CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Phillip L. Swagel, Director

September 1, 2021

Honorable Jason Smith
Ranking Member
Committee on the Budget
U.S. House of Representatives
Washington, DC 20515

Re: Inflation and Its Effects

Dear Congressman:

This letter addresses the three questions that you asked about the effects of high inflation.

Inflation and Income

You asked how household income is affected when inflation exceeds the growth of labor income. Inflation has eroded the purchasing power of families. From the second quarter of 2020 through the second quarter of 2021, compensation per hour of work (as measured by the employment cost index for workers in private industry) increased by 3.1 percent. Over the same period, the price index for personal consumption expenditures (which the Federal Reserve uses to define its 2 percent long-run goal for inflation) increased by 3.9 percent. The purchasing power of compensation for an hour of work has therefore declined by about 0.7 percent over the past year. A year ago, the Congressional Budget Office did not project that the erosion of purchasing power would occur.

In CBO's assessment, the growth of real labor compensation (that is, compensation adjusted to remove the effects of inflation) will eventually align with the growth of labor productivity. In CBO's most recent projections, real labor compensation and labor productivity increase by 1.6 percent annually, on average, from 2022 through 2031.

Inflation and Taxes

You also asked who pays higher taxes when inflation rises. The answer depends on the characteristics of the tax-filing unit. Although many aspects of the individual income tax system are indexed for inflation, some are specified in nominal dollars and therefore do not vary with inflation. Among the more important are the child tax credit ($2,000 per child from 2022 to 2025), the income thresholds over which taxpayers must include Social Security benefits in their adjusted gross income ($25,000 for single taxpayers and $32,000 for married taxpayers filing joint returns), and the income thresholds over which taxpayers must begin paying the net investment income tax ($200,000 for single taxpayers and $250,000 for married taxpayers filing joint returns). Because those items are not indexed, higher inflation will cause the real value of the child tax credit to decline and will subject a greater share of Social Security benefits and investment income to taxation.

In 2022, if inflation caused nominal income to increase by 1 percent, and if the inflation-indexed parameters of the tax system also increased by 1 percent, individual income taxes would increase by 1.1 percent, CBO estimates. Put another way, a 1 percent inflationary increase in nominal income would cause the average tax rate among all taxpayers to rise by 0.01 percentage point. The increase in the average tax rate would be smaller for taxpayers with the lowest and highest income and larger for taxpayers between those two extremes.

There are several reasons that the relationship between inflation and taxes could differ from what was described in that hypothetical situation. The tax system is currently indexed to inflation by means of a specific price index—the chained consumer price index. If inflation were to rise, the increase in nominal income might differ from the increase in inflation measured with that index. Also, the indexation of the tax system occurs after some delay, so an increase in inflation would produce a larger initial increase in tax rates and a subsequent decline; the size and timing of the effect would depend on the paths of income and inflation for the rest of the year.

Inflation and Growth

In addition, you asked how high and unexpected inflation affects economic growth. Higher inflation raises real tax rates on sources of capital income because the income tax applies to nominal, not real, capital income. Specifically, income from capital gains, interest, and dividends is not adjusted for inflation when taxable income is calculated. When inflation rises, the nominal amount of such income rises, as does the tax owed on that income, even though the real value of the income is unchanged. Thus the tax on real capital income is higher in an economy with higher inflation than in an economy with lower inflation. For example, if the tax rate on nominal capital gains was 20 percent and inflation increased from 2.5 percent to 5.0 percent, the real after-tax rate of return would decrease by half a percentage point. All else held equal, that would reduce people's incentives to save and invest, resulting in a smaller stock of capital, which would decrease economic output and income.

I hope this information is useful to you. If you have any other questions, please contact me directly.

Sincerely,

Phillip L. Swagel
Director

cc: Honorable John Yarmuth
Chairman