The Long Tail of Fiscal Stimulus

September 9, 2020

Key takeaways

• The stimulus packages that Congress has passed so far have been enormous and have come with surprising speed.
• The economic effects appear to not be fully realized as consumers are unable or unwilling to spend money during the pandemic.
• As a result, the economy runs the risk of having “not enough” stimulus now and “too much” stimulus later.

Massive Fiscal Stimulus

The U.S. Congress has so far provided historic levels of fiscal stimulus. The three stimulus packages passed as of September 9, 2020 amount to about $2.3 trillion in fiscal stimulus, or 12-13.5% of GDP.\(^1\)

In comparison, the 2009 American Recovery and Reinvestment Act provided about $831 billion in stimulus. That comprised 5.4% of 2008 GDP.\(^2\)

Congress has enacted 3 separate bills (plus an additional funding bill) since the pandemic onset. By far the largest was the CARES Act, which provided $2.2 trillion in fiscal stimulus.\(^3\)

The effects of the CARES Act have been modeled by the Penn Wharton Budget Model (PWBM). The estimated quarterly effects range from +7 percentage points to Q2 GDP (relative to baseline) to -0.2 percentage points by 2030 as a result of government borrowing crowding out private capital and reducing the installation of efficient private capital.\(^4\) It’s not clear, however, how well the model takes the inability to spend during a time of pandemic into account.
A Long Tail for Disbursement

Much, but not all, of the stimulus has been disbursed by the government. A website run by the Committee for a Responsible Federal Budget shows that, as of September 9, 2020, about 60% of the available funds have been disbursed. Some prominent programs like Unemployment Insurance benefits and one-time stimulus checks, are almost fully disbursed. The paycheck protection program is about 80% disbursed, while more obscure programs such as the loosening of Tax Cut and Jobs Act-imposed caps on interest deductibility and operating losses, as well as deferred payroll tax payments (both part of the CARES Act) have been minimally disbursed.

In context, the lag in disbursement may not be substantial. These are historically large bills, and some administrative struggles are to be expected. Offsetting this is the fact that the legislation was passed very early into the recession, within 2 months of its onset. By contrast, the American Recovery and Reinvestment Act was passed in February 2009, 15 months after recession onset.

A Longer Tail for Consumption

Another drag, however, appears to be unusually severe in this recession. Consumers, confined at home, are saving large portions of their stimulus checks. Compounding the usual risk-averse driven desire to save found during most recessions is the inability to spend due to government- and self-imposed restrictions on activity.

In the above right chart, we plot actual disposable personal income levels, which have spiked sharply with the stimulus to households (including usual unemployment insurance as well as special stimulus spending). We also plot actual consumption, which has dropped significantly.

In addition to these actual series, we plot three estimates of plausible consumption spending patterns. These are possible paths, given the fall in wages and the rise in stimulus. The simplest assumption is that consumption continues on its usual path, oblivious to the panic and to the
stimulus spending. This is perhaps a policy aspiration: supporting consumption at usual or close to usual levels so that the rest of the economy can recover as quickly as possible.

Another plausible consumption path is that consumption follows the stimulus upward, with consumers not just supporting the economy, but compensating for weakness in investment and elsewhere. This is the blue dotted path that shows an acceleration of spending during the slowdown.

Even the most conservatively estimated calculation shows pent-up demand. This path assumes that consumers look past stimulus money and continue to spend the same share of their compensation as before. As compensation has gone down in the aggregate, spending ought to go down. Even by this measure, people are holding back. That is, not only are they—on aggregate—not spending the stimulus money, they are saving a greater-than-usual share of their wages.

### Estimated Cumulative Savings since March is in the Trillions

<table>
<thead>
<tr>
<th>Extrapolation Basis</th>
<th>Cumulative Consumption Shortfall, March-June ($ billions)</th>
<th>Estimated Pent-up Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Goods at 50%</td>
<td>Services at 25%</td>
</tr>
<tr>
<td>Historical consumption/compensation ratio (128% of compensation)</td>
<td>3,455</td>
<td>535</td>
</tr>
<tr>
<td>Historical consumption growth (0.35% monthly growth)</td>
<td>7,100</td>
<td>1,101</td>
</tr>
<tr>
<td>Stable consumption/DPI ratio (89% of DPI)</td>
<td>10,657</td>
<td>1,652</td>
</tr>
</tbody>
</table>

Source: BEA, MIM calculations

The chart above summarizes the estimated cumulative consumption shortfall of the paths we described above. We see that not all of this shortfall will be pent-up demand. Some will be foregone, as people will not get all the haircuts they skipped during the lockdown, and as they delay their next car purchase by the number of miles they saved from their daily commute. If we assume only about half of consumption will eventually be spent, and a much smaller (25%) share of services will be caught up (long-delayed vacations, concerts, other entertainment for which there is no crowd-free substitute), there is still at least a trillion dollars in consumption—at least 6 percent of GDP—waiting for COVID-19 to go away.

### Looking Forward

What does this long tail of stimulus mean?

Although obviously many people with low wages and little savings are spending the entirety of the stimulus that has been provided, a substantial portion of the stimulus money appears to be saved, not spent. That indicates the economy is receiving less support than we would expect given the size of the stimulus. It also implies that a huge amount of stimulus spending—including even currently earned compensation—appears to be pent up. It may only be released when people feel safer going outside and into crowds.
It appears to be increasingly difficult to see how a new stimulus package that is structured like the CARES Act could stimulate spending today. Other benefits, such as mitigating economic stress on the most vulnerable households, remain.

Finally, inflation looms as a possibility if there is a positive demand shock, for example due to an unexpected, robust solution to COVID-19.

**Endnotes**


3. This excludes Executive Orders and monetary policy actions.


5. COVIDMoneyTracker.org, accessed September 9, 2020. This website comes up with a total of $4.0 trillion in legislative action, using maximum estimated levels of funding when no cap is specified; e.g. the $600/week benefits were restricted by number of weeks available, not restricted to an aggregate cap.

6. Compensation excludes government transfers and investment income.

---

**About MetLife Investment Management**

MetLife Investment Management (MIM),¹ MetLife, Inc.’s institutional investment management business, serves institutional investors by combining a client-centric approach with deep and long-established asset class expertise. Focused on managing Public Fixed Income, Private Capital and Real Estate assets, we aim to deliver strong, risk-adjusted returns by building tailored portfolio solutions. We listen first, strategize second, and collaborate constantly as we strive to meet clients’ long-term investment objectives. Leveraging the broader resources and 150-year history of the MetLife enterprise helps provide us with deep expertise in navigating ever changing markets. We are institutional, but far from typical.

For more information, visit: [investments.metlife](http://investments.metlife)

---

¹ MetLife Investment Management (“MIM”) is MetLife, Inc.’s institutional management business and the marketing name for the following affiliates that provide investment management services to MetLife’s general account, separate accounts and/or unaffiliated/third party investors: Metropolitan Life Insurance Company, MetLife Investment Management, LLC, MetLife Investment Management Limited, MetLife Investments Limited, MetLife Investments Asia Limited, MetLife Latin America Asesorias e Inversiones Limitada, MetLife Asset Management Corp. (Japan), and MIM I LLC.
Disclosure

For Institutional Investor, Qualified Investor and Professional Investor use only. Not for use with Retail public.

This document has been prepared by MetLife Investment Management ("MIM") solely for informational purposes and does not constitute a recommendation regarding any investments or the provision of any investment advice, or constitute or form part of any advertisement of, offer for sale or subscription of, solicitation or invitation of any offer or recommendation to purchase or subscribe for any securities or investment advisory services. The views expressed herein are solely those of MIM and do not necessarily reflect, nor are they necessarily consistent with, the views held by, or the forecasts utilized by, the entities within the MetLife enterprise that provide insurance products, annuities and employee benefit programs. The information and opinions presented or contained in this document are provided as the date it was written. It should be understood that subsequent developments may materially affect the information contained in this document, which none of MIM, its affiliates, advisors or representatives are under an obligation to update, revise or affirm. It is not MIM’s intention to provide, and you may not rely on this document as providing, a recommendation with respect to any particular investment strategy or investment. The information provided herein is neither tax nor legal advice. Investors should speak to their tax professional for specific information regarding their tax situation. Investment involves risk including possible loss of principal. Affiliates of MIM may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives) of any company mentioned herein. This document may contain forward-looking statements, as well as predictions, projections and forecasts of the economy or economic trends of the markets, which are not necessarily indicative of the future. Any or all forward-looking statements, as well as those included in any other material discussed at the presentation, may turn out to be wrong.

1 MetLife Investment Management ("MIM") is MetLife, Inc.'s institutional management business and the marketing name for the following affiliates that provide investment management services to MetLife’s general account, separate accounts and/or unaffiliated/third party investors: Metropolitan Life Insurance Company, MetLife Investment Management, LLC, MetLife Investment Management Limited, MetLife Investments Limited, MetLife Investments Asia Limited, MetLife Latin America Asesorias e Inversiones Limitada, MetLife Asset Management Corp. (Japan), and MIM I LLC.