



# CRISIS & MONETARY POLICY

The pandemic and war have bred new challenges for global central banks in coming years

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**T**he global inflation surge that abruptly ended decades of moderating price gains came at a unique confluence of crises: the global pandemic and Russia's invasion of Ukraine.

Now, economists must ask, What lessons does this era offer for monetary policy? We might begin with the lessons from the pandemic and war that are relevant for monetary policy, even if the world eventually moves back to an environment of low interest rates and low inflation. Most economists missed the inflation surge, and we need to understand why, and how monetary policy may have to change going forward.

But some crisis effects—high inflation, supply chain disruptions, greater trade barriers—may persist much longer, or intensify. That could challenge macroeconomic stability around the world, especially in emerging markets. How can we avoid this?

### **Accounting for inflation surge**

Soaring prices were a surprise from the perspective of precrisis policy frameworks, especially for advanced economies. Empirical evidence suggested that inflation rose by only a small amount when unemployment declined, consistent with a very flat Phillips curve. This evidence was reinforced



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by the pre-pandemic experience of inflation that remained tepid even as monetary stimulus pushed unemployment to very low levels.

However, these models embedding a low Phillips curve slope did a poor job of explaining the pandemic-related surge in prices. Most inflation forecasts based on these models, including ours at the IMF, significantly underpredicted inflation.

While high inflation partly reflects unusual developments, some forecast errors likely reflect our misunderstanding of the Phillips curve and the supply side of the economy.

While the standard Phillips curve links inflation to the unemployment gap, the rapid employment recovery may have played a significant role in driving inflation, implying that “speed effects” matter more than previously thought. There may also be important nonlinearities in the Phillips curve slope: price and wage pressures from falling unemployment become more acute when the economy is running hot than when it’s below full employment. Finally, surging goods inflation during the recovery—when constraints on supply and demand for services meant massive stimulus fell heavily on goods—suggests the importance of capacity constraints at the sectoral, as well as aggregate, level.

### Lessons for monetary policy

One implication of these insights is that we need better aggregate supply models that reflect the pandemic’s lessons. For instance, it will help to further develop sectoral models that differentiate between goods and services and incorporate sectoral capacity constraints to help account for speed effects and nonlinearities at both the sectoral and aggregate levels.

But we should also reconsider policy prescriptions widely held prior to the pandemic that were based on a flat Phillips curve.

One such prescription held that unemployment well below its natural rate was acceptable, even desirable. Running the economy hot seemed to work well for the United States and other advanced economies before the pandemic. Unemployment fell to historic lows, including for disadvantaged workers, while inflation remained below target.

But inflation risks from running the economy hot may be much greater than we previously thought.

The pandemic also highlighted difficulties in measuring economic slack. While mismeasurement isn’t a serious problem if the Phillips curve is flat, it is if the curve is nonlinear when unemployment falls below a highly uncertain natural rate. In this situation, policymakers may unwittingly push unemployment below their (overly optimistic) estimate of the natural rate and fuel an inflationary surge—as arguably occurred during the Great Inflation of the 1970s. In addition, the pandemic suggests that running the economy hot makes it more likely that key sectors will hit capacity constraints, generating inflationary pressures that may become broad-based.

Running the economy hot may still be desirable in certain circumstances, but policymakers must be more attuned to the potential downsides and be careful with overdoing stimulus.

Another pre-pandemic view was that major central banks could use their credibility to “look through” temporary supply shocks, like high oil prices, and assume inflation would be transient. Policy rates would adjust in response to second-round effects; that is, to the more persistent effects on inflation. But these were typically estimated to be small, so policymakers didn’t have to react much, even to large shocks—consistent with favorable inflation-employment trade-offs.

The pandemic underscored how supply shocks can have broad, persistent inflationary effects, with surprising speed. Strong upward price pressures in some industries may spread through supply chains, and to wages, or affect inflation expectations, influencing price or wage setting.

This suggests that central banks should react more forcefully under certain conditions. Initial conditions likely matter: looking through a temporary shock may cause problems if inflation is already high, so additional shocks are more likely to dislodge price expectations. Central banks may also need to be more aggressive in their policy responses in a strong economy where producers can easily pass on rising costs and workers are less

willing to accept real wage declines. The central bank may also have to react more if the shocks are broad-based rather than concentrated in particular sectors.

### Risk of persistence

The lessons about the Phillips curve and policy prescriptions predicated on its being flat would apply even in a pre-pandemic environment with typically low interest rates and inflation in which supply problems dissipate. But there's also the possibility of much more persistent inflation that de-anchors expectations, and of more chronic disruptions to global supply chains and open trade.

A key risk is that high inflation de-anchors inflation expectations. This would complicate monetary policy trade-offs, because currency depreciations and supply shocks would both have much more persistent inflationary effects. Bigger interest rate hikes to contain inflation would cause larger output contractions. Significant and front-loaded tightening by several central banks over the past year has helped attenuate de-anchoring risks. Nevertheless, central bankers should remain vigilant.

The challenge for central banks would also be compounded if supply shocks become more entrenched. This may occur if countries decide to reduce the risk of supply chain disruptions by raising trade barriers. That would expose countries to greater supply shock volatility, in turn posing more difficult trade-offs for monetary policy and making economic stabilization harder.

Central banks in emerging markets would be particularly hurt if trade becomes more fragmented and inflation expectations de-anchor. These economies are already more vulnerable to external shocks, and could face harder policy trade-offs.

In principle, the pandemic and war could also have enduring effects on the demand side of the economy by affecting the equilibrium real interest rate (the rate at which in the long run the economy achieves its potential output without incurring inflation). They could impact inequality, demographics, productivity, demand for safe assets, and public investment and debt, among other things. For instance, the pandemic and war may further depress the equilibrium rate by increasing demand for safe assets and raising inequality.

Overall, these effects probably won't be particularly large, and, accordingly, the equilibrium rate is likely to remain low—though there remains

uncertainty about its actual level. Moreover, a persistent shift to deficit spending, or a sizable catch-up in climate investment, could materially boost the equilibrium rate.

### Policy implications

The pandemic and war have further challenged central banks. Those in advanced economies had focused in recent years on providing enough stimulus to support growth and boost low inflation. The task was to deliver the firepower needed through near-zero interest rates when inflation seemed destined to remain too low.

Now, these crises underscore for central banks that managing risks means accounting for inflation that's too low or too high—and the possibility of stronger tensions between the objectives of price stability and employment or growth. The pandemic has also shown how the relationship between unemployment and inflation, embedded in the Phillips curve, may not be flat when the economy is strong—and that shocks like high energy prices may play out differently in good times versus subdued periods.

Accordingly, the more palpable risk of rapid inflation means it's crucial to revisit the robustness of strategies such as running the economy hot and seeing supply shocks as temporary. These strategies offer benefits, but also raise risks to price stability.

Beyond these lessons, there are concerns that the pandemic and war may lead to larger supply shocks, and less-anchored inflation expectations. These risks are biggest for emerging markets, especially those with high debt. But with the fastest inflation in decades, advanced economy central banks also face significant risks, which is why they need to stay the course and maintain restrictive monetary policy rates until they see durable signs of inflation returning to target. We can't have sustained economic growth without restoring price stability.

While central banks must lead the inflation fight, other policies can help. Fiscal policy should play a role, with targeted help for the most vulnerable that doesn't stimulate the economy. Policymakers must advance the climate agenda to preserve economic and financial stability. Finally, policies that reduce fragmentation risks in global trade will lower the risk of supply shocks and help boost the world's potential output. **FD**

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