Philip N Jefferson: Technology's impact on the post-pandemic economy

Speech by Mr Philip N Jefferson, Member of the Board of Governors of the Federal Reserve System, at the conference "Technology-Enabled Disruption: Lessons from the Pandemic and the Path Ahead", organised by the Federal Reserve Banks of Atlanta, Dallas and Richmond, in Atlanta, Georgia, 4 October 2022.

* * *

Good morning, and thank you. It is a pleasure to be here today. I am happy to be giving my first speech as a member of the Board of Governors at the Federal Reserve Bank of Atlanta. I would like to thank the Atlanta, Dallas, and Richmond Feds for inviting me today and for bringing together this collection of expertise and research.

Today I would like to continue the discussion you have been having about tech-enabled responses to the pandemic. Then I would like to delve a bit further into what those pandemic-related disruptions have meant for economic activity at the microlevel and how the changes of the past few years affect how I view the outlook for the macroeconomy.

This may be my first speech as a Fed Governor, but I am well aware of one practice associated with these occasions. That practice requires me to say that I am speaking for myself alone. My views do not necessarily reflect those of anyone else at the Board of Governors or in the Federal Reserve System.

Technology-Enabled Solutions to Pandemic Disruptions

Turning to the subject of this conference, there is no question that technology helped households and businesses to adapt and adjust in many ways to the disruption brought about by the pandemic. Those adaptations-from enabling people to keep working to helping businesses stay open-undoubtedly prevented worse outcomes. They also likely changed the economic landscape for good and, in many cases, for the better-from hybrid working and how businesses approach distribution, investment, and inventories to the way consumers shop and pay for goods and services. Those changes are evident across broad categories, each of which this conference has discussed in some detail.

Supply chain and business investment underwent, and are still experiencing, significant change. Large increases in computers and peripherals investment enabled remote work and helped to automate processes at physical establishments while simultaneously minimizing in-person contact.

Likewise, the labor market showed great adaptability in the rapidity and relative ease that many sectors showed in shifting to remote working. Of course, that did not translate to all areas of employment, such as those jobs that require person-to-person interaction. Nevertheless, technology allowed many employees to continue working

during a pandemic. Also, it likely had an indelible effect on current and future ways of working, including encapsulating hybrid work and greater flexibility for employees as fixtures.

The shift to remote and hybrid learning, however, was difficult, but without technology, learning during lockdown might have ceased entirely. In some cases, schools were closed for only a few weeks or months, and the entire in-person learning apparatus was replaced with technology-enabled remote learning. The teachers and administrators-and I was one at the time-adapted remarkably quickly to a dramatically different set of tools and techniques. Teachers, students, and parents made a rapid shift to an entirely new dynamic, often on entirely new platforms. We are still learning the lessons of that interlude, and they can influence how schools at all levels think about future planning. My colleagues and I recently heard from a community college administrator about the challenges she faced. Training programs that fill worker demand in local industries require hands-on experience, which meant retooling the curriculum for a hybrid environment. Student services also had to change to accommodate the increased need for childcare and other pandemic-related hurdles, or her school risked a drop in enrollment.

The payments system has also seen an acceleration in alternative online and mobile payment methods as well as contactless payment options. We all remember the onset of the pandemic, when social distancing became imperative and delivery and curbside pickup became the norm for many. Remote card payments naturally rose as in-person use fell. As stores reopened while the fear factor was still considerable, the contactless payment options that were available on cards and mobile devices received more attention. Such changes, coupled with the growing prominence of person-to-person money transfer apps, provided consumers with remote and touchless cash substitutes in their daily lives. The expanded use of those various payment options rested on the foundation of an intricate, robust payments ecosystem. That system supported a migration from in-person payment options to no-contact alternatives, helping restart the economy during a time of deep stress.

These are just a few of the examples you have been discussing, and there are many more. The pandemic, and the tech-enabled responses to it, changed the economy in fundamental ways that will likely not revert. It is vital to understand those changes and the effects they will have going forward.

As an economist looking at these issues on a microlevel, I appreciate the expertise on display at this conference. From my new perch as a Fed Governor taking the macro view, the research presented gives more context to the wider economic playing field. From either perspective, the technology-enabled responses and the changes brought about by the pandemic itself are important issues for policymakers to understand. They affect how we look at the economy overall.

As I look ahead, I am considering how those changes affect the outlook, and I would like to speak a bit about how I see the economy evolving as we move forward.

Outlook

The labor market remains strong, as can be seen across a variety of measures, from the low unemployment rate to the high quits rate, which illustrates the confidence of workers who are willing to leave their jobs in pursuit of better ones. Labor force participation remains lower than it was prior to the pandemic, reflecting several factors, including people who left the workforce for early retirement and some remaining parents and other caregivers who stayed home through the pandemic. These are not factors that reverse on a dime.

With still-strong labor demand and sluggish labor supply, the job market remains very tight. Workers are moving between jobs more rapidly than in the past, putting upward pressure on wages. In a market with more job openings than workers, the competition to fill vacancies is leading to rapid wage gains now, and the resulting salary compression may lead to further upward wage pressures in the future. As growth has slowed this year, supply—demand conditions in the labor market-and the overall economy-seem likely to ease some. We have already seen some indications from survey data, information from transportation hubs, and producer prices that supply bottlenecks have, at long last, begun to resolve.

Nonetheless, inflation remains elevated, and this is the problem that concerns me most. Inflation creates economic burdens for households and businesses, and everyone feels its effects. It can also change people's expectations about how long lasting price rises will be. Those inflation expectations can become entrenched and, in doing so, increase the likelihood that high inflation will persist. While oil and gasoline prices have come down in recent months, I am concerned that fluctuations in prices of the goods to which people pay the most attention, like food and housing, will affect expectations of future inflation. Thankfully, longer-term inflation expectations appear to remain well anchored, consistent with our 2 percent target. I will be watching those expectations closely.

An important outcome of the shifts you have been discussing, from firms' production patterns and distribution mechanisms to consumers' purchasing decisions, is that inflation dynamics likely changed also. How and why prices change require careful study and analysis, and a data-driven approach is more essential than ever.

Restoring price stability may take some time and will likely entail a period of below-trend growth. However, I want to assure you that my colleagues and I are resolute that we will bring inflation back down to 2 percent. The full effects of monetary policy take time, but in my brief time on the Federal Open Market Committee, we have acted boldly to address rising inflation, and we are committed to taking the further steps necessary.

Implications for Policy Approaches

The fundamental shifts at the core of the economy shape my approach to policy. As we are assessing the dynamics of the macroeconomy amid rapid changes, we will be watching the data closely and applying rigorous analysis. My focus is on progress toward our goal.

It is too soon to say whether the pandemic and the changes it brought-many of which this conference has covered-are going to be permanent or ebb as time goes by. My guess is that it is likely to be a combination of the two, with some features becoming

embedded, such as new approaches to working and contactless payments, and others returning to something like they were before, like the preference for in-person education.

Either way, it will take time for these changes to prove themselves to be either permanent fixtures or temporary features. Research will play a key role as we try to answer important questions. New data will help us analyze the changes to the economy, and research will assemble the pieces of the puzzle that show the bigger picture.

As we watch and assess developments in the U.S. economy, we will have to take into consideration a multitude of factors, including those rooted in technology-enabled disruption, and the strength and the staying power of the many forces that are shaping the economy.

Thank you for your time, and I look forward to your questions.