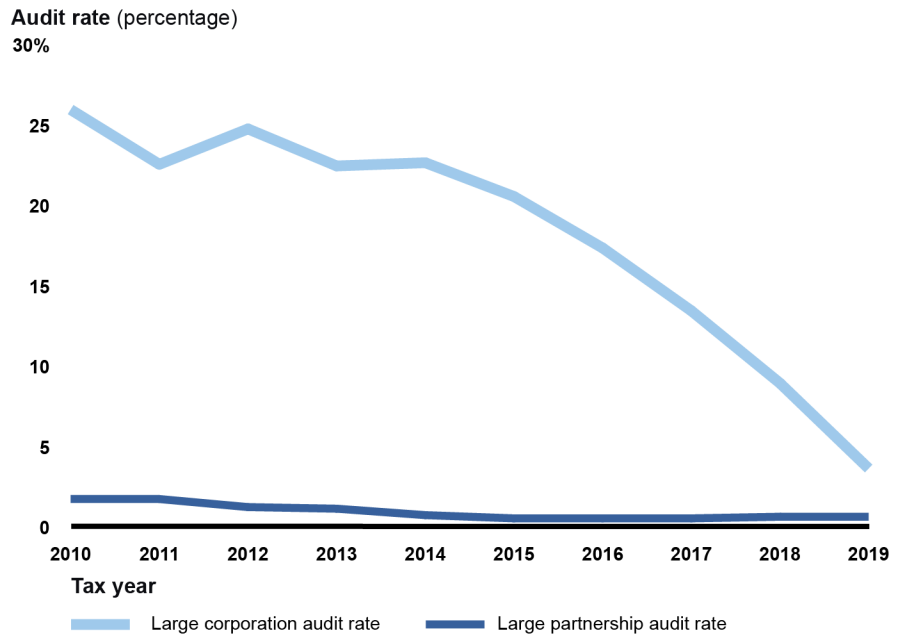
From 2010 through 2019, IRS consistently audited a smaller percentage of large partnerships than large C corporations (those with \$100 million or more in assets). Audit rates for both types of businesses have declined since tax year 2010, as shown in figure 9.<sup>30</sup>

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<sup>29</sup>Those partnerships that meet the criteria for IRS's Large Partnership Compliance Program may not meet the definition used for this report of partnerships with \$100 million or more in assets and 100 partners or more.

<sup>30</sup>The percentage covered and other audit results for tax year 2019 are still within the 3-year period of limitations at the time of our analysis and may increase in future years as additional examinations are completed.

**Figure 9: Audit Rates for Large Partnerships and Large Corporations, Tax Years 2010 to 2019**

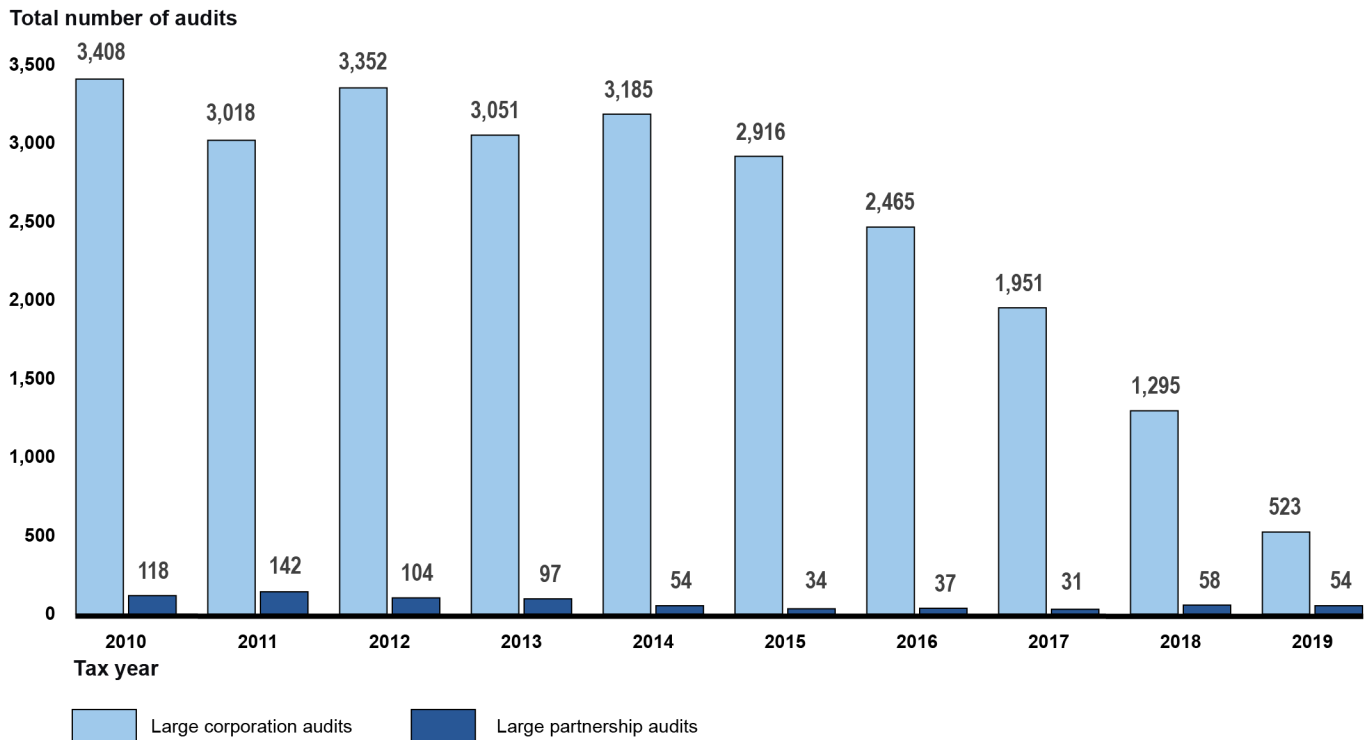


Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Note: Data for large partnerships only include field audits. Data for large C corporations, which are those with \$100 million or more in assets, include corporate correspondence and field audits. About 5 percent of large corporate audits were correspondence audits between fiscal years 2010 and 2019.

In absolute terms, IRS audits a much smaller number of large partnerships compared to large C corporations, even as partnerships have become a more common type of business entity since 2002 compared to C corporations, as shown in figure 10. LB&I officials said they completed the Overall Partnership Strategy Project in September 2022. As part of that assessment, officials recognized that audit coverage of partnerships is significantly less than that of corporations and as a result highlighted the need to increase partnership audits. Further, IRS’s assessment stated that tax practitioners may believe there is less enforcement in the partnership area, which has potentially encouraged the use of partnerships as vehicles for tax noncompliance.

**Figure 10: Total Number of Audits of Large Partnerships and Large Corporations, Tax Years 2010 to 2019**



Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Note: Data for large partnerships only include field audits. Data for large C corporations, which are those with \$100 million or more in assets, include corporate correspondence and field audits. About 5 percent of large corporate audits were correspondence audits between fiscal years 2010 and 2019.

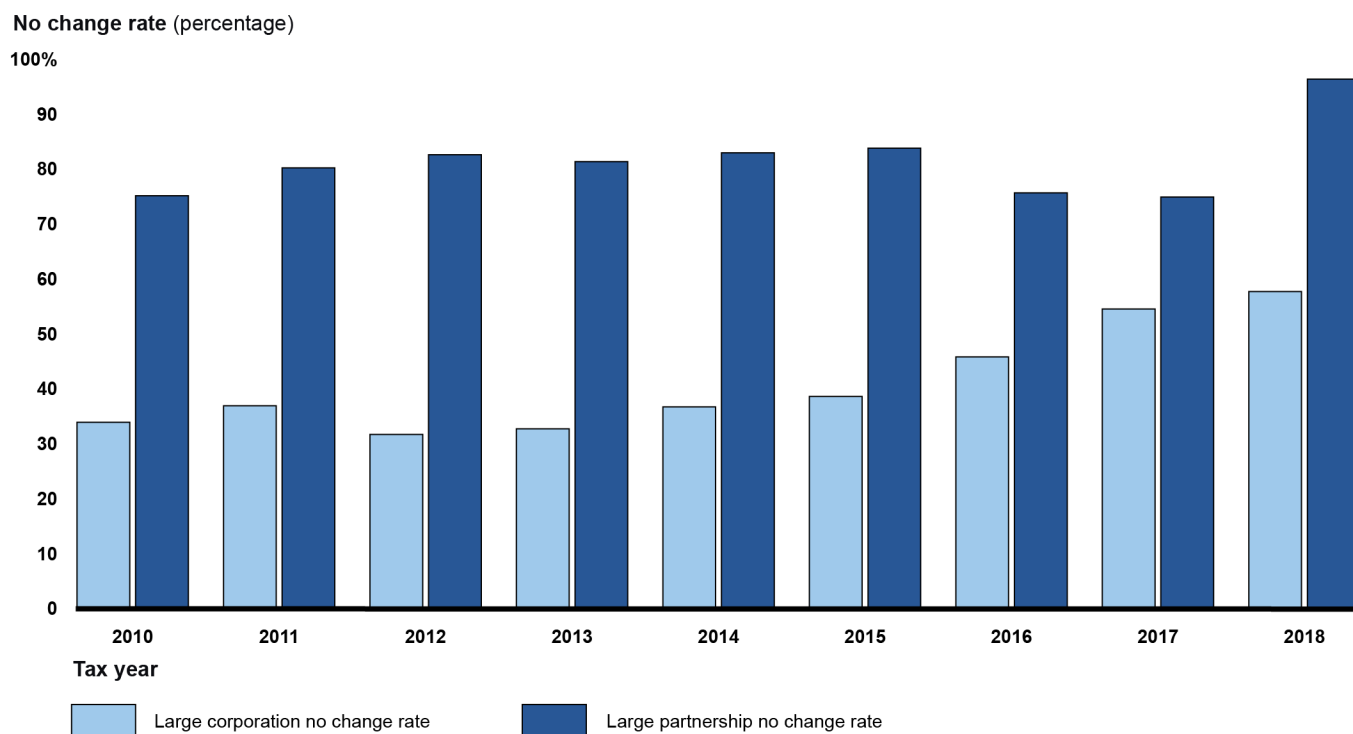
Audits of large partnerships more often resulted in no changes to the partnership’s return compared to audits of large C corporations as shown in figure 11. A large partnership audit may result in no change for a number of reasons, such as:

- IRS does not identify any tax noncompliance.
- IRS runs out of time on the period of limitations and has not identified any compliance risk.

Between tax years 2010 and 2018, almost 81 percent of large partnership audits resulted in no change to the tax return. The no change rate for

large partnership audits was more than double the no change rate for C corporation audits, on average, during that period.<sup>31</sup>

**Figure 11: No Change Rate for Audits of Large Partnerships and Large Corporations, Tax Years 2010 to 2018**



Source: GAO analysis of Internal Revenue Service data. | GAO-23-106020

Note: For partnerships, the no change rate is calculated by dividing the number of closed audits that result in no change to the partnership's reported income, loss, deductions, or credits reflected on the tax return or Schedule(s) K-1 for partners filed in a tax year, divided by all closed partnership audits filed in the same tax year. The no change rate for corporations is based on audits that made no changes in the tax liability reported on the corporate tax return (e.g., tax penalties or refundable credits). Data for large partnerships only include field audits. Data for large C corporations, which are those with \$100 million or more in assets, include corporate correspondence and field audits. About 5 percent of large corporate audits were correspondence audits between fiscal years 2010 and 2019.

<sup>31</sup>For more recent tax years, such as 2019, there may be audits that IRS has yet to close because the taxpayer agreed to a period of limitation extension. Therefore, the aggregate audit results presented in this report for those years may not reflect the final results once all audits are closed. Also, our analysis did not track the slightly more than 1 percent of large partnership audits which went to IRS appeals, where the initial audit result against a taxpayer could potentially change. However, such a small percentage of cases going to appeals would not materially change the results presented.

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An IRS official said the high no change rate among large partnerships has been a challenge for IRS to figure out, although officials have reviewed it extensively internally. IRS officials said that large partnership audits face a number of challenges including the complexity of partnership structures, familiarity of staff with the new BBA audit procedures, and specialist staff with knowledge of partnership tax law. In all four of our discussion groups with IRS staff, they highlighted the level of complexity associated with partnership structures as a challenge; three of our four discussion groups mentioned the complexity of partnership law and partnerships having multiple tiers and complex structures. In September 2022, IRS completed its overall partnership strategy in which it stated partnership tax law is among the most complex in tax law.

IRS officials also described conceptual challenges in comparing no change rates for large partnerships and large corporations. IRS compares the no change rates internally, but officials said there are differences in the structures of these types of businesses. For example, C corporations are taxable entities, whereas partnerships are pass-through entities. As of April 2023, officials said they are considering an alternative no change rate for large partnerships to account for the whole partnership structure, but they did not have a timeframe for implementing it.

When field audits of large partnerships resulted in changes to the return, from tax year 2010 to 2018, the average audit adjustment to income was negative \$264,000. This compared to a \$4.5 million average adjustment to tax liability as a result of large corporate audits over the same time period.<sup>32</sup> IRS officials said adjustments from a partnership audit can have a range of different tax effects on individual partner's returns, depending on the item(s) adjusted and the individual partner's specific tax situation. Such effects would not be captured in the average audit adjustment to income on the partnership's return.

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### IRS Officials Said New Audit Procedures Simplify Administrative Burden but Data Are Limited to Further Assess Impact

BBA audit procedures have generally simplified the administrative burden of partnership audits for IRS, according to the officials who oversee the Pass-Through Entities practice area and in two of our four discussion groups with IRS staff.

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<sup>32</sup>The data above include only partnership field audits while it includes both correspondence and field audits for corporations. However, the data are comparable because only about 5 percent of large corporate audits were correspondence audits between fiscal years 2010 and 2018.

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According to IRS officials, while an audit's core components, such as requesting and reviewing information from taxpayers, are the same, the new audit procedures shifted the responsibility for allocating adjustments and assessing tax as a result of the audit from IRS to the partnership. In the case of large partnerships, which could have hundreds or thousands of partners, the reduction in burden would likely be meaningful for IRS.

BBA's new procedures also save time at the end of an audit due to the additional authority granted to the partnership's representative under BBA, according to IRS officials. Under TEFRA, the Tax Matters Partner, who is designated by a partnership to represent the business before IRS during an audit, had limited authority to act on behalf of the partnership or the partners. Under BBA, the partnership's representative can request modifications to the partnership's return, extend or waive the period of limitations, extend the adjustment period, and accept the final adjustment.

IRS also has more flexibility to designate a representative. IRS can select any person in the partnership who has sufficient knowledge and meets the residency requirement.<sup>33</sup> In contrast, under TEFRA, partnerships were not required to designate a Tax Matters Partner on their returns and could designate an entity rather than an individual.<sup>34</sup> In two of our four discussion groups with IRS staff, they stated that they are still getting used to the new BBA audit procedures. However, in three of our four discussion groups, IRS staff also said they received the help they needed from specialists, which could include specialists on tax issues and the BBA audit procedures.

IRS officials said they do not yet have sufficient data on the time it takes to complete BBA partnership audits compared to audits under TEFRA. Of the large partnership population we identified, 218 audits were opened for returns filed for tax years 2018 to 2020. IRS began two-thirds of these audits in calendar year 2022 and many of these cases remained open as

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<sup>33</sup>An individual or entity meets the residency requirements if (1) it has a U.S. taxpayer identification number, (2) it has a U.S. street address and a telephone number with a U.S. area code, and (3) the partnership representative or designated individual acting on behalf of an entity partnership representative makes themselves available to meet in person with the IRS in the United States at a reasonable time and place as determined by the IRS in accordance with Treasury regulations. 26 C.F.R. § 301.6223-1(b).

<sup>34</sup>If a large partnership did not designate a Tax Matters Partner on the partnership return, IRS provided the partnership the opportunity to do so. If the partnership did not do so, under TEFRA the partner with the largest profit interest automatically became the Tax Matters Partner. However, if IRS determined that it was impracticable to apply this rule, it could designate the Tax Matters Partner.

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of March 2023. For example, 28 of 58 returns audited for tax year 2018 were closed as of March 2023. Because data are limited, we could not determine what effect, if any, the new BBA procedures may have had on time frames for completing these audits.

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## IRS Efforts to Improve Large Partnership Audits Are Hindered by Model Design and Overly Broad Measures

### Opportunities Exist to Improve the Design of Statistical Models to Better Select the Highest Risk Returns

IRS began using statistical models to help prioritize partnership returns for audit in 2006 and has developed two additional models since then. However, IRS did not follow leading practices for statistical modeling in developing the current model or the new model IRS is preparing to deploy.<sup>35</sup> Specifically IRS developed the models without using representative samples of partnership returns. IRS also based the models on untested assumptions about risk and compliance and does not have a formal process in place for using future partnership audit results or additional research to improve the performance of its models.

### IRS Uses Two Models Currently to Review Partnership Returns

**Partnership Model.** IRS introduced the current Partnership Model in 2018. It replaced another model, which IRS began using in 2006. The Partnership Model compares certain items from partnership returns across certain groups and multiple years to identify potential compliance risks. The results are weighted by the degree of importance assigned to each type of comparison by IRS staff. The results are combined and used to classify each return as low, medium, or high risk. For tax year 2020, IRS used the Partnership Model to review the 249,464 partnership returns with \$10 million or more in assets for which LB&I is responsible. The high-risk returns identified by the model are sent for additional review by classifiers. Audit work had started on almost 400 of these returns as of

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<sup>35</sup>Trevor Hastie, Robert Tibshirani, and Jerome Friedman, *The Elements of Statistical Learning: Data Mining, Inference, and Prediction* 2d ed. (New York: Springer, 2009), 219-237 and Gareth James, et al., *An Introduction to Statistical Learning: with Applications in R*, 2d ed. (New York: Springer, 2021), 29-37.

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April 2023. This number makes the model output the largest single source of returns audited from that tax year.

**Large Partnership Compliance Model.** IRS has been developing the Large Partnership Compliance Model in response to the growing number of large, complex partnerships. The Large Partnership Compliance Model could replace the Partnership Model in reviewing most partnership returns, but IRS has not yet decided if it will. The new model is intended to prioritize returns for classification and to provide information to audit teams about the potential noncompliance risks identified in the returns. In April 2023, IRS used the new model for the first time to identify 150 large partnership returns from tax year 2021 for additional review by classifiers. A subset will be selected for potential audit, contingent upon hiring and training efforts related to IRA funding. The new model uses multiple indicators of risk for noncompliance that are based on accounting rules, tax law, and a machine learning algorithm. The return scores are then weighted according to the degree of importance assigned to each metric by IRS's subject matter experts. The results are combined and used to classify the risk of noncompliance for each return as very low, low, medium, high, or very high. IRS considers the Large Partnership Compliance Model to be an artificial intelligence (AI) system and included it in an inventory of AI use cases required by Executive Order 13960 *Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*.<sup>36</sup> IRS officials told us they also believe the Partnership Model meets the description of an AI system used by the Executive Order.<sup>37</sup>

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<sup>36</sup>Exec. Order No. 13960, *Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, 85 Fed. Reg. 78939 (Dec. 8, 2020).

<sup>37</sup>Exec. Order No. 13960 uses the definition of AI included in section 238(g) of the National Defense Authorization Act for Fiscal Year 2019. John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, § 238(g), 132 Stat. 1636, 1697–1698 (2018). The Act defines AI to include any artificial system: (1) that performs tasks under varying and unpredictable circumstances without significant human oversight, or that can learn from experience and improve performance when exposed to data sets; (2) developed in computer software, physical hardware, or other context that solves tasks requiring human-like perception, cognition, planning, learning, communication, or physical action; (3) designed to think or act like a human, including cognitive architectures and neural networks; (4) that uses a set of techniques, including machine learning that is designed to approximate a cognitive task; or (5) designed to act rationally, including an intelligent software agent or embodied robot that achieves goals using perception, planning, reasoning, learning, communicating, decision making, and acting.



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IRS Used Unrepresentative Data to Develop Partnership Models

We found that both the Partnership Model and the Large Partnership Compliance Model have design weaknesses that are not consistent with leading practices and limit IRS's ability to leverage these technologies to objectively identify the most high-risk returns and improve audit selection over time.

IRS did not select a representative sample of partnership returns to identify the noncompliance risk factors used by its two models. Instead, IRS drew samples of returns the models identified as potentially high-risk for examination by IRS's subject matter experts. Officials then compared the models' assessment of the returns to the assessment of subject matter experts to see if their conclusions were similar. To test the Partnership Model, IRS took random samples of returns with varying degrees of predicted risk above a minimum threshold, not a sample of all partnership returns in LB&I's population. IRS did not provide documentation that would allow us to evaluate these tests in detail.

If IRS had used a sample of returns from the general population of returns reviewed by LB&I, including some returns that the models might have identified as without risk or lower risk, IRS examiners might have found additional potential compliance challenges in returns the model was not designed to detect. In contrast, IRS previously used a type of representative sampling—random selection—to help develop its prior model. That model was intended to replicate the decision making of experienced classifiers.

IRS told us that they did not take random samples from the general population of partnership returns that LB&I reviews when developing the Partnership Model because this would have been a very costly undertaking that the relevant offices did not have the resources to undertake. IRS also did not take random samples to develop the Large Partnership Compliance Model. Officials said that IRS decided to prioritize returns that the model flagged as risky for their initial tests rather than taking a sample from the full population of partnerships under LB&I's purview.

Multiple guidelines related to the development and use of statistical models call for agencies to take a representative sample of the full population. Our *AI Accountability Framework* states that entities using data in AI systems should assess the reliability, quality, and representativeness of all the data used in the system's operation,

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including any potential biases, inequities, and other societal concerns associated with the AI system's data.<sup>38</sup>

Furthermore, accepted practices for predictive statistical modeling suggest agencies should develop and validate models using training samples that are representative of the populations on which the models are to be applied.<sup>39</sup> In addition, *Standards for Internal Control in the Federal Government* state that entities should identify information requirements to achieve objectives and obtain relevant data from reliable internal and external sources, free from error and bias and faithfully represent what they purport to represent.<sup>40</sup>

Further, circumstances have changed since IRS developed the Partnership Model and began developing the Large Partnership Compliance Model. Officials cited resource constraints as a reason for not taking representative samples for the Partnership Model and told us they used IRS's annual appropriations to support work on the Large Partnership Compliance Model. Going forward, IRA funding provides supplemental resources which could potentially be used for refining model methodologies, including by reviewing random samples from the general populations of large partnership returns. Without using representative data to develop the models, IRS may not be able to detect potential compliance challenges that its subject matter experts are not currently aware of and that the models are not currently designating as potentially risky. This could limit IRS's ability to prioritize tax returns to focus audits on the returns with the highest risk of noncompliance as well as identify emerging risks.

### IRS Uses Untested Assumptions and Has Limited Plans to Incorporate Feedback from Audit Results into Partnership Models

Both the Partnership Model and Large Partnership Compliance Model incorporate a number of assumptions that have not been tested or validated using known outcome data or other research on compliance. For example, the Partnership Model makes a number of data comparisons and determinations based on assumptions about noncompliant behavior. To support the use of these assumptions, IRS officials referred to a research paper on behaviors in groups of similar

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<sup>38</sup>GAO, *Artificial Intelligence: An Accountability Framework for Federal Agencies and Other Entities*, [GAO-21-519SP](#) (Washington D.C.: June 30, 2021).

<sup>39</sup>Hastie, Tibshirani, and Friedman, 2009. James, et al., 2021.

<sup>40</sup>[GAO-14-704G](#).

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partnerships (or peers) and compliance.<sup>41</sup> However, IRS does not use the same peer groups or definitions as the researchers who conducted the work and does not present a clear theoretical basis for some of the model's assumptions.

For example, the research paper defines firms as peers based on both their size and their industry, while IRS considers these two characteristics independently. Furthermore, the research paper suggests that partnerships are more likely to be noncompliant after emulating the behavior of peers who reduced their tax burden through noncompliance. Theoretically, this would make noncompliant partnerships less likely to be outliers, because previously compliant partnerships are predicted to emulate the behavior of noncompliant peers. The challenge this would present for IRS is that the Partnership Model flags partnership returns that are outliers.

We also identified multiple untested assumptions about risk factors and their importance in the Large Partnership Compliance Model. The assumptions used to develop the business risk indicators on partnership returns and the weighting factors used to develop aggregate risk scores were drawn from interviews with IRS subject matter experts in the fields of accounting and tax law. They are based on considerable expertise in these fields, but were not tested or validated using known outcome data from audited returns found to be noncompliant or other supporting research. Furthermore, IRS did not investigate how final rankings for partnership returns generated by the model might be affected by industry, income group, use of different forms and schedules, or various other factors that could be observed and tested for their ability to predict noncompliance. IRS has said it plans to explore differences by industry and size, but has not done so at this time.

The limited number of large partnership audits IRS undertakes makes it challenging to use known outcome data to test assumptions about noncompliance risk factors that are built into the models. When developing its prior model, IRS acknowledged the limited data available from completed partnership audits. That model was designed to replicate human judgments that were made by classifiers. This allowed IRS to use

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<sup>41</sup>Andrew Bird, Alexander Edwards, and Thomas G. Ruchti, "Taxes and Peer Effects," *The Accounting Review*, Vol. 93, No. 5 (Sept. 2018).

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the results from a classified and reviewed sample of returns when developing the model.

In contrast, the newer models are designed to rank returns by the perceived risk of noncompliance, meaning that known outcome data on compliance would be needed to test these models. IRS told us that for the Partnership Model, the agency has not determined how much data would be necessary to review the model assumptions because of the low number of audits IRS currently has the capacity to conduct. For the Large Partnership Compliance Model, officials told us they could use statistical methods to calculate the number of completed cases that would be needed to test the model assumptions, but did not say that they had done this analysis.

In addition, IRS has limited plans for incorporating feedback from the results of future audits or conducting research that might help supplement this lack of outcome data. While officials from the office of the Assistant Deputy Commissioner for Compliance Integration told us they have access to data on audit results, officials responsible for the models told us in March 2023 that they do not have a detailed strategy or plan for using actual audit outcomes to act as a “feedback loop” to help the models more accurately identify high-risk returns. In response to our preliminary findings, IRS officials told us in May 2023 that the agency’s subject matter experts and relevant offices will work with the contractors who created the Large Partnership Compliance Model to develop a plan for incorporating the use of audit results and other feedback as it becomes available.

IRS officials told us that the Large Partnership Compliance Model was used to review returns for the first time in April 2023, so plans for testing assumptions and using data and feedback to improve its performance are not developed yet. IRS has not provided documentation of its plans for incorporating feedback, or details concerning the amount of data that will be needed to validate and test the assumptions in the model or additional research into compliance it could use to supplement the limited amount of audit data available. Officials noted that another challenge is that audits can take several years to complete, which makes it more difficult to obtain outcome data to train models and potentially improve selection or create a feedback loop.

Assumptions should be tested according to key practices for using data in AI systems and improving the performance of those systems. We have previously reported that entities should (1) assess the data variables used in AI component models to ensure appropriateness; (2) define

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performance metrics that are precise, consistent, and reproducible; and (3) assess the performance of each component against defined metrics to ensure it functions as intended and is consistent with program goals and objectives.<sup>42</sup> Accepted practices for predictive statistical modeling also call for analysts to validate model specifications against their ability to predict target outcomes in development, validation, and real-world application samples.<sup>43</sup> Furthermore, *Standards for Internal Control in the Federal Government* also calls on entities to use quality information to achieve their objectives. Not developing plans for incorporating more information as it becomes available is inconsistent with these standards, which state that entities should identify information requirements to achieve objectives.<sup>44</sup>

Taken together, the untested assumptions used in the models and the lack of plans to incorporate feedback may make it more difficult for IRS to identify the highest risk partnership returns and improve the no-change rate for large partnership audits. While IRS continues to consider potential future plans related to the Large Partnership Compliance Model, it risks not being able to continue improving that model and other models if it does not develop a process for using audit results to help the models better assess potential risks consistent with leading practices. Without early coordination between the model development and audit planning processes, IRS may not be able to conduct its audit and research efforts at a scale that allows it to validate models against outcomes and other compliance data.

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### IRS Has Not Created a Definition for Large, Complex Partnerships to Guide Audits

IRS has not defined or developed guidance on what a large, complex partnership is or developed measures to ensure additional audits focus on such partnerships. The lack of a definition presents a challenge as IRS seeks to increase its audit coverage of partnerships with a focus on large, complex partnerships. IRS plans to double audit coverage for partnerships with \$10 million or more in assets by fiscal year 2025 compared to fiscal year 2021.

IRS planning documents state that it will expand enforcement efforts related to large, complex partnerships. Two of these documents, the IRS

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<sup>42</sup>[GAO-21-519SP](#).

<sup>43</sup>Hastie, Tibshirani, and Friedman, 2009. James, et al., 2021.

<sup>44</sup>[GAO-14-704G](#).

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fiscal year 2024 congressional budget justification and the IRA strategic operating plan, identify large, complex partnerships as potential risks for noncompliance.<sup>45</sup> However, IRS does not define these concepts in these planning documents. Further, IRS's measures and internal reporting used by management do not make meaningful distinctions among partnerships to help ensure a focus on large and complex cases.

IRS had been working on developing an LB&I partnership strategy when Congress passed and the President signed the IRA in August 2022. At that point, IRS shifted efforts away from the partnership strategy to the IRA strategic operating plan. Both the IRA strategic operating plan and IRS's budget justification for fiscal year 2024 state that large, complex partnership structures contribute to the tax gap—the difference between taxes owed and what taxpayers actually pay voluntarily and on time. As such, these documents identify large, complex partnerships as an enforcement priority.

Officials told us in April 2023 that these two terms—complexity and size—are often used interchangeably. However, neither planning document defines large or complex partnerships. In 2014, we recommended defining large partnerships based on asset size and number of partners and revising activity codes used to track audit results to align with a large partnership definition.<sup>46</sup> We subsequently identified this recommendation as a priority because its implementation could improve the effectiveness of IRS compliance and enforcement efforts.<sup>47</sup> IRS agreed with this recommendation and said it would take action contingent upon resources available.

In response, IRS in 2021 initiated the Large Partnership Compliance Program, which identifies the largest of the large partnerships using various measures on partnerships' returns.<sup>48</sup> However, only a small number of partnership returns meet the criteria for the program. Of the partnership returns filed for tax year 2019, approximately 1,700 met the

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<sup>45</sup>Internal Revenue Service, *Fiscal Year 2024 Congressional Budget Justification & Annual Performance Report and Plan*, Publication 4450 (Washington, D.C.: February 2023); and Internal Revenue Service, *Internal Revenue Service Inflation Reduction Act Strategic Operating Plan: FY2023 – 2031* (Washington, D.C.: Apr. 5, 2023).

<sup>46</sup>[GAO-14-732](#).

<sup>47</sup>GAO, *Priority Open Recommendations: Internal Revenue Service*, [GAO-22-105632](#) (Washington, D.C.: June 6, 2022).

<sup>48</sup>IRS described this as a pilot program.

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criteria for the Large Partnership Compliance Program. IRS officials have provided other definitions to us on what constitutes a large partnership including those with greater than \$10 million in assets. All partnership returns in LB&I meet the greater than \$10 million in assets threshold, which in tax year 2020 was slightly less than 250,000 partnerships.

Neither the budget justification nor IRA strategic operating plan used these definitions to identify the focus on large, complex partnerships. In addition, the Commissioner of LB&I stated in an April 2023 briefing to us that IRS has not created a definition for a large, complex partnership.

*Standards for Internal Control in the Federal Government* states that management should define objectives in specific and measurable terms. Further, terms should be easily understood.<sup>49</sup>

While it is understandable that IRS might choose to present more general definitions or guidance in public documents due to the sensitive nature of information on IRS enforcement strategies, internal audit planning documents and management systems make limited efforts to define complexity or size. In internal LB&I audit measures, the agency groups all partnerships together, rather than breaking out audit results and resources used by different sizes or complexity. In addition to the planning documents discussed above, in multiple hearings before congressional committees, the Secretary of the Treasury and IRS Commissioner have emphasized that large, complex partnerships will be a key focus of IRS enforcement activities going forward. However, without a definition or associated guidance on what is a large, complex partnership and associated measures used by management to track audit resources used and results on an important enforcement priority, IRS will be challenged to ensure it is focusing on the cases that will help it achieve its goals. An IRS official responsible for IRS's focus on large partnerships said that IRS is in the planning stages for how to segment the large partnership population, but there was no timeline or specific steps planned when we spoke in April 2023.

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<sup>49</sup>[GAO-14-704G](#).

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## IRS Has Not Developed Detailed Measures for Tracking Resources Used and Results of Large Partnership Audits

IRS uses activity codes to track and manage partnership audits, but the codes do not allow IRS to identify large, complex partnerships. We previously reported that IRS's activity codes are not specific enough to identify large partnerships or provide much meaningful distinction among partnerships.<sup>50</sup> IRS uses these activity codes to set goals for the number of returns to audit and to track audit results and resources used. Currently, IRS uses three codes to differentiate among the 3.8 million partnerships that filed a tax return in tax year 2019. They include the following categories:

- 10 or fewer partners and gross receipts under \$100,000
- 10 or fewer partners and gross receipts of \$100,000 and over
- 11 or more partners

All the partnerships which are the focus of this report would be classified under the third code because they have 100 or more partners. This broad category does not highlight which partnerships have the most complex structures, limiting its usefulness for making meaningful distinctions based on size. By contrast, IRS has six asset categories for tracking large corporation audit results and costs allowing it to make distinctions between mid-size and large corporations for audit planning.<sup>51</sup>

IRS's IRA strategic operating plan identifies a key objective of delivering cutting-edge technology, data, and analytics to operate more effectively. The plan also notes the importance of harnessing data and analytics to drive operations and decision-making. The plan states that data should inform every aspect of IRS's operations and decision-making, such as allowing IRS to focus more enforcement resources on taxpayers most likely to owe large amounts of taxes.

During our previous report, IRS said in its agency comments that revising the activity codes to enable tracking of large partnership audits was dependent upon future funding. The additional funding from IRA should allow IRS to update these codes based on data and research in conjunction with guidance on what constitutes a large, complex partnership. More detailed measures that reflect a definition of large, complex partnerships would help IRS track progress toward its goals.

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<sup>50</sup>GAO-14-732.

<sup>51</sup>This refers to the \$100 million asset threshold used earlier in this report. IRS has two additional categories for corporations with assets from \$10 million to just under \$100 million.



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Without measures used by management to track audit resources used and results available to IRS on an important enforcement priority, IRS lacks key information for decision making and planning the use of audit resources.

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## Conclusions

Large partnerships are a significant part of the economy and are increasing in number, size, and complexity. However, the relatively low rate at which IRS audits large partnerships raises concerns about IRS's ability to ensure tax compliance among these businesses. IRS has made expanding audits of large, complex partnerships a key objective of its implementation and use of the enforcement funding provided in the IRA. IRS may need several years to increase its audit rate of large partnerships, which in tax year 2019 was less than half a percent, to be on par with its audit coverage of large corporations.

The high no change rate for large partnership audits is concerning. More than 80 percent of the time, audits of large partnerships result in no change to the partnership return and no additional tax assessed. This suggests that IRS spends substantial resources auditing taxpayers that ultimately are found to be tax compliant. Alternatively, it could indicate that IRS does not have the skills or capability to uncover noncompliance. IRS could begin to address this issue by making improvements to the design of its statistical models used to analyze and select partnership returns. These improvements fall into three areas—using more representative data to uncover previously unidentified areas of noncompliance, testing assumptions used to design the models, and using feedback and audit outcomes or other research to improve model performance. Making these improvements to the models' design would help IRS select the highest risk returns for audit.

While IRS officials attributed past challenges in auditing large partnerships to resource constraints, the IRA provides billions of dollars to fund enforcement activities. IRS has identified complex, large partnerships as an area of focus for reducing the tax gap. However, IRS officials have no definition or guidance of complexity and an overly broad definition of a large partnership. IRS also does not have specific metrics for tracking large partnership audits. Developing a definition and more specific metrics would help IRS measure progress toward its goals and track audit results and costs.

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## Recommendations for Executive Action

We are making the following four recommendations to IRS:

The Commissioner of Internal Revenue should use representative sampling of partnership returns, including those on which IRS's current partnership models do not identify risk factors, to help identify additional noncompliance that may not be detected and to improve the agency's understanding of the models' effectiveness. (Recommendation 1)

The Commissioner of Internal Revenue should test and validate the key assumptions used in IRS's partnership models through analysis of data on audit outcomes or other research and develop a formal process for using audit results and other data as they become available to improve model performance. (Recommendation 2)

The Commissioner of Internal Revenue should develop guidance defining large, complex partnerships and the characteristics of those entities. (Recommendation 3)

The Commissioner of Internal Revenue should identify and implement measures for tracking progress toward agency objectives that reflect the definitions and guidance for large, complex partnerships, which should include creating additional activity codes for IRS to track audit resources used and results. (Recommendation 4)

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## Agency Comments

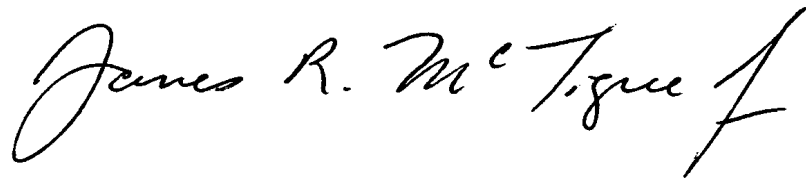
We provided a draft of this report to IRS for review and comment. IRS agreed with all of our recommendations. In its comments, reproduced in appendix I, IRS described planned actions consistent with all our recommendations. In summary, IRS stated it would consider the most effective approaches to evaluate the effectiveness of its models, improve its modeling analytics, conduct additional research and analysis to better understand the characteristics of and define partnership segments, and consider the best method to measure the results of both audit and nonaudit compliance efforts. IRS also provided technical comments, which we incorporated as appropriate.

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We are sending copies of this report to the appropriate congressional committees, the Commissioner of the IRS, and other interested parties. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-6806 or [mctiguej@gao.gov](mailto:mctiguej@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink that reads "James R. McTigue, Jr." The signature is written in a cursive style with a large, stylized initial 'J' at the end.

James R. McTigue, Jr.  
Director, Tax Policy and Administration  
Strategic Issues Team

# Appendix I: Comments from the Internal Revenue Service



DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, DC 20224

July 18, 2023

Mr. James R. McTigue, Jr.  
Director, Tax Issues, Strategic Issues Team  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, D.C. 20548

Dear Mr. McTigue:

Thank you for the opportunity to review and comment on the draft report, *"IRS Audit Processes Can Be Strengthened to Address a Growing Number of Large, Complex Partnerships"* (GAO-23-106020).

As noted in GAO's report, over the last two decades, there has been an exponential increase in the number of large partnership returns filed with the IRS. Large partnerships pose unique challenges for tax administration due not only to the use of complex ownership structures with cascading tiers and circular ownership that mask the flow of distributions and assets, but also because subchapter K provisions and regulations are among the most complex in the tax law. This landscape, when coupled with a lack of funding for IRS over the last decade, presented challenges for tax administration. GAO's report highlights some of those challenges, including the examination results under the now repealed TEFRA regime.

For all these reasons, the IRS has been working to significantly enhance and increase our coverage of this population using a holistic multi-pronged strategy that considers, in addition to traditional examinations, the role of soft letters, guidance, outreach and enhancements to tax forms. In Fiscal Year (FY) 2021, we executed a successful partnership hiring initiative to bring in-house an infusion of external partnership expertise that is supporting our efforts to identify emerging tax planning strategies and issue identification. At the beginning of FY 2022, the Large Business & International Division (LB&I) established and began implementation of a goal to double the large partnership audit rate by FY25. As of the middle of FY23, we have made significant progress to meet that goal. As part of those efforts, in addition to training hundreds of our agents, we executed the first stage of the Large Partnership Compliance program (LPC).

As with any new program, we launched with a discreet population, and we are monitoring the results and will analyze the outcomes to improve our modeling efforts as

we expand our footprint. This is a long-term effort given the cycle time needed to complete the examination of these large returns, but we are moving forward with the next round of LPC and taking steps to continuously enhance our selection efforts harnessing the considerable expertise of our subject matter experts. Also, as noted in the report, we are increasing cases being assigned out of our updated partnership model. We assigned many of these cases to the examiners who attended our enterprise training delivered in FY22 and early this FY. We have revised our training to reflect an emphasis on holistic consideration of a risking that extends beyond the partnership return to consider the relevant related returns that warrant examination. Doing so will also provide additional insight and audit results that we will use to improve our models.

The funding brought about by the Inflation Reduction Act (IRA) significantly changes the calculus of what is feasible and positions the agency to successfully execute on several fronts to improve tax administration of and compliance for large partnerships. Taxpayers and their advisors would be well served to review their tax positions and ensure they are in a supportable posture as the IRS looks to significantly increase its commitment to this important component of tax administration. As we refine and execute on our strategy, we will be focused on data analytics, both in terms of data currently received and/or available but also considering adjustments to tax forms that would support compliance and assist the partners in correctly filing their tax returns. We will also continue to build on our prior efforts to hire mid-career professionals who can help us move quickly to ramp up our efforts and hire new professionals who we can train and develop over time and who will make the IRS a career. We are committed to the ongoing development of tools that improve our ability to analyze the structure in which the partnership resides and provide a line of sight into the role the partnership plays in the operations.

Finally, we note two points of context for readers of the report. First, with respect to the examination results noted in the report, it is important to recognize that most of those results are under TEFRA, a regime that was repealed largely in part because it was not well suited for auditing large partnerships. Examinations under the BBA, TEFRA's replacement, are on-going but sufficient results are not available yet because of the cycle time for completion of a large partnership audit. Also, it is important to note that audits of a partnership generally result in one or more related audits of the partners in the partnership. However, the IRS tracking system currently tracks the results of an examination at the partnership level, even though the adjustments flowing from our work may not be on the Form 1065 but instead are made on the returns resulting in tax liability such as the Form 1040 or 1120. As such, the "no-change" rate is discussing that no-change was made to that partnership return but doesn't account for the changes that may have been made to the related returns. As we look to the future, we're considering how to better capture the true compliance output of a partnership examination. Second, notwithstanding what is noted in the report, the IRS fully intends to utilize the feedback from our examinations to improve our models. That is standard operating procedure, as that feedback is informative and invaluable.

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Thank you for providing the report and valuable feedback. We provided technical comments on the draft separately. If you have questions, please contact me, or a member of your staff may contact Clifford R. Scherwinski, Director of Pass-Through Entities, Large Business and International at 602-636-9400.

Sincerely,

Douglas W. O'Donnell

Digitally signed by Douglas W.  
O'Donnell  
Date: 2023.07.18 06:49:55 -0400

Douglas W. O'Donnell  
Deputy Commissioner for  
Services and Enforcement

Enclosure

Enclosure

**GAO Recommendation and the IRS and Treasury Responses to GAO-23-106020 draft report “IRS Audit Processes Can Be Strengthened to Address a Growing Number of Large, Complex Partnerships”**

**Recommendation 1:**

The Commissioner of Internal Revenue should use representative sampling of partnership returns, including those on which IRS’s current partnership models do not identify risk factors, to help identify additional noncompliance that may not be detected and to improve its understanding of the models’ effectiveness.

**Comment:**

As reflected in the IRS’ recently issued Strategic Operating Plan (SOP) initiative 3.3, the IRS is committed to increasing enforcement activities to help ensure tax compliance of large partnerships. One key part of that commitment is to review and refine our methods for identifying noncompliance. The IRS will consider the most effective approaches to evaluate the effectiveness of our models.

**Recommendation 2:**

The Commissioner of Internal Revenue should test and validate the key assumptions used in its partnership models through analysis of data on audit outcomes or other research and develop a formal process for using audit results and other data as they become available to improve model performance.

**Comment:**

As reflected in the IRS’ recently issued Strategic Operating Plan (SOP) initiative 3.3, the IRS is committed to increasing enforcement activities to help ensure tax compliance of large partnerships. Our efforts will include the use of improved modeling analytics that use new data, audit results and modeling techniques.

**Recommendation 3:**

The Commissioner of Internal Revenue should develop guidance defining large, complex partnerships and characteristics of those entities.

**Comment:**

As reflected in the IRS’ recently issued Strategic Operating Plan (SOP) initiative 3.3, the IRS is committed to increasing enforcement activities to help ensure tax compliance of large partnerships. We plan to perform additional research and analysis to better understand the characteristics and define partnership segments.

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**Recommendation 4:**

The Commissioner of Internal Revenue should identify and implement measures for tracking progress toward agency objectives that reflect the definitions and guidance for large, complex partnerships, which should include creating additional activity codes for IRS to track audit resources used and results.

**Comment:**

Activity codes are not the sole method the IRS can employ to track audit resources used and results achieved related to compliance efforts focused on large partnerships. We will consider the best method to measure the results of both audit and non-audit compliance treatments.



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# Appendix II: GAO Contact and Staff Acknowledgments

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## GAO Contact

James R. McTigue, Jr., (202) 512-6806 or [mctiguej@gao.gov](mailto:mctiguej@gao.gov).

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## Staff Acknowledgments

In addition to the individual named above, Jason Vassilicos (Assistant Director), Michael O'Neill (Analyst in Charge), Cristina Marleny Bolanos, Caitlin Cusati, Sara Daleski, Steven Flint, Rob Gebhart, Anthony S. Gray, Carl Nadler, Andrew J. Stephens, Daniel Speer, Jeff Tessin, Sonya Vartivarian, Alicia White, Khristi Wilkins, and Sarah Steele Wilson made key contributions to this report.

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