Overview

The lecture slides discuss ten papers on the topics of business cycles, unemployment, stabilization policy, and behavioral macroeconomics. The papers try to answer the following questions:

- What are the sources of unemployment and unemployment fluctuations?
- How large is the unemployment gap?
- How should monetary policy, fiscal policy, and unemployment insurance respond to fluctuations in unemployment?
- What are the macroeconomic implications of people's concerns for social status and for fairness?

Models of Unemployment

In matching models of unemployment, all unemployment would disappear if unemployed workers searched sufficiently hard for jobs. This property is difficult to reconcile with the long queues of unemployed workers at job bureaus and factory gates observed during the Great Depression. Conversely, in rationing models of unemployment, there is always a lack of jobs in the economy. This property is difficult to reconcile with the many unfilled vacancies observed after the Coronavirus Pandemic. "Do Matching Friction Explain Unemployment? Not in Bad Times" (Michaillat 2012) blends the matching and rationing models of unemployment to build a model with both frictional and rationing unemployment. The model describes well both tight and slack labor markets.

One limitation of the model, however, is that all unemployment fluctuations are driven by productivity shocks. This is because the model is in the Diamond-Mortensen-Pissarides tradition: it only features a labor market, so there is no scope for aggregate-demand shocks. "Aggregate Demand, Idle Time, and Unemployment" (Michaillat & Saez 2015) addresses this limitation by adding to the labor market a product market with similar structure. In the extended model, not all workers are employed, and not all goods and services produced by firms are sold. Unemployment is therefore affected by aggregate demand (Keynesian component), real wages (classical component), and the matching process (frictional component).

⌘ Monetary Policy with Unemployment

Unlike in neoclassical models, in matching models there is no guarantee of efficiency. The prevailing unemployment rate is generally inefficient: either inefficiently high or inefficiently low. "Beveridgean Unemployment Gap" (Michaillat & Saez 2021) develops a measure of the unemployment gap to assess how far the unemployment rate is from its socially efficient level. The paper finds that in the United States, the unemployment rate is generally inefficient. The unemployment gap was above 6 percentage points in the aftermath of the Great Recession. It was below -1 percentage points at the end of the Coronavirus Pandemic.

The fact that the US unemployment rate is generally inefficiently means that monetary policy should try to shrink the gap between the unemployment rate and its efficient level. "An Economical Business-Cycle Model" (Michaillat & Saez 2022) develops a monetary version of the model in "Aggregate Demand, Idle Time, and Unemployment". In the monetary model, unemployment is determined by the intersection of an aggregate-demand curve (stemming from households' consumption-saving decisions) and an aggregate-supply curve (equivalent to a Beveridge curve). Monetary policy influences the aggregate-demand curve, so it can be used to shrink the unemployment gap. In fact, the optimal monetary policy is to adjust interest rates to eliminate the unemployment gap.

Fiscal Policy with Unemployment

Monetary policy should eliminate the unemployment gap, but this is not always possible. Once monetary policy reaches

the zero lower bound, for instance, it becomes impotent, and it has to be supplemented by fiscal policy. "Optimal Public Expenditure with Inefficient Unemployment" (Michaillat & Saez 2019) studies how public expenditure should be adjusted when unemployment is inefficient. The paper finds that optimal public expenditure deviates from the Samuelson rule to reduce the unemployment gap. The amplitude of the deviation depends on the government multiplier and the substitutability between public and private consumption.

"A Theory of Countercyclical Government Multiplier" (Michaillat 2014) provides another advantage of the model of unemployment developed here. The model produces government multipliers that are higher when unemployment is high than when unemployment is low. This result is consistent with a growing body of evidence.

Unemployment Insurance

Fluctuations in unemployment raise another policy question: should the generosity of unemployment insurance depend on the unemployment rate? This question was hotly debated during the Great Recession, pitting those who thought that UI was costly because it discouraged job search and raised unemployment further against those who thought that UI was not costly because it barely raised unemployment -- as there were no jobs available for jobseekers. "A Macroeconomic Approach to Optimal Unemployment Insurance: Theory" (Landais, Michaillat, & Saez 2018) uses the model of unemployment developed here to weight the two sides of the argument. The paper obtains a formula that contrasts how generous unemployment insurance should be in good times and in bad times.

"A Macroeconomic Approach to Optimal Unemployment Insurance: Applications" (Landais, Michaillat, & Saez 2018) then applies the optimal unemployment insurance formula to the United States. It finds that unemployment insurance should be more generous in bad times than in good times, as it is in practice.

Behavioral New Keynesian Models

"An Economical Business-Cycle Model" assumes that people derive direct utility from wealth -- because wealth is a marker of social status, and people value high social status. Thanks to this assumption, the model features a nondegenerate aggregate-demand curve and behaves well at the zero lower bound. "Resolving New Keynesian Anomalies with Wealth in the Utility Function" (Michaillat & Saez 2021) exports this assumption to the New Keynesian model and shows that the assumption resolves the anomalies that appear in the New Keynesian model at the zero lower bound. With wealth in the utility function, there is no collapse of output and inflation at the zero lower bound, and the effects of government spending and forward guidance at the zero lower bound are bounded and reasonable.

Another limitation of the New Keynesian model is that that the origin of price rigidity is never explained. Taking such a shortcut is problematic: how can we determine the optimal level of inflation if we do not know why people dislike inflation so much? "Pricing under Fairness Concerns" (Eyster, Madarasz, & Michaillat 2021) develops a theory of price rigidity that conforms to customers' and firms' motivations when setting prices. The theory is consistent with evidence that firms stabilize prices out of fairness to their consumers: people find high markups unfair so firms do not increase prices too fast to avoid giving the impression that they are charging high markups. Embedded in a New Keynesian model, the theory describes well the effects of monetary policy. The theory also explains why people dislike inflation so much: when monetary policy loosens and inflation rises, customers misperceive markups as higher and feel unfairly treated by firms.