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***“Financial Stability Factors and the Severity  
of the Current Recession”***

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*\*Identical remarks will be presented later in the day as part of the Annual Robert Glauber Lecture hosted by the Mossavar-Rahmani Center for Business & Government at Harvard University’s Kennedy School of Government*

*The views expressed today are my own, not necessarily those of my colleagues on the Federal Reserve Board of Governors or the Federal Open Market Committee.*

Good morning – or good afternoon, depending on where you are tuning in today – and thank you for inviting me to join you for the UBS European Virtual Conference. I am happy to be speaking during a most interesting, and, unfortunately, challenging, time for the world economy.

Both the United States and many European countries are currently at a place we had hoped we could avoid – in the midst of a second wave of a deadly pandemic. In Europe, many countries have gone from modest restrictions to a “shutdown-light” model, to try to bend the curve of COVID-19 cases, with the possibility that more severe shutdowns may be needed. In the U.S., the rise in infections is more recent, and the lack of central coordination has led to divergent responses among states. Some states have done little, if anything, to restrict activity, while other states have taken a much more proactive public health stance.

Of course, official policies and personal behavior can differ. For example, some localities chose to institute requirements for masks, but found enforcement too difficult. Other places opted for a less conservative public health response, yet people chose to limit their activity and focus on self-preservation, staying at home even without being subject to government mandates.

Like many observers, I firmly believe that the path to righting the economy hinges on first getting the virus under control. Without effective *public health* policy, the virus will remain the major source of *economic* problems – despite fiscal and monetary authorities acting early on to try to moderate the economic impact of the virus.

COVID-19 is what economists would call a “tail event,” meaning something in the lower-probability “tails” of a distribution of possible outcomes. (Of course, some had predicted

that viral pandemics would occur at some point, so it may be wrong to see it as an especially surprising tail event, or one especially unlikely to occur again). The severity of a tail event can be impacted – positively or negatively – by many factors, not just the immediate fiscal and monetary responses. How well a country is positioned to weather a tail event depends, importantly, on the financial positioning of households, financial institutions, and firms when that tail event strikes. So, while a worldwide pandemic happening precisely when it did could not have been predicted, it was certainly possible that *some* tail event might occur that would disrupt the economy.

My view is that the possibility of such tail events justifies, as prudent, financial positioning to lessen the severity of adverse economic shocks – whether those positioning steps are personal decisions, such as precautionary savings, or regulatory ones, such as bank capital cushions. Those economies that go into a recession in more fragile financial condition are likely to experience amplified economic problems that could have been ameliorated with more proactive financial stability steps, taken in advance. Of course, protection from adverse tail events is not free, so to speak. The behavior of economic agents is largely based on cost-benefit decisions, often driven by incentives and disincentives provided by policymakers.<sup>1</sup>

The most recent statement by the Federal Open Market Committee, or FOMC – the Federal Reserve’s monetary policy-making body – indicates the committee’s intention to keep interest rates at the current low level until the Fed’s 2 percent inflation target has been achieved.<sup>2</sup> This reflects concerns about the below-target inflation rate experienced over the previous decade. A potential cost of this policy, from my perspective, would be the incentives that low interest rates create for households and firms to take on more leverage and more risk. In the United

States, the corporate sector was more leveraged in early 2020, at least by some measures, than at the beginning of previous recessions. Today, I will discuss the ramifications of low interest rate policies, the impact on leverage, and the potential consequences for a subsequent economic downturn – based on the U.S. experience in the current recession.

This is an important time to focus on preventing the buildup of financial imbalances, because many central banks are considering modifying their reaction functions to prioritize achieving certain elements of their mandates. In the United States, that implies being more reluctant than in previous recoveries to raise interest rates until we have achieved full employment and 2 percent inflation.<sup>3</sup>

While I support achieving these two goals, I believe it requires, in addition, a more proactive supervisory and financial stability focus to prevent financial imbalances from ratcheting up the severity of economic downturns. In the United States, this is particularly problematic, because legislation formulated after the financial crisis has not mandated a financial stability focus, but rather a too-big-to-fail focus, and the regulatory tools available to the Fed are much more limited than in many European and Asian countries.

I will also highlight in my remarks today that those segments of the labor market most affected by amplified business cycles – when financial stability “guardrails” are limited – can be populated by those workers who are most vulnerable and least able to adapt to the changed economic environment. That imbalanced human toll is a bad outcome for democracy as well as the economy.

## The Current Situation

A healthy economy requires a healthy populace. In both Europe and the United States, a full recovery is not possible until the public health crisis has been addressed. **Figure 1** shows the dramatic differences across countries in their experience with the virus. On the horizontal axis is a country's share of the global population, and on the vertical axis is a country's share of world deaths from COVID-19. Countries above the dotted line are, given their population, overrepresented in deaths caused by the virus, and those below the dotted line are underrepresented in virus deaths, given their population.<sup>4</sup>

Worth noting is that two panels are needed in the figure. On the left chart, the U.S. is so disproportionately accounting for world COVID-19 deaths that it required a separate scale from the right chart. Unfortunately, several European countries also have a disproportionately high number of deaths, including the United Kingdom, France, Spain, and Italy – and have recently imposed new restrictions.

On the other hand, Figure 1 shows there are countries that have done well in managing the virus, including New Zealand, Japan, and South Korea. Even a developing country, Vietnam, is showing a disproportionately low share of COVID deaths given its share of the world population, implying its success in controlling the virus.

Obviously, the virus has had severe economic consequences, as shown in **Figure 2**. It is useful to think about the virus's effects in economies that disproportionately involve services, which tend to require more personal interaction than the production and sale of goods. And, in fact, service activities proved to be more affected by the need to social distance than were goods-producing activities. In the United States, consumption of goods now exceeds what was

consumed at the beginning of the year, while services consumption remains depressed. Americans have continued remodeling houses and buying durable goods, but things like traveling and recreational activities outside of the home are taking place at a lower rate. Thus, the virus is a disproportionate shock for those countries that are more services dependent, such as the U.S., and most developed countries.

### **Impact of Economic Shocks**

While the economic impact of COVID-19 may fall disproportionately on service-oriented economies where the services require a lot of social interaction, other factors also are important in determining the severity of the pandemic's economic consequences. As **Figure 3** shows, the United States economy goes through cycles, with ups and downs of the unemployment rate reflecting episodes of recessions and expansions.

The figure highlights two important points. First, the amplitude of the unemployment rate is currently quite high, as it was during the financial crisis of 2007-2008. The second point worth noting is that the area on the chart where unemployment is *above* the so-called full employment level has been much larger than the area involving unemployment *below* the estimate of full employment.<sup>5</sup> Part of the reason for this asymmetry is that much of the history of this sample reflected a disinflationary trend – inflation fell consistently from 1980 to 2004. Several of the instances where the unemployment rate bounced back up sharply were recessions, resulting from attempts to control inflation. But policymakers also cannot control the dynamics of the economy all that precisely. Thus, imbalances in one direction, say exceeding full

employment to the point of excessively tight labor markets, tend to result in a bounce back in unemployment above the natural rate.

If policymakers want to achieve maximum sustainable employment, in my view the focus should be less on pushing the economy well below full employment – which helps produce imbalances in the economy that could also affect the severity of the next recession.

Some imbalances are worse than others. Note that in the recovery from the Financial Crisis and Great Recession, the U.S. saw just over nine years with the unemployment rate above the full employment level, but just over three years of an unemployment rate below its natural rate. Instead of pushing the unemployment rate below its natural rate, the focus should be on avoiding the subsequent large spikes of unemployment and slow recovery that occur when the downturn is made worse by a lead-up that involves excessive risk-taking and the associated imbalances, both real and financial.<sup>6</sup>

An additional important factor in the severity of a downturn is the policy response. Fortunately, in the United States the initial policy response to COVID-19 by monetary and fiscal policymakers was prompt and substantial.<sup>7</sup> Unlike the beginnings of some recessions when it is initially unclear whether the economy is in a downturn at the outset, the rapid increase in the COVID-19 virus, the economic shutdowns, and the sharp decline in asset prices made it immediately clear to policymakers that swift action was needed.

Fiscal policymakers moved quite quickly by historical standards in the U.S., with support focused on small businesses and low- and moderate-income workers. Monetary policy was also implemented promptly. In March, the Federal Reserve reduced the federal funds rate to between 0 and 25 basis points (**Figure 4**) and began asset purchases (**Figure 5**). And a series of

emergency lending facilities were announced that were designed to stabilize financial markets and provide support for businesses. This swift action by policymakers has been critical to the improvements in the economy so far. Now, with a second wave of infections underway, my sense is that more fiscal and monetary accommodation is appropriate.

## **Financial Fragility**

Another factor shaping the severity of this recession – in other words, the severity of the consequences of the pandemic shock – is how fragile, or susceptible to financial instability, the economy was prior to the shock. How well prepared were firms, households, and financial institutions for a so-called tail event? In the interest of time, today I will look specifically at the preparedness of firms.

An examination of payroll employment by industry shows firms whose business requires social interaction continue to be badly disrupted by the pandemic. **Figure 6** shows that retail, arts and entertainment, restaurants, and hotels have all been severely impacted. While payroll employment declined in these industries during the past recession, payroll employment declined much more substantially with the pandemic and remains well below levels from the previous year.

The large and enduring weakness in these sectors has other costs besides the loss of jobs in the short run. **Figure 7** shows a list of publicly traded firms in the consumer discretionary space that have defaulted on debt (and/or filed for bankruptcy) in 2020.<sup>8</sup> Two observations stand out. First, most of these firms had elevated leverage, as evidenced by their most recently

reported, pre-pandemic, debt to earnings before interest, taxes, depreciation, and amortization (EBITDA) ratios being quite elevated. In fact, most of the firms had debt to EBITDA too high to qualify for support through the Federal Reserve's Main Street Lending Program, a lending facility designed to aid troubled firms impacted by COVID-19, which requires a debt-to-EBITDA ratio under six for collateralized loans.<sup>9</sup> The second observation is that these firms are "labor intensive." The consumer discretionary sector accounts for significant employment, much of it relatively low-wage workers. And, of course, bankruptcies tend to make temporarily unemployed workers into longer-term unemployed workers.

It is important to note *when* the high level of debt was incurred. If it was incurred right before the shock, the appropriate financial stability approach may be different than if it was incurred much earlier in the recovery. Put another way, how has leverage in the corporate sector evolved over the years amid the low interest rate environment, and what are the potential ramifications of this trend? This is an important question, which I will discuss next with some preliminary observations.

**Figure 8** shows the median debt-to-EBITDA ratio for (mostly publicly traded) firms in the consumer discretionary sector that defaulted (and/or filed for bankruptcy) in 2020 and those that did not. Interestingly, through 2013 the median debt to EBITDA was around or below two times for the defaulted and the non-defaulted firms. However, during the recovery period the median debt leverage of defaulted firms rose quite sharply, reaching more than eight times right before the recession – while the non-defaulted firms had only a mild increased reliance on debt.

The debt-to-EBITDA measure can be affected by firms with very low profitability.

**Figure 9** shows the capacity to service debt had become impaired at defaulted firms, and **Figure**

**10** shows that the debt-to-assets ratio, another measure of leverage, began rising sharply in 2011. As a result, when the recovery had started, but interest rates were low, the firms that eventually defaulted issued much more debt, and this increased leverage appears to have affected their ability to survive the pandemic downturn.<sup>10</sup>

### **The Impact of Excessive Risk-Taking**

As I discussed in a recent speech, the financial pressures associated with excessive risk-taking behavior build gradually, and usually only become clear in the next economic downturn. When the ensuing recession occurs – often suddenly – and more severe recessionary dynamics take over, sadly the impact tends to be greatest on workers and firms that are least able to adjust and adapt.<sup>11</sup>

Indeed, for the aforementioned defaulted firms, again, focused on the consumer discretionary sector, the debt began to rise about eight years before the shock. If the results harmed only shareholders, one could argue that they should be free to take that risk. However, the fact is that customers, suppliers, and employees are also hurt by risk-taking behavior. Today, I will focus on the impact on employees.

**Figure 11** shows the demographics of firms in the service sector. A ratio above one indicates that the demographic group is overrepresented in that industry relative to its share in the workforce. Looking at the first row, women are overrepresented in the service sector, relative to their share in the work force. Women are overrepresented in retail as well as in leisure and hospitality. Note that Black or African American workers, Hispanic or Latino

workers, and those workers between the ages 16-24 years are over-represented in leisure and hospitality as well.

In a bankruptcy situation, there normally is a reduction in workforce, and if it becomes a firm closure, the employee's connection to the employer is severed. As a result, a significant number of workers in defaulted firms are likely to lose their jobs, and when many firms in the industry are simultaneously filing for bankruptcy, their ability to find work in the same industry will be difficult.

During the pandemic, women and minorities may not only be disproportionately impacted by excessive risk-taking by these firms, but they are more likely to leave the workforce altogether. **Figure 12** shows that the labor force participation rate for prime working-age women had fallen sharply again in recent months and is well below the level at the beginning of the year. October saw a slight uptick in participation rates for both working-age men and women. **Figure 13** shows that minorities also have seen a large decline in labor force participation, relative to the beginning of the year and relative to white workers.

## **Concluding Observations**

In summary and conclusion, I would reiterate that shocks happen, but certain factors make them worse. While the monetary and fiscal policy response in the United States has been an important economic mitigant to problems generated by the pandemic since the onset this spring, excessive risk-taking during the previous recovery period is, unfortunately, likely to prolong the country's economic distress – especially for those most disproportionately affected.

Financial factors, including excessive leverage, can influence how severe the consequences of a shock will be, and how painful a recession becomes. Imbalances in the real economy and financial factors accelerating recession dynamics can make the effects of a shock and the severity of a recession much worse. Today, I have focused on the excessive risk-taking of some firms in the consumer discretionary sector. However, imbalances in the household and financial sector have often been problematic, as well – particularly in the Financial Crisis and Great Recession.

These observations have policy implications. In Europe and Asia, many countries have a governance structure able to focus on the financial stability imbalances that are occurring in their economies, and those countries have tools to try to prevent the buildup of excessive risk. No such structure or tools are available in the U.S. This is a problem, both now and for future economic downturns.

With many central banks focused on keeping interest rates low for an extended period to achieve their mandates – for example in the last recovery – it is particularly important to watch for reaching-for-yield behavior and excessive risk-taking. Easy monetary policy requires more guardrails protecting against rising financial stability risks. Without financial stability governance and tools, recessions have the potential to be more severe and fall disproportionately on those that can least afford it. And the recessions are likely to be deeper and longer, requiring more fiscal and monetary stimulus than would otherwise be necessary.

In sum: We need to place more attention on the *severity* of outcomes in recessions, which are made worse if we cannot or will not take action against emerging imbalances.

Thank you for inviting me to join you, and I wish you all continued health – and I look forward to a time when we can gather in person.

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<sup>1</sup> For example, some policies might hinder some of the precautionary decisions made by individuals and regulators.

<sup>2</sup> See Sept. 16, 2020 statement of the Federal Reserve Open Market Committee:  
[https://www.federalreserve.gov/news\\_events/pressreleases/monetary20200916a.htm](https://www.federalreserve.gov/news_events/pressreleases/monetary20200916a.htm)

<sup>3</sup> Reflecting the Fed's mandates to achieve full employment and price stability, for which we target 2 percent inflation.

<sup>4</sup> While this figure suggests those above the dotted line are overrepresented, it does not shed light on causality.

<sup>5</sup> That is, the level of unemployment estimated to represent the economy at full employment.

<sup>6</sup> Of course, the nature of the shock is also important – whether it is a demand shock or supply shock; a financial shock or real shock; a local (U.S. centric) shock or global shock.

<sup>7</sup> For more discussion, see May 19, 2020 remarks by Eric S. Rosengren, entitled: [\*The Main Street Lending Program and Other Federal Reserve Actions\*](#).

<sup>8</sup> It is worth noting, as I have in prior talks, that the traditional retail sector writ large has been challenged prior to COVID-19, due in part to the rise of online retail and firms like Amazon.com.

<sup>9</sup> For more on the Federal Reserve's Main Street Lending Program, see <https://www.bostonfed.org/mslp>.

<sup>10</sup> These analysis are descriptive and, therefore, do not suggest causality, nor control for firm-specific characteristics. As previously noted, the analysis is preliminary and based on work being conducted by FRB Boston staff.

<sup>11</sup> And if workers and firms are less able to adjust and adapt, that makes the recession more severe. For more discussion, see Oct. 8, 2020 remarks by Eric S. Rosengren, entitled [\*Economic Fragility: Implications for Recovery from the Pandemic\*](#).