

**Jackson Hole Economic Policy Symposium  
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**Paper: “Fiscal Policy in the Age of COVID: Does it ‘Get in all of the Cracks?’”  
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## **1. Introduction**

The paper by Gourinchas, Kalemli-Özcan, Penciakova, and Sander is a *tour de force* analysis of the effects of the various fiscal measures adopted by countries to blunt the economic impact of COVID and the accompanying lockdowns. This 77-page paper is really two papers plus a coda. The first paper estimates the effects of fiscal policies aimed at supporting small- and medium-scale enterprises (SMEs) by analyzing a rich quantitative partial equilibrium model with many firms and sectors, linked through input-output relationships. The second paper analyzes the effects of unemployment insurance and unconditional transfers in a quantitative model of interacting small open economies with multiple sectors. This part of the paper considers not only the domestic effects of a government’s transfers policy, but also possible spillover effects of fiscal policy from advanced economies (AEs) to emerging market economies (EMs). Finally, the coda addresses the question of the effects of rises in global interest rates on EMs’ outlook. The authors estimate the effect of a change in the global natural real rate of interest on EM sovereigns’ external borrowing costs. The results suggest that a two-speed recovery, meaning that the AEs recovery more quickly than the EMs, could have deleterious effects on the EMs. In total, the various analyses lead to eight important results that the authors highlight in their introduction, as well as numerous subsidiary results discussed in the paper.

The analysis is very impressive. I have not seen another paper that has adeptly captured so many important details of the structure of the economy, modeled how COVID affected the world’s economies in parsimonious yet plausible ways, and generated answers that are summarized so clearly.

I cannot begin to do justice to this paper in a short discussion, so I will limit my discussion to expanding on just two themes: the effects of government transfers and the importance of preserving economic links.

## **2. Government Transfers**

In the “second paper within the paper,” Gourinchas et al. (GKPS) compute the output effects of transfers using a calibrated structural two-period model of interacting small open economies. Each country has multiple sectors and intermediate goods play an important role. A novel feature of their model and some recent models is that supply constraints on labor in one sector can lead to insufficient Keynesian demand in another sector. The most important feature for the analysis of transfers is the assumption that some consumers live hand to mouth, consuming all their current income each period. The authors calibrate their model to outside estimates of the fraction of hand-to-mouth households in various countries, with the values greater for EM countries.

The authors find an exceedingly small multiplier on transfers, only 0.06 on average. That multiplier implies that for every \$1 transferred, GDP rose by only 6 cents. To put this estimate in context, I simulated a stylized medium-scale New Keynesian (NK) model. This model, which is closer to the types used by central banks, incorporates more complete dynamics, as well as other Keynesian features designed to generate higher multipliers, such as sticky prices and wages, noncompetitive labor markets, and hand to mouth consumers. However, it contains neither the detailed input-output linkages of the authors’ model nor the COVID-specific features and shocks. Thus, it is a useful alternative view of these multipliers during more normal times.

Figure 1 shows the impact multipliers for government purchases versus transfers. In both cases, the rise in government outlays lasts only one quarter and is financed with deficit spending in the short run. Moving along the horizontal axis shows how those multipliers change with the fraction of households who live hand to mouth, meaning they consume all their income each period. Note two results from these simulations. First, government purchases multipliers are always higher than government transfers. This result is well-known and is explained by the fact that the impact effect of transfers works through disposable income to consumption, and is hence mediated by the marginal propensity to consume, which is lower than one when averaged over all consumers. In

fact, if there are no hand to mouth households, transfers multipliers are 0 while government purchases multipliers are still around one. Second, multipliers for both government purchases and transfers rise with the fraction of households that live hand to mouth.

GKPS calibrate their model so that 25 percent of household are hand-to-mouth in AEs and 35 percent are in EMs. According to the simulations in my NK model, the transfers multiplier should have been around 0.3 in AEs and around 0.5 in EMs. My simulation results raise two questions: First, why are GKPS's multipliers so much lower? Second, why did government's choose transfers over government purchases in their stimulus packages?

GKPS provide an answer to the first question about why their multipliers are so low. Their model implies that 69 percent of global GDP was supply-constrained because of COVID factors. When sectors are supply-constrained, stimulus policies result in rising prices with little or no impact on real output.

Let's now turn to the second question: why did governments favor transfers over government purchases even though the multipliers for transfers are lower? The answer to this question is related to GKPS's title about fiscal policy "getting in all the cracks." Unlike transfer payments, which can be targeted at houses by income level using tax records, at least in advanced countries, government purchases help only certain segments of the economy initially. For example, if governments had instead built more roads in response to COVID, the initial impact would have helped only workers and firms in road construction, with multiplier effects likely trickling slowly and incompletely to the rest of the economy. As a result, many households would have not been helped. Thus, as the authors emphasize, aggregate multipliers offer only a partial view of the effectiveness of policy.

Did the transfers help low-income households, which are often the hardest "cracks" to reach? Figure 2 is based on data from Affinity Solutions credit card data available from Chetty's et al.'s [tracktherecovery.org](https://tracktherecovery.org). The graph shows daily spending by low-income households in the U.S. during COVID as a percent of their spending January 2020 before the lockdowns. The three vertical dashed lines indicate the dates when the stimulus payments from the three packages enacted began to be sent out to households. Spending by low-income households jumped noticeably after each of the three dates. The rise was more sustained after the first package, and more transitory after the second and third round of checks. Nevertheless, spending by low-income

households is now almost 20 percent above its level in January 2020. Of course, a key question is how much of that rise in spending was simply eaten up by higher prices.

### **3. Preserving Economic Links**

The second theme I wish to emphasize is the importance of preserving economic links, which expands on the first part of the GKPS paper. GKPS analyze the effects of fiscal policies aimed to supporting small and medium size enterprises. They use a rich partial equilibrium model of firms in many sectors and with input-output linkages, include business failures, COVID effects on labor productivity and on the supply of labor, rigid wages, and labor supply constraints in some sectors. Their calibrated, quantitative model implies that SME failure rates would have been much higher absent government support; they estimate that in both AEs and EMs, the government policies halved the failure rate relative to what it would have been with no government help. However, it was inefficiently targeted and hence very expensive.

A metaphor that I have used is that governments needed to throw out life preservers as quickly as possible to keep economic entities afloat during the lockdowns in order to preserve valuable economic relationships. Figure 3 is a stylized representation of the economic links in an economy. The links include worker-to-firm links, firm-to-bank links, and firm-to-firm links up and down the supply chain. The GKPS paper quantifies how many links the government fiscal policies helped preserve, but their model does not allow them to assess the economic benefits in a dynamic context. Here I will argue that preventing those failures is likely an important reason that many economies have been able to roar back once the lockdowns ended.

Most economic exchanges occur in the context of durable economic relationships. When those relationships are broken, relationship-specific capital is lost and it can take a long time for new matches to form. Ben Bernanke made this point in his 1983 paper on the macroeconomic consequences of the bank failures in the Great Depression and Diamond (1982) and Mortensen and Pissarides (1994) made this point for worker-firm relationships.

Figure 4 illustrates this point for labor markets. The graph builds on some recent work by Hall and Kudlyak (2021a) showing the inexorable decline in the unemployment rate during expansions. They characterize the well-documented asymmetry in the cyclical behavior of the unemployment

rate with the quip “unemployment rate rises like a rocket and falls like a feather.” A theme of their work is that the rate of decline in the unemployment rate is quite similar across expansions despite very different government policies governing each one. I interpret the cyclical asymmetry of the unemployment rate along with the similarity of the rate of decline in unemployment across expansions as suggesting that, while government policy may be able to prevent some of the initial breakups of relationships, it cannot speed up the rematching process. That is, government policy cannot speed up the mending of the economic fabric any more than a doctor can speed up the healing of a broken bone.

However, Figure 4 also shows that the recovery from the COVID recession was much faster than previous recessions since 1960. Hall and Kudlyak (2021b) argue that most unemployed workers during COVID were workers with a job, but on temporary layoff. This fact can potentially explain why the recovery has been so quick: many unemployed workers were able to return to work without first having to search out a new match. According to GKPS’s results, government policies to aid business enterprises prevented many business failures. This meant that many of the worker layoffs were indeed temporary and fewer temporary layoffs turned into permanent layoffs because the business enterprises were able to stay afloat despite the lockdowns.

#### **4. Conclusion**

The masterful paper by Gourinchas and co-authors uses a variety of quantitative models to provide estimates of the effects of the various fiscal policies adopted by governments in response to COVID. This paper can be viewed as an encyclopedia of the effects of the various fiscal policies adopted in response to COVID. It will become a go-to reference for policy makers and academics alike.

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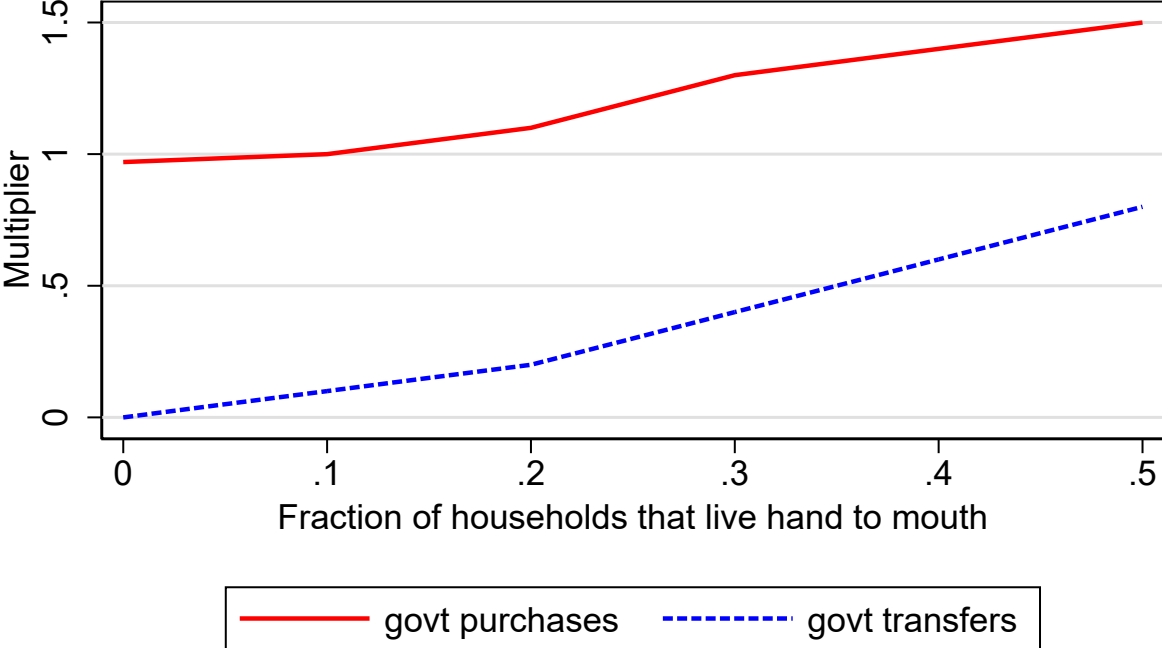
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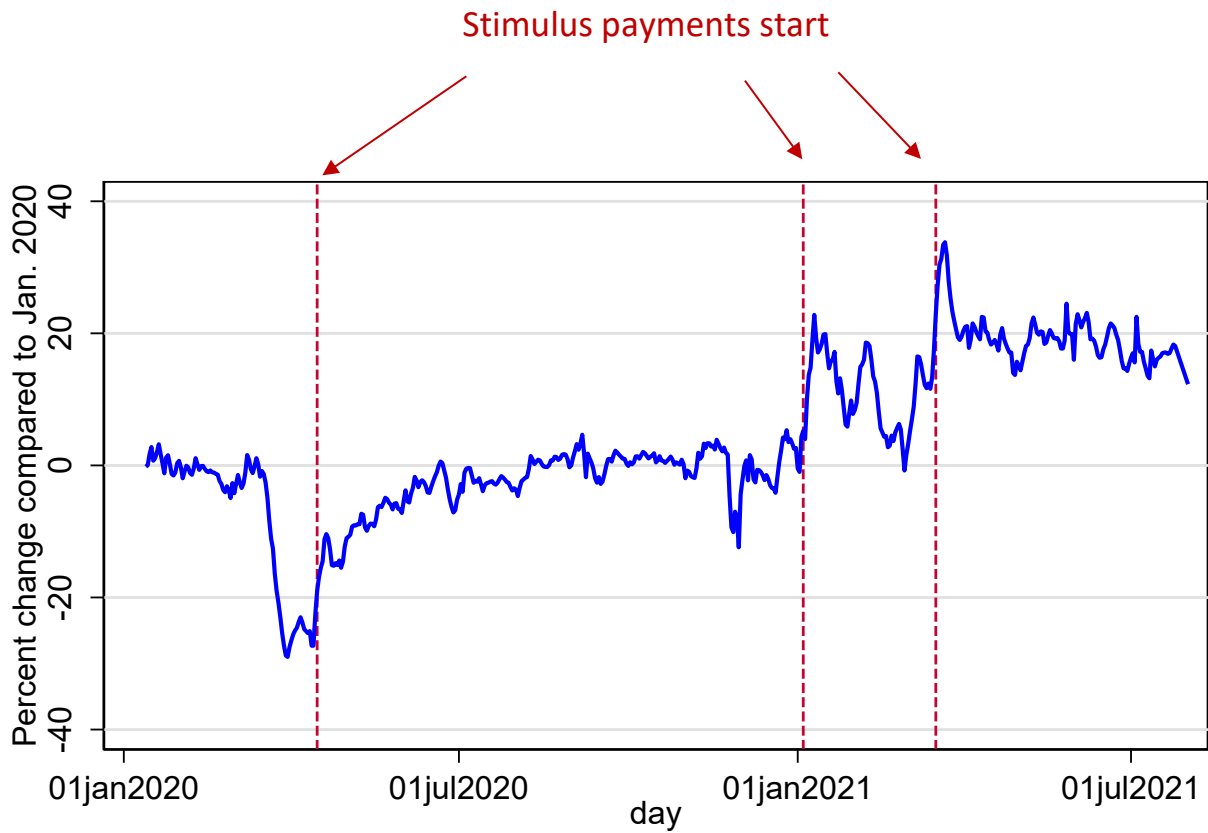
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**Figure 1. Impact Multipliers in a Medium-Scale New Keynesian Model:  
Temporary Increases in Government Purchases versus Transfers**



Notes. Based on simulations by the author.

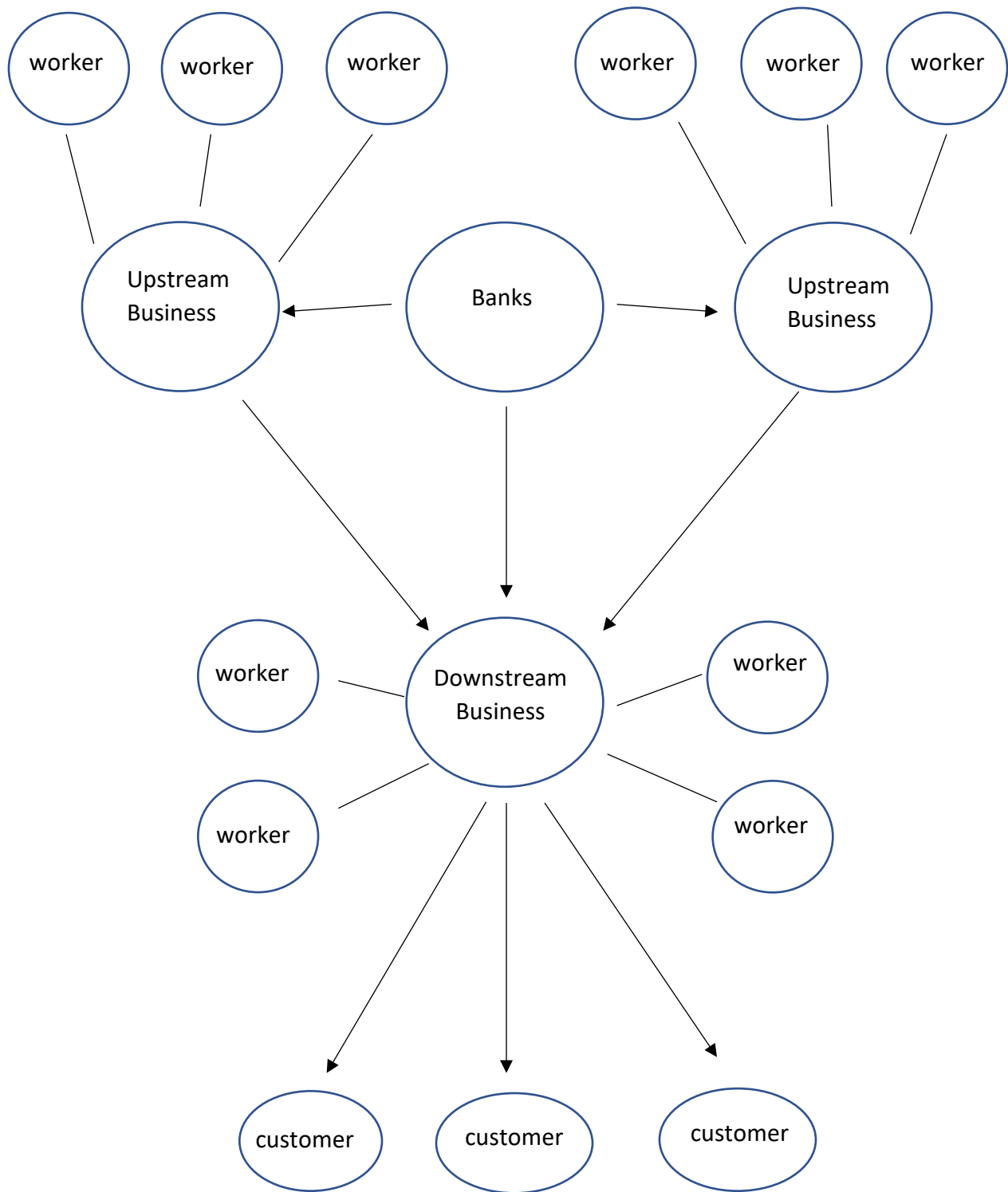
**Figure 2.**  
**Low Income Household Spending Responses to U.S. Stimulus Packages**



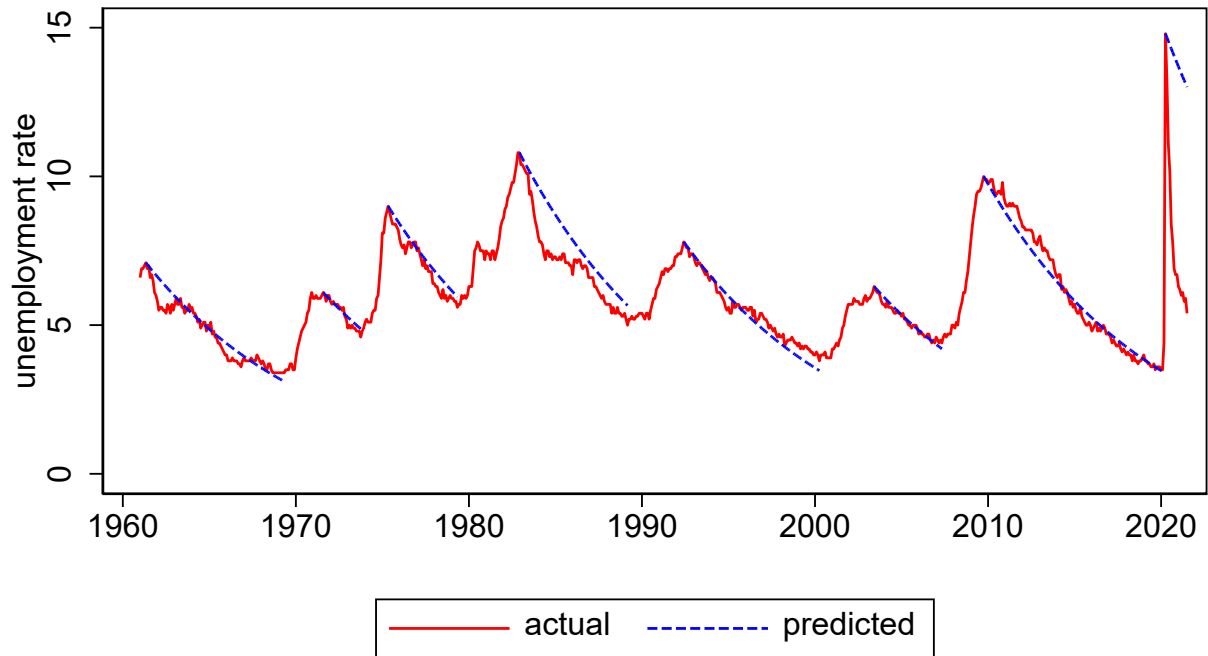
Notes. Data provided by Affinity Solutions to Chetty et al. (2020) and made available at [tracktherecovery.org](https://tracktherecovery.org).



**Figure 3. The Importance of Preserving the Links of the Economic Network**



**Figure 4. Actual vs. Predicted Decline in the Unemployment Rate During Expansions**



Notes. Actual unemployment is the civilian unemployment rate from the Bureau of Labor Statistics. The predicted decline is based on estimates during the intervals from the peak to the trough of unemployment from 1961m1 – 2020m2. The framework uses a first-difference version of the Hall-Kudlyak (2021a) framework.