Testimony of Dr. Tyler Goodspeed before the U.S. Congress Joint Economic Committee

To:	Members of the Joint Economic Committee
From:	Dr. Tyler Goodspeed
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Subject:	Committee Hearing entitled, "Building on a Strong Foundation: Investments Today
	for a More Competitive Tomorrow"

Chairman Beyer, Ranking Member Lee, and Members of the Committee:

Thank you for the opportunity to testify before you today on an important macroeconomic issue, namely, investment to enhance the future potential of the U.S. economy.

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.



Employment level (index, pre-recession = 100)



Source: Bureau of Economic Analysis and Bureau of Labor Statistics via Haver Analytics; author's calculations.

The subject of today's hearing may be informed by evaluating lessons from the aftermaths of the two most recent U.S. recessions—the 2007-09 recession associated with the global financial crisis, and the pandemic recession of 2020. As reported in Figure 1, the former was characterized by the slowest labor market recovery in postwar U.S. history, and constituted a notable exception to Friedman's (1964, 1993) "plucking" model of business fluctuations, in which the amplitude of an economic expansion is strongly correlated with the amplitude of the preceding contraction.¹ Recent research by Bordo and Haubrich (2017) confirms that this correlation is even stronger when a contraction is coincident with a financial crisis, with the aftermath of 2007-09 being one of only three exceptions over the past 140 years.²

In particular, the slow recovery from July 2009 through December 2016 was characterized by two historical anomalies. First, the contribution of capital deepening to labor productivity growth turned negative, meaning essentially that despite an historically slow labor market recovery, firms' gross investment in new plant and equipment per worker was insufficient to keep pace with depreciation of existing capital per worker. Second, the prime-age labor force—those between the ages of 25 and 54 either employed or actively looking for work—declined by 1.6 million, despite continued population growth within that age cohort.



Figure 2. Real Private Nonresidential Fixed Investment, 2009:Q3-2019:Q4

Note: The pre-2017 trend is calculated by regressing the growth rate in real private nonresidential fixed investment on a linear time trend over the 2009:Q3-2016:Q4 sample period. The trend is then projected forward and backward from the level of real private nonresidential fixed investment in 2017:Q3, with trend levels reconstructed from projected growth rates. *Source:* Bureau of Economic Analysis via Haver Analytics; author's calculations.

In response to this anomalously slow recovery, in 2017-19 the U.S. government implemented an agenda of tax and regulatory reform designed to lower the cost of domestic capital formation, to reduce tax

¹ Milton Friedman, "Monetary Studies of the National Bureau," in *The National Bureau Enters Its 45th Year* (New York, NY: National Bureau of Economic Research 44th Annual Report, 1964), 7-25; Milton Friedman, "The 'Plucking Model' of Business Fluctuations Revisited," *Economic Inquiry* 31 (1993): 171–177.

² Michael Bordo and Joseph Haubrich, "Deep Recessions, Fast Recoveries, and Financial Crises: Evidence from the American Record," *Economic Inquiry* 55 (2017): 527–541.

expenditures and reinvest those revenue savings into marginal personal income tax rate reductions, and increased the standard deduction to help raise after-tax rates of return on work as American workers entered or reentered employment at the lower end of the income distribution. In addition, the U.S. government embarked on a deregulatory program to facilitate new business formation and incentivize increased domestic investment and hiring.

Reflecting this pro-growth agenda, in 2018 and 2019 real private nonresidential fixed investment rose to a level that was 9.4% above the trend of the pre-2017 expansion, as demonstrated in Figure 2. An increase in business investment of this magnitude could be expected to raise the long-run potential output of the U.S. economy by approximately 3%. As business investment rose above trend in 2018 and 2019, so too did labor productivity growth. As reported in Figure 3, in 2018 and 2019, the United States was the only major advanced economy (G7 economies and Australia) to observe labor productivity growth rise above its pre-2017 expansion average.



Figure 3. Growth in Labor Productivity among Advanced Economies, 2009–19

Note: Reported growth rates are compound annual growth rates in real GDP per employed person, computed over the specified quarters. *Source:* Organisation for Economic Co-operation and Development; author's calculations.

As shown in Figure 4, whereas during the economic expansion from July 2009 through December 2016 the number of prime-age Americans between the ages of 25 and 54 either employed or actively looking for work declined by 1.6 million, in the three years through December 2019 the prime-age labor force increased by 2.3 million. By the end of 2019, approximately three quarters of the flows into employment were individuals entering work from out of the labor force. Despite this substantial increase in labor supply, business demand for labor was such that real, inflation-adjusted wages for the bottom 10th of the wage distribution rose 9.6%, compared to 4.6% for the top 10th of the distribution, while real median household income in the three years from 2017 through 2019 rose by more (\$5,900) than in the 20 years from 1996 through 2016. Rising real wages are a strong incentive for workers to enter or reenter the labor force, which was reflected in rising labor force participation rates. As a result, wage, income, and wealth inequality declined, and labor's share of income rose.

With the arrival of the COVID-19 pandemic in early 2020, the Organisation for Economic Co-operation and Development projected that the U.S. economy would contract by more than 12% during the four quarters of 2020. The non-partisan Congressional Budget Office forecasted that the official unemployment rate would surge to 16% and end 2020 still above 10%, with some private forecasters projecting a peak unemployment rate of 25%. Instead, the National Bureau of Economic Research concluded that the 2020 pandemic recession ended in April 2020, with the recovery officially commencing in May 2020. Unemployment peaked at 14.7% in April 2020, and by the end of the year had already declined to 6.7%—lower than in November 2013. The broadest measure of labor market underutilization, U-6, had declined to 11.7%—lower than in August 2014. Following job recoveries of 2.6 million, 4.5 million, 1.4 million, and 1.7 million in May, June, July, and August 2020, by December 2020 the U.S. had already recovered 55% of the job losses of March and April 2020, and the U.S. economy had recovered 78% of the decline in the level of output in the first and second quarters of 2020.



Figure 4. Change in Prime-Age Labor Force, 2009-2019

Source: Bureau of Labor Statistics via Haver Analytics; author's calculations.

Eleven months into this recovery, 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, a fiscal stimulus of unprecedented magnitude for an economic expansion. Applying standard fiscal multipliers to a fiscal expansion of this size would imply aggregate demand rising to a level as much as 5% above pre-pandemic forecasts of potential output. In the month of March 2021 alone, consumer demand for goods surged by 10.7%. With a large gap between aggregate demand and real aggregate supply, the difference was reflected in a substantially higher price level via inflation.

The fiscal expansion in early 2021 not only strained a supply side of the U.S. economy that was still recovering from pandemic-related disruptions by excessively stimulating aggregate demand, but further impaired that supply-side recovery by raising implicit marginal tax rates on the return to work. Specifically, the extension of a \$300-per week Federal supplement to unemployment insurance benefits until September 2021 and the expansion of the Child Tax Credit (CTC) through the end of 2021 effectively raised implicit marginal tax rates on workers. Not only did the 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, 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, as demonstrated by Corinth et al. (2021).³ The prime-age labor force participation rate rose just 0.6 percentage point from March to December 2021. At the end of 2021, prime-age labor force participation was still 1.1 percentage points below its pre-pandemic level, implying 1.4 million missing workers between the ages of 25 and 54.

In addition, the Build Back Better plan contributed to increased business tax uncertainty that likely impeded a recovery in business fixed investment, which has incurred a large cumulative shortfall since the start of the pandemic, relative to pre-pandemic trend. A shortfall in business investment results in a smaller private capital stock, translating into lower long-run potential output. In particular, the prospect of higher corporate income tax rates after 2021 would have generated a large incentive for firms to defer planned investment in new equipment, as the deduction for bonus depreciation is more valuable under a prospective 28% Federal corporate income tax rate than under a 21% rate.



Figure 5. Harmonized Index of Core Consumer Prices, 2002-2022

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.

Reflecting this exacerbation of the mismatch between aggregate demand and supply that was introduced in March 2021, inflation in the United States, which had been rising at the same or slightly slower pace (1.0%) as in the Euro area (1.1%) in the 12 months through February 2021, surged after March 2021. By January 2022—before the Russian Federation's invasion of Ukraine—the increase in the core rate of inflation in the United States since February 2021 was more than quintuole that in the Euro area over the same time period, as measured by the Harmonized Index of Consumer Prices

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).

(HICP), which standardizes inflation comparisons between the United States and Euro area.⁴ Explanations of high U.S. inflation that are global in nature—for example, supply chain disruptions or semiconductor shortages—are therefore unable to explain all of the increase in inflation in the United States over the past year, because inflation has risen by much more in the United States than in other advanced economies. Sector-specific investments and subsidies are therefore unlikely to resolve inflationary pressure that is fundamentally macroeconomic in nature.

The pattern of recent economic recoveries in the United States therefore suggests that a tax and regulatory environment that encourages broad-based private investment and labor force participation and avoids overstimulating demand is essential for facilitating robust economic expansion in a manner consistent with price stability. In particular, the experience of 2017-19 demonstrates the efficacy of lowering the cost of capital to incentivize increased private domestic capital formation and investment in workers, and raising the after-tax rate of return on work, in generating strong and long-run sustainable economic growth that delivers real gains across the income distribution.

⁴ 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.