# Testimony of Dr. Tyler Goodspeed before the U.S. House of Representatives Committee on Financial Services

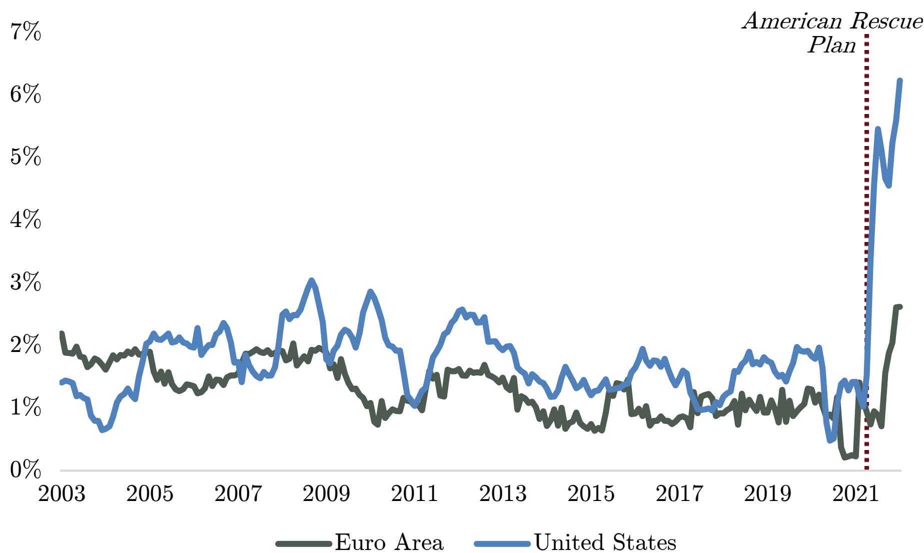
**To:** Members of the Committee on Financial Services
**From:** Dr. Tyler Goodspeed
**Date:** March 8th, 2022
**Subject:** Full Committee Hearing entitled, "The Inflation Equation: Corporate Profiteering, Supply Chain Bottlenecks, and COVID-19"

Chairwoman Waters, Ranking Member McHenry, and Members of the Committee:

Thank you for the opportunity to testify before you today on an issue of foremost concern for the U.S. economy and American households, namely, the substantial rise in inflation in the United States over the past year.

I am a Kleinheinz Fellow at the Hoover Institution at Stanford University and the U.S. Director at Greenmantle LLC, a global macroeconomic advisory firm. From 2017 to 2021, I had the privilege to serve on the President's Council of Economic Advisers as Senior Economist, Chief Economist for Macroeconomic Policy, Member, Vice Chairman, and Acting Chairman. In the latter roles I advised on the economic policy response of the Federal government to the worst macroeconomic shock to hit the U.S. economy since the Great Depression, a response which contributed to the 2020 recession being officially the shortest recession in U.S. history. In my academic work I have published extensively on economic and financial history, monetary economics, and the role of access to credit in mitigating adverse macroeconomic shocks.

*Figure 1. Harmonized Index of Core Consumer Prices, 1999-2021*




*Note:* Year-over-year percent change. HICP excluding food and energy for United States. HICP excluding food, energy, alcohol and tobacco for Euro area.
*Source:* Eurostat via Federal Reserve Bank of St. Louis; Bureau of Labor Statistics via Haver Analytics; author's calculations.

In 2021 and early 2022, the U.S. economy experienced the highest level of consumer price inflation since February 1982, with the Consumer Price Index (CPI) rising 7.5% in the 12 months through January 2022. If home prices factored directly into the calculation of the CPI, as they did before 1983, measured inflation would likely have been even higher, as the median home sale price rose more than 15% in the year through January. Whereas in early 2021 higher inflation was confined to a relatively narrow set of price categories, it is now broad-based. Various measures of underlying inflation indicate that the price level accelerated in January, with core prices now rising at an annualized rate of 7-8%.[1]

*Figure 2. Change in Annual Average Consumer Price Inflation, 2021 versus 2019*

*Source:* OECD; author's calculations.

[1] These measures include the Federal Reserve Bank of Cleveland's Weighted-Median CPI and Trimmed-Mean CPI, the Federal Reserve Bank of Atlanta's Sticky CPI, and core CPI (CPI excluding volatile food and energy).

Fundamentally, this four-decade high in inflation is the consequence of demand substantially outstripping supply in the U.S. economy. To a partial extent this has been a global phenomenon, as global supply has continued to sustain disruptions due to the COVID-19 pandemic. However, the magnitude of the increase in inflation in the United States is unique among advanced economies. As shown in *Figure 1*, reasonably comparable measures of core consumer price inflation in the United States and the Euro area, which previously tracked each other closely, diverged sharply in 2021, with a sharp break occurring after March 2021.

Compared to 45 other major economies tracked by the Organisation for Economic Co-operation and Development (OECD), the increase in the average level of inflation in the United States in 2021, relative to its 2019 pre-pandemic average, was greater than in all 45 other economies except Saudi Arabia, Brazil, and Turkey (*Figure 2*). Explanations of high U.S. inflation that are global in nature—for example, supply chain disruptions or increased market concentration—are therefore unlikely to explain all of the increase in inflation in the United States. Instead, a key difference between the United States and other major economies is that U.S. fiscal policy in 2021 stimulated demand on an unprecedent scale while simultaneously impeding a recovery in supply.

In particular, in March 2021, Congress passed and President Biden signed into law the American Rescue Plan Act of 2021, which introduced stimulus spending equal to approximately 9% of the U.S. economy, while increases in implicit marginal tax rates on employment impeded a recovery in labor force participation and uncertainty surrounding the future path of domestic business taxation likely raised the option value of deferring new business investment. I address both the demand- and supply-side impacts in turn.

A fiscal stimulus during an economic expansion of the magnitude of the $1.9 trillion American Rescue Plan Act was unprecedented in postwar U.S. history before 2021, and immediately followed $900 billion in additional pandemic-related spending already introduced under the Consolidated Appropriations Act, 2021. Applying conventional fiscal multipliers to a fiscal expansion of this size would imply aggregate demand rising to level as much as 5% above pre-pandemic forecasts of potential output.

Though an excess of aggregate demand over potential output of this magnitude would on its own generate substantial upward pressure on the price level, it understates the extent of the supply-demand imbalance introduced by the American Rescue Plan, because actual potential output in the supply-constrained context of the ongoing pandemic in 2021 was likely lower than pre-pandemic estimates of potential. In addition, it does not account for any drawdown of above-trend savings accumulated by households under the CARES Act and Consolidated Appropriations Act, 2021, which already totaled $1.5 trillion at the end of 2020. Any residual between nominal aggregate demand and potential output would then translate directly into higher prices.

The impact of an excess demand shock arriving in March 2021 is observable in the timing of the divergence between U.S. and Euro area core inflation, as measured by the Harmonized Index of Consumer Prices (HICP).[2] Whereas in the 12 months through February 2021, core HICP rose at roughly the same pace in the Euro area as in the United States, from February 2021 through December 2021 the increase in the core HICP inflation rate in the United States was more than triple that in the Euro area. Though HICP data is not yet available for the United States for January 2022, if we estimate it using observed CPI and the average difference between core CPI and core HICP inflation in 2021, the divergence is even sharper—the increase in the year-over-year core inflation rate in the United States is almost quintuple that in the Euro area. A similar pattern holds for overall HICP.

---

[2] Core HICP (excluding volatile food and energy) for the United States is available through the Federal Reserve Bank of St. Louis. Core HICP for the Euro Area is also available through the Federal Reserve Bank of St. Louis, but excludes food, energy, alcohol, and tobacco.

In the context of an ongoing pandemic and the associated impediments to the consumption of services, the American Rescue Plan generated a surge in demand for goods, with personal consumption expenditures on goods rising by 10.7% in the month of March 2021 alone. Soaring demand for goods placed severe strain on the capacity of U.S. ports to process increased import volumes. Despite port congestion being cited as a major contributor to rising inflation, U.S. ports actually handled record import volumes in 2021, approximately 20% above 2019 volumes. When we observe both price and quantity rising, economists associate that with demand increasing by more than supply. If port congestion in 2021 had instead been caused by a disruption to port capacity rather than an increase in demand, we would have observed rising prices but falling quantities. Port congestion in 2021 is therefore more likely a symptom of an over-stimulated economy than a cause of it.

The American Rescue Plan did, however, adversely impact the recovery of the supply-side potential of the U.S. economy, in particular the recovery in labor force participation. The extension of a $300-per week Federal supplement to unemployment insurance benefits until September 2021 effectively raised the implicit marginal tax rate on the return to work, while an expansion of the Child Tax Credit (CTC) through the end of 2021 also raised implicit marginal tax rates on workers. Not only did a larger credit raise implicit marginal tax rates over the income phase-out thresholds, but also a lower phase-out threshold for the increased credit meant that more workers were affected by those higher implicit tax rates. Moreover, as Corinth et al. (2021) demonstrate, the expanded CTC under the American Rescue Plan also increased implicit marginal tax rates on the return to work over the phase-in threshold by substantially lowering the return to work relative to the expansion of the CTC under the 2017 Tax Cuts and Jobs Act.[3] The labor force participation rate rose just 0.4 percentage point from March to December 2021, and ended the year only 0.2 percentage point above its August 2020 level. At the end of 2021, labor force participation was still 1.5 percentage points below its pre-pandemic level, implying 2.4 million missing workers.

In addition, increased business tax uncertainty resulting from the Build Back Better plan likely impeded a recovery in business fixed investment, which by my estimates has incurred a $1.8 trillion cumulative shortfall since the start of the pandemic, relative to pre-pandemic trend. Such a shortfall implies a smaller U.S. private capital stock, translating into approximately 1% lower potential output. In particular, the prospect of higher corporate income tax rates after 2021 would have incentivized firms to defer planned investment in new equipment, as the deduction for bonus depreciation is more valuable under a 28% Federal corporate income tax rate than under a 21% rate.

While the preceding analysis has focused on macroeconomic aggregates, it is important to not lose sight of the effect of the inflation shock of the past year on American workers and households. While average wages increased in nominal terms in 2021, they decreased in inflation-adjusted terms, as nominal wage growth was unable to keep pace with rising inflation. Even fixing the composition of the workforce, which can change over the course of a recovery, employee compensation declined in inflation-adjusted terms by 2.5% during the four quarters of 2021.

We observed a similar dynamic in the period of high inflation in the 1970s, when wages similarly struggled to keep pace with rising inflation. During the economic recovery from 1975 to 1980, real wages declined at an average annual rate of 1 percent. Though higher inflation erodes the value of existing debt, which can in the short-term benefit lower-income households—who tend to be more highly leveraged—borrowing costs quickly respond to account for higher expected inflation. Moreover, lower- and middle-income workers not only tend to have less bargaining power in wage negotiations, they also are disproportionately impacted by the rising cost of basic necessities—such as food, gas and rent—which constitute a bigger share of their disposable personal income. Lower-income households are also at greater risk in an inflationary environment because they have fewer financial hedges against

[3] Kevin Corinth, Bruce Meyer, Matthew Stadnicki, and Derek Wu, "The Anti-Poverty, Targeting, and Labor Supply Effects of the Proposed Child Tax Credit Expansion," National Bureau of Economic Research Working Paper No. 29366 (October 2021).

inflation, most notably owner-occupied real estate. In the closing years of the of the Great Inflation of the 1960s to the early 1980s, rent inflation of nearly 10% was outstripping nominal wage gains.

Over the past year, inflation in the United States has risen to levels not observed since the end of the Great Inflation. While inflation has risen globally, global factors cannot explain all or most of the increase in inflation in the United States because the magnitude of that increase has been substantially greater in the United States than in other advanced economies. Rather, a key factor in higher inflation in the United States were fiscal policy measures that stimulated aggregate demand to an historically unprecedented degree, while simultaneously exacerbating existing challenges to a recovery in the supply-side potential of the U.S. economy.