



# Budget Model

## Why Taxpayers Owed \$500 Billion in Taxes When They Filed This Year

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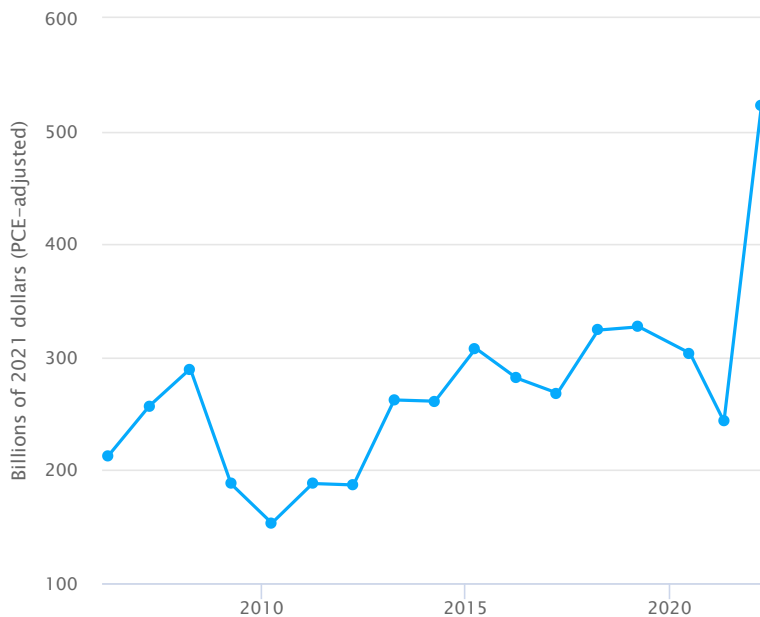
**Summary:** Households owed more than \$500 billion in taxes when they filed their returns this year, an increase of about \$200 billion from immediately prior to the pandemic. The large tax liability owed at filing is mostly the result of a surge in capital gains and other income from financial assets in 2021.

### Introduction

Individual taxpayers owed the IRS hundreds of billions more than usual when they filed their 2021 tax returns last month. Figure 1 shows the amount of nonwithheld individual income tax collected around each year's tax filing deadline since 2005.<sup>1</sup> Adjusted for inflation, collections of nonwithheld tax in filing months were just over \$300 billion in the years before the pandemic, dipped below \$250 billion in 2021, and then surged to more than \$500 billion in April 2022. Nonwithheld income taxes include taxes on income from financial assets and income from pass-through businesses, but exclude taxes on wages withheld by employers throughout the year.

## Figure 1. Payments of Nonwithheld Individual Income Tax in the Month of the Tax Filing Deadline

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Notes: Figures are adjusted for inflation based on the price index for Personal Consumption Expenditures (PCE). The tax filing deadline is generally in April but was extended to July in 2020 and to May in 2021.

Sources: Penn Wharton Budget Model, Department of the Treasury, Bureau of Economic Analysis.

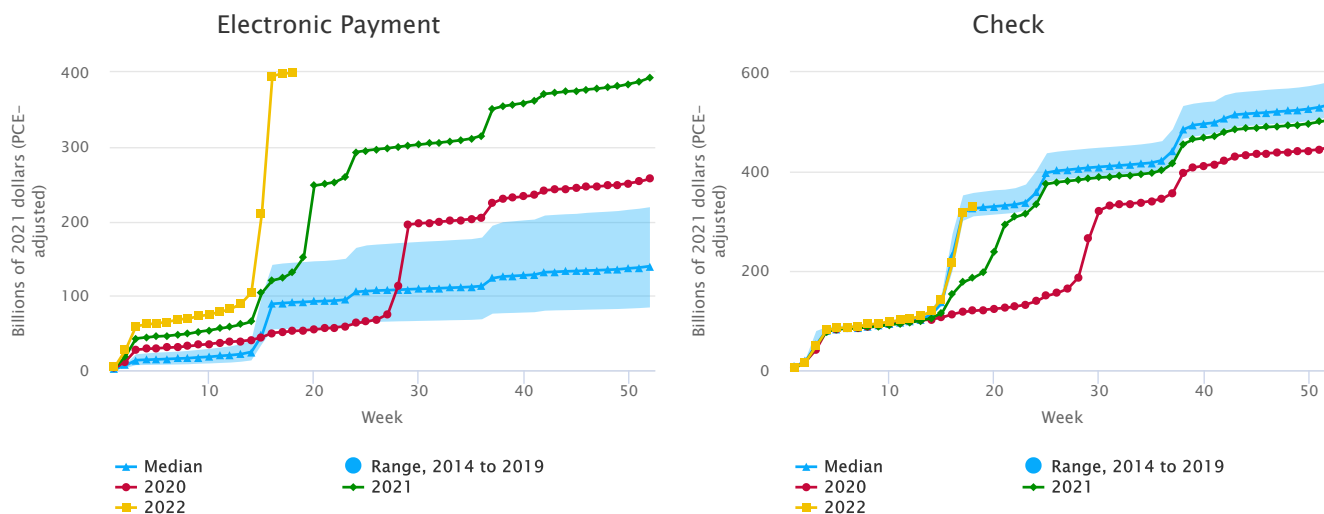
### Who Paid More When They Filed?

The surge in taxes due at filing came entirely from taxpayers who paid by electronic funds transfer. Figure 2 compares cumulative (year-to-date) weekly payments of nonwithheld tax in 2022 with recent years, broken out by method of payment. Electronic payments and payments by check show strikingly different patterns in the years since 2020. Electronic payments rose well above pre-pandemic norms, accounting for extensions of the tax filing deadline in 2020 and 2021. In contrast, payments by check stagnated.

The magnitude of electronic payments in recent years, and especially in 2022, is unprecedented. Adjusted for inflation, payments in the middle two weeks of April 2022 alone exceeded total electronic payments over any full calendar year prior to 2020. Total annual electronic payments reached historic highs in both 2020 and 2021 but both were already surpassed by the end of April 2022, with eight months of tax collections still ahead.

## Figure 2. Cumulative Weekly Payments of Nonwithheld Individual Income Tax by Method of Payment

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Notes: Figures are adjusted for inflation based on the price index for Personal Consumption Expenditures (PCE). The tax filing deadline is generally in April but was extended to July in 2020 and to May in 2021.

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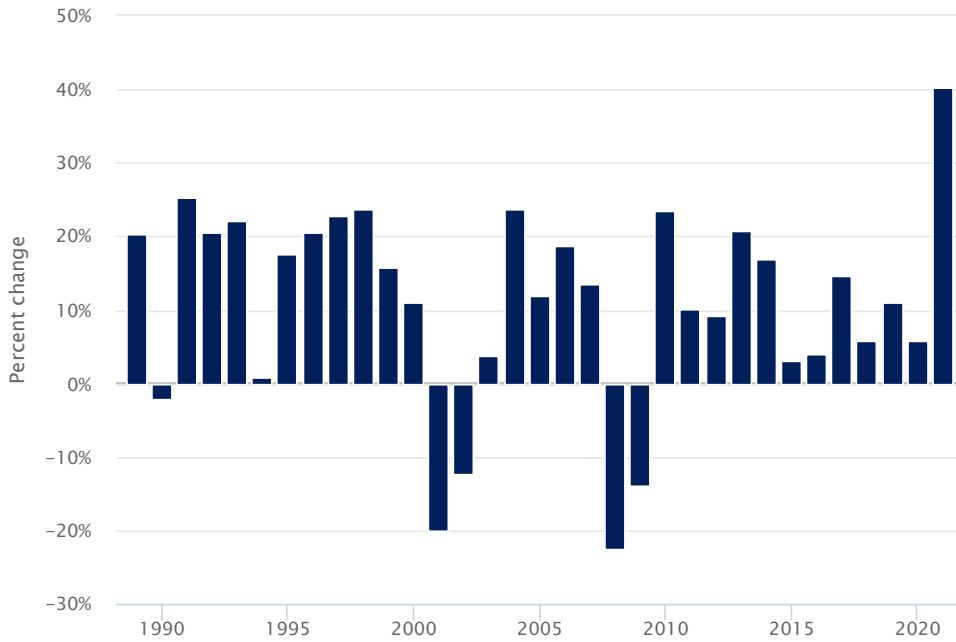
Both businesses and households pay nonwithheld income taxes, but the divergence across payment methods points to households as the source of the recent surge. Noncorporate business owners generally estimate the nonwithheld tax liability on their business income and make payments of estimated tax throughout the year, settling any differences between actual and estimated tax liability when they file their returns. For financial reasons, these payments are typically made by check.<sup>2</sup> Households generally owe nonwithheld tax on their financial income – including capital gains, dividends, and interest – and pay the full amount when they file. Most households file their returns electronically and most of the tax due at filing is paid by electronic funds transfer.

### More Gain, More Pain

The unprecedented surge in households' nonwithheld tax liability reflects an equally unprecedented surge in financial income in 2021.<sup>3</sup> Figure 3 shows annual growth in the value of corporate equities and mutual fund shares owned by households. Household equity wealth rose 40 percent last year – nearly twice as fast as any other year since 1990 – as the economy recovered and equity prices rose sharply. Recent years have also seen a substantial increase in the volume of [trading](#) by [households](#). Rapid asset price appreciation and broadening participation in markets imply an unusually high level of household financial income in 2021, especially capital gains.

Figure 3. Growth in Value of Household Corporate Equity and Mutual Fund Assets

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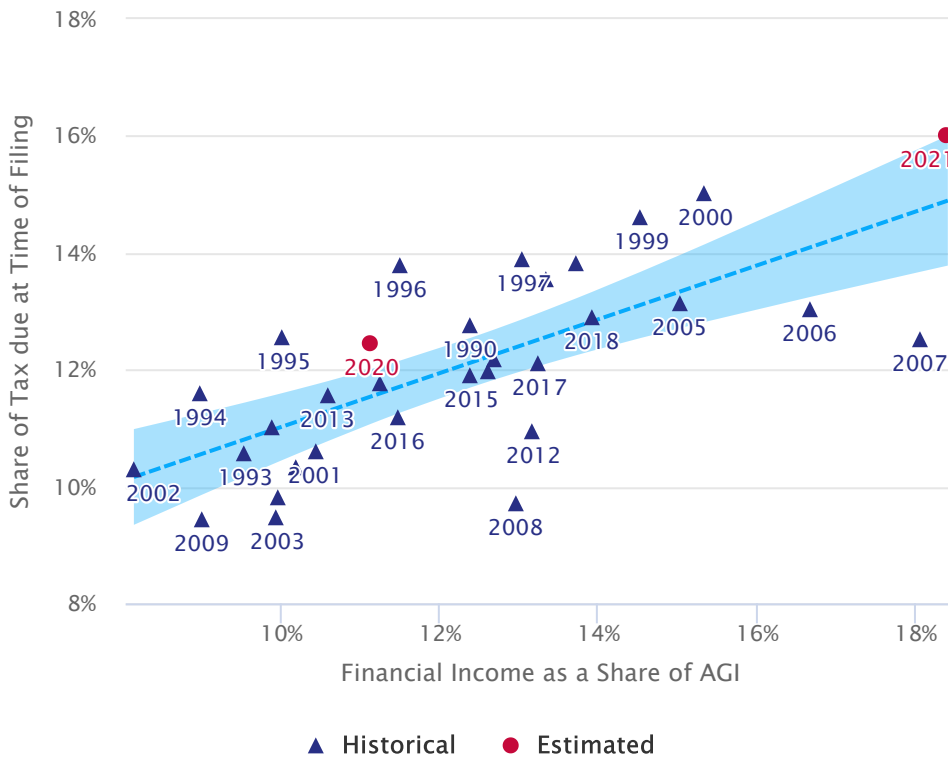


Note: Growth rates are calculated as the percentage change in the annual average of quarterly levels.  
 Sources: Penn Wharton Budget Model; Federal Reserve Board.

High levels of financial income are historically associated with more tax owed when individuals file their returns. Figure 4 plots the aggregate share of adjusted gross income (AGI) accounted for by income from financial assets against the share of total tax liability due at time of filing. Since households pay taxes on their financial income only when they file their returns, there is a strong positive relationship between the two. Historical data is currently available only for the 1990-2019 period but Figure 4 shows PWBM’s estimates for 2020 and 2021, based on the historical relationships between tax payments, tax liability, and financial income. These relationships imply that financial income made up nearly one fifth of AGI in 2021, higher than any year since at least 1990.

Figure 4. Taxable Financial Income and Tax Due at Time of Filing

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Notes: Financial income includes capital gains, dividends, and taxable interest. The shaded areas represent 95 percent confidence intervals around the linear trend (dashed line). AGI = adjusted gross income. Sources: Penn Wharton Budget Model; IRS Statistics of Income.

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1. The tax filing deadline is generally in April but was extended to July in 2020 (filing for the 2019 tax year) and to May in 2021 (filing for the 2020 tax year). ↪
2. Paying by check allows a taxpayer or a taxpayer’s bank to initiate a tax payment while retaining use of the funds until the check clears, which may take several days. ↪
3. Returns filed in April 2022 cover income earned in the 2021 tax year.

Government transfer payments were also unusually high in 2021, and these payments could have affected taxpayers’ position when they filed. However, they cannot account for the surge in tax payments relative to prior years. Most of the transfers, including Economic Impact Payments (stimulus checks) and the expanded Child Tax Credit, actually reduced tax liability or the amount owed at filing. Unemployment insurance benefit payments – which do tend to increase tax owed at filing – fell more than a third from 2020 to 2021. ↪

