

Short lectures in macro-labor

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This course aims to give an overview of core aggregate labor market facts, from employment and unemployment rates, flows across labor force states and the dynamic of earnings, along with prevailing tools for modeling these outcomes in both the long run and over the business cycle. The course also touches on the relation between unemployment and price inflation, and treats within that context recent issues concerning the conduct of monetary policy.

In addition to lecture notes with a set of suggested readings, the course provides computer codes to perform the covered data and numerical analysis (Stata and Matlab).

Below is an outline of the 5-part course:

1. Introduction: characterizing the state of the labor market

We cover the measures and principal facts regarding stocks and flows in the labor market, approaches to control for slow moving demographic trends when comparing labor market statistics over long periods of time, as well as measures of the demand for labor and indicators of turnover. This leads to introducing the search and matching approach to understanding unemployment in equilibrium. The section concludes with an overview of measures of earnings, and their challenges, for a full characterization of the state of the labor market.

2. Search and matching models of equilibrium unemployment: introduction and an application to policy

The analysis will focus on the intuition for the main drivers of unemployment in steady state, from costs to creating jobs to the determinants of equilibrium wages. We will explore how the environment may be used to study the steady state implications of labor market policies and extended to allow for endogenous job search effort and job destruction.

3. Business cycles in the labor market

We develop the framework to study the business cycle of unemployment and job vacancies. The section will present numerical methods for solving and simulating equilibrium models of unemployment, compute moments of interest and impulse response functions. An important focus will be placed on the challenge of generating internal propagation of exogenous shocks and discuss prominent solutions in the literature, with a deeper dive into alternative assumptions over how worker and firms determine wages.

4. How credit and goods market frictions affect the labor market

Following the lessons of the global financial crisis, we introduce credit market frictions to the analysis studying its interaction with labor markets with a focus on implications for business cycles. While credit market frictions principally affect the cost of job creation, the structure of the product market governs the payoffs to recruiting to the firm. The second half of this part focuses instead on the effects of goods market frictions for the demand for labor and unemployment in equilibrium.

5. Labor markets, price inflation and monetary policy

The inflation-unemployment trade-off, central to monetary policy, is the focus of the final section. We study the dynamics of inflation and unemployment in a New Keynesian environment with equilibrium unemployment. Additional time will be spent on issues that arises in the presence of an effective lower bound on the central bank's policy rate. We close this part and the course on themes emerging since the onset of the COVID-19 pandemic.