Monetary Policy and the Labor Market: A Quasi-Experiment in Sweden

When Sweden’s central bank tightened monetary policy from 2010-2011 in response to concerns about financial stability, the economy contracted and the unemployment rate rose by 1 to 2 percentage points, driven by inflexible wage rates (or nominal wage rigidity), with unemployment increasing the most at the bottom of the income distribution.

The Federal Reserve Bank has two mandates, set by Congress in the 1970s: 1) stable prices and moderate long-term interest rates, and 2) maximum employment, often understood as the level that exists when there is neither a boom nor a recession. That second mandate, to which other central banks around the world variously subscribe, is tricky to achieve, in part because policymakers do not fully understand the extent to which their actions affect the labor market.

Much research on this subject focuses on historical economic events, but this paper examines a recent large monetary policy shock in Sweden, where the central bank (the Riksbank) raised interest rates by nearly 2 percentage points in 2010-2011, despite the country’s below-target inflation and above-average unemployment. Why would a central bank tighten monetary policy when it was meeting its two mandates? The authors argue that the Riksbank’s action, which followed the worldwide financial crisis of 2007-2009, was driven by new concerns about financial stability (which many observers consider central banks’ unofficial third mandate).

The Riksbank repo rate, or the interest rate governing banks’ short-term borrowing and deposits with the central bank, rose from 0.25% in June 2010 to 2% in August 2011. Given the existing inflation and unemployment rates, as well as an economy recovering from a steep recession, these actions caught market participants by surprise, despite that they were signaled in advance.
The authors estimate that the ensuing economic contraction had the following effects:

• While unemployment was initially unaffected by the tightening, it rose steadily over the course of two years, eventually reaching a peak increase of about 1–2 percentage points (pp) between two and three years after the contraction. This increase is large relative to existing estimates of typical monetary shocks.

• Beyond unemployment, the authors estimate that output and investment fell, rates of inflation were lower, and the exchange rate appreciated, all consistent with predictions of standard economic models.

• The key assumption supporting the authors’ interpretation that the monetary tightening caused the contraction of economic activity, is that there were no other shocks that could have created this contraction in the absence of the monetary tightening. Specifically, they do several checks to show that the European sovereign debt crisis did not significantly contribute to the rise in unemployment in Sweden in this period.

Having established the causal link between monetary tightening and a large rise in unemployment, the authors then use administrative microdata (including union contracts) to test the extent to which this was due to nominal wage rigidities, or wages that were resistant to change (“sticky” in economic parlance). They find the following:

• Sectors with stickier wages see larger increases in unemployment. This effect is especially pronounced among highly indebted firms, indicating that wage rigidity may interact with other aspects of firms’ exposure to monetary policy.

• The authors’ estimates imply that wage rigidity of this sort accounts for approximately half of the overall rise in unemployment.

Finally, the authors unpack this aggregate effect and examine heterogeneity in the incidence of the monetary contraction in the labor market, and compare it to the typical heterogeneity in cyclical exposure across the income distribution. This is important, because if groups that are most exposed to business cycles also respond most to monetary policy, then central banks can use monetary policy to stabilize employment for these groups without leading to employment distortions. They find the following:

• Monetary policy tightening raised unemployment for workers in the bottom earnings decile by 1 pp more than the highest-earning workers.

• While typical of monetary contractions, this episode was meaningfully more regressive than the typical business cycle, suggesting a tradeoff between stabilizing aggregate employment and distorting relative employment across groups.

Bottom line: If optimal monetary policy were not complex enough, this work reveals that labor market heterogeneity in response to policy adds yet another dimension of tradeoffs for central banks. And while the authors’ focus is on a recent Swedish case study about the effects of contractionary monetary policy on the labor market, their setting could be used to explore other effects of monetary policy, including the importance of banks, household balance sheets, or expenditure switching (policies that influence a country’s expenditures on foreign and domestic goods), among others.